



**DATA VALIDATION REPORT LDW  
AOC5 Middle Reach Phase II**

**Prepared for:**

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EcoChem Project: C22035-4

February 28, 2025

**Approved for Release:**

A handwritten signature in black ink that reads "Alison M. Bodkin". The signature is written in a cursive style and is positioned above a horizontal line.

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Alison Bodkin  
Project Manager  
**EcoChem, Inc.**

## PROJECT NARRATIVE

### ***Basis for the Data Validation***

This report presents the results of Full (EPA Stage 4) and Summary (EPA Stage 2B) validation performed on sediment and quality control sample data for the LDW AOC5 Phase II project. A complete list of samples is provided in the **Sample Index**.

Samples were analyzed by Analytical Resources LLC (ARL), Tukwila, WA; ALS, Burlington, Ontario, Canada; Cape Fear Analytical, LLC., Wilmington, North Carolina; and AMTest Laboratories, Kirkland, WA. The analytical methods and EcoChem project chemists are listed below.

ANALYSIS	METHOD	PRIMARY REVIEW	SECONDARY REVIEW
Dioxins and Furans	EPA 1613B	ETC	AGB
PCB Aroclors	EPA 8082A	IWH	AGB
Pesticides (Hexachlorobenzene)	EPA 8081B / 8270D	IWH	AGB
PAH	EPA 8270D-SIM / 8270E	IWH	AGB
SVOC	EPA 8270D / 8270 E / 8270E-SIM	IWH	AGB
Metals	EPA 6020	ETC	CLR/AGB
Mercury	EPA 7471B	ETC	CLR/AGB
Total Organic Carbon	9060A	ESJ	AGB
Total Solids	SM 2540 G-11	ESJ	AGB
Ammonia	SM 4500-NH3-H-11	ESJ	AGB
Sulfide	SM 4500-S2-D-11	ESJ	AGB

The data were reviewed using guidance and quality control criteria documented in the analytical methods; *Lower Duwamish Waterway Group, Pre-Design Investigation Quality Assurance Project Plan for the Lower Duwamish Waterway - Middle Reach* (Windward Environmental, LLC/Anchor QEA, October 21, 2022); *National Functional Guidelines for High Resolution Superfund Methods Data review* (USEPA 2020); *National Functional Guidelines for Organic Data Review* (USEPA 2020); and *National Functional Guidelines for Inorganic Data Review* (USEPA 2020); and *R10 Data Validation and Review Guidelines for Polychlorinated Dibenzo-p-Dioxin and Polychlorinated Dibenzofuran Data (PCDD/PCDF) Using Method 1613B and SW846 Method 8290A* (USEPA May 2014).

EcoChem’s goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced previously.

Data qualifier definitions, reason codes, and validation criteria are included as **Appendix A**. A Qualified Data Summary Table is included in **Appendix B**. Data Validation Worksheets will be kept

on file at EcoChem, Inc. A qualified laboratory electronic data deliverable (EDD) is also submitted with this report.

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24E0313	LDW24-SC1511B	24E0313-01							✓						✓	✓
24E0313	LDW24-SC1511C	24E0313-02							✓						✓	✓
24E0313	LDW24-SC1511E	24E0313-03							✓						✓	✓
24E0313	LDW24-SC1511G	24E0313-04							✓						✓	✓
24E0313	LDW24-SC1511I	24E0313-05							✓						✓	✓
24E0313	LDW24-SC1515B	24E0313-06							✓						✓	✓
24E0341	LDW24-SC1390B	24E0341-01							✓						✓	✓
24E0341	LDW24-SC1390C	24E0341-02							✓						✓	✓
24E0341	LDW24-SC1390G	24E0341-03							✓						✓	✓
24E0341	LDW24-SC1390E	24E0341-04							✓						✓	✓
24E0341	LDW24-SC1390I	24E0341-05							✓						✓	✓
24E0341	LDW24-IT1524A	24E0341-06							✓						✓	✓
24E0341	LDW24-SC1525	24E0341-07	✓						✓						✓	✓
24E0341	LDW24-SC1534C	24E0341-08							✓						✓	✓
24E0341	LDW24-SC1534D	24E0341-09							✓						✓	✓
24E0341	LDW24-SC1534F	24E0341-10							✓						✓	✓
24E0341	LDW24-SC1534H	24E0341-11							✓						✓	✓
24E0341	LDW24-SC1534J	24E0341-12							✓						✓	✓
24E0341	LDW24-SC1534L	24E0341-13							✓						✓	✓
24E0341	LDW24-SC1510D	24E0341-14							✓						✓	✓
24E0341	LDW24-SC1510E	24E0341-15							✓						✓	✓
24E0341	LDW24-SC1510G	24E0341-16							✓						✓	✓
24E0341	LDW24-SC1510I	24E0341-17							✓						✓	✓
24E0341	LDW24-SC1510K	24E0341-18							✓						✓	✓
24E0341	LDW24-SC1510M	24E0341-19							✓						✓	✓
24E0373	LDW24-IT1516A	24E0373-01													✓	✓
24E0373	LDW24-SC1541C	24E0373-02							✓						✓	✓
24E0373	LDW24-SC1541C-FD	24E0373-03							✓						✓	✓
24E0373	LDW24-SC1541D	24E0373-04							✓						✓	✓
24E0373	LDW24-SC1541F	24E0373-05							✓						✓	✓
24E0373	LDW24-SC1541H	24E0373-06							✓						✓	✓
24E0373	LDW24-SC1541J	24E0373-07							✓						✓	✓

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**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24E0373	LDW24-SC1541L	24E0373-08							✓						✓	✓
24E0373	LDW24-SC1533	24E0373-09							✓						✓	✓
24E0373	LDW24-SC1535B	24E0373-10							✓						✓	✓
24E0373	LDW24-SC1535C	24E0373-11							✓						✓	✓
24E0373	LDW24-SC1535E	24E0373-12							✓						✓	✓
24E0373	LDW24-SC1535G	24E0373-13							✓						✓	✓
24E0373	LDW24-SC1535I	24E0373-14							✓						✓	✓
24E0373	LDW24-SC1535K	24E0373-15							✓						✓	✓
24E0373	LDW24-SC1542B	24E0373-16	✓						✓						✓	✓
24E0373	LDW24-SC1542C	24E0373-17	✓						✓						✓	✓
24E0373	LDW24-SC1542E	24E0373-18	✓						✓						✓	✓
24E0373	LDW24-SC1542G	24E0373-19	✓						✓						✓	✓
24E0373	LDW24-SC1542I	24E0373-20	✓						✓						✓	✓
24E0373	LDW24-SC1542K	24E0373-21	✓						✓						✓	✓
24E0404	LDW24-SC1520B	24E0404-01							✓						✓	✓
24E0404	LDW24-SC1520B-FD	24E0404-02							✓						✓	✓
24E0404	LDW24-SC1521	24E0404-03							✓						✓	✓
24E0404	LDW24-IT1513A	24E0404-04	✓						✓	✓	✓				✓	✓
24E0404	LDW24-IT1513A-FD	24E0404-05	✓						✓	✓	✓				✓	✓
24E0404	LDW24-SC1544B	24E0404-06	✓						✓						✓	✓
24E0404	LDW24-SC1544C	24E0404-07	✓						✓						✓	✓
24E0404	LDW24-SC1544E	24E0404-08	✓						✓						✓	✓
24E0404	LDW24-SC1544G	24E0404-09	✓						✓						✓	✓
24E0404	LDW24-SC1544G-FD	24E0404-10	✓						✓						✓	✓
24E0404	LDW24-SC1544I	24E0404-11	✓						✓						✓	✓
24E0404	LDW24-SC1563B	24E0404-12							✓						✓	✓
24E0404	LDW24-SC1563C	24E0404-13							✓						✓	✓
24E0404	LDW24-SC1563E	24E0404-14							✓						✓	✓
24E0404	LDW24-SC1563G	24E0404-15							✓						✓	✓
24E0404	LDW24-SC1563I	24E0404-16							✓						✓	✓
24E0429	LDW24-IT1545A	24E0429-01	✓						✓			✓			✓	✓
24E0429	LDW24-IT1567	24E0429-02							✓						✓	✓

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SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24E0429	LDW24-IT1550A	24E0429-03	✓						✓			✓			✓	✓
24E0429	LDW24-IT1550B	24E0429-04							✓	✓	✓				✓	✓
24E0429	LDW24-IT1550C	24E0429-05							✓	✓	✓				✓	✓
24E0429	LDW24-IT1550E	24E0429-06							✓	✓	✓				✓	✓
24E0429	LDW24-IT1550G	24E0429-07							✓	✓	✓				✓	✓
24E0429	LDW24-SC1536B	24E0429-08							✓						✓	✓
24E0429	LDW24-SC1536C	24E0429-09							✓						✓	✓
24E0429	LDW24-SC1536E	24E0429-10							✓						✓	✓
24E0429	LDW24-SC1536G	24E0429-11							✓						✓	✓
24E0429	LDW24-SC1536I	24E0429-12							✓						✓	✓
24E0429	LDW24-IT1543A	24E0429-13							✓			✓			✓	✓
24E0429	LDW24-IT1562B	24E0429-14							✓						✓	✓
24E0429	LDW24-IT1562C	24E0429-15							✓						✓	✓
24E0429	LDW24-IT1562E	24E0429-16							✓						✓	✓
24E0429	LDW24-IT1505A	24E0429-17							✓						✓	✓
24E0429	LDW24-SC1536B-FD	24E0429-18							✓						✓	✓
24E0457	LDW24-SC1501C	24E0457-01							✓						✓	✓
24E0457	LDW24-SC1439D	24E0457-02							✓		✓				✓	✓
24E0457	LDW24-SC1439E	24E0457-03							✓		✓				✓	✓
24E0457	LDW24-SC1439G	24E0457-04							✓		✓				✓	✓
24E0457	LDW24-SC1439G-FD	24E0457-05							✓		✓				✓	✓
24E0457	LDW24-SC1439I	24E0457-06							✓		✓				✓	✓
24E0457	LDW24-SC1439K	24E0457-07							✓		✓				✓	✓
24E0457	LDW24-SC1439M	24E0457-08							✓		✓				✓	✓
24E0517	LDW24-IT1469A	24E0517-01	✓						✓						✓	✓
24E0517	LDW24-IT1470B	24E0517-02	✓						✓						✓	✓
24E0517	LDW24-IT1470C	24E0517-03	✓						✓						✓	✓
24E0517	LDW24-IT1470E	24E0517-04	✓						✓						✓	✓
24E0517	LDW24-IT1470G	24E0517-05	✓						✓						✓	✓
24E0517	LDW24-SC1386B	24E0517-06							✓		✓				✓	✓
24E0517	LDW24-SC1386C	24E0517-07							✓		✓				✓	✓
24E0517	LDW24-SC1386E	24E0517-08							✓		✓				✓	✓

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**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24E0517	LDW24-SC1386E-FD	24E0517-09							✓		✓				✓	✓
24E0517	LDW24-SC1386G	24E0517-10							✓		✓				✓	✓
24E0517	LDW24-SC1386I	24E0517-11							✓		✓				✓	✓
24E0517	LDW24-SC1385B	24E0517-12							✓		✓				✓	✓
24E0517	LDW24-SC1385C	24E0517-13							✓		✓				✓	✓
24E0517	LDW24-SC1385E	24E0517-14							✓		✓				✓	✓
24E0560	LDW24-IT1418B	24E0560-01							✓						✓	✓
24E0560	LDW24-IT1418C	24E0560-02							✓						✓	✓
24E0560	LDW24-IT1418E	24E0560-03							✓						✓	✓
24E0560	LDW24-IT1418G	24E0560-04							✓						✓	✓
24E0560	LDW24-IT1428B	24E0560-05							✓		✓				✓	✓
24E0560	LDW24-IT1428C	24E0560-06							✓		✓				✓	✓
24E0560	LDW24-IT1428C-FD	24E0560-07							✓		✓				✓	✓
24E0560	LDW24-IT1428E	24E0560-08							✓		✓				✓	✓
24E0560	LDW24-IT1428G	24E0560-09							✓		✓				✓	✓
24E0560	LDW24-IT1426B	24E0560-10							✓						✓	✓
24E0560	LDW24-IT1426B-FD	24E0560-11							✓						✓	✓
24E0560	LDW24-IT1426C	24E0560-12							✓						✓	✓
24E0560	LDW24-IT1426E	24E0560-13							✓						✓	✓
24E0560	LDW24-IT1426G	24E0560-14							✓						✓	✓
24E0560	LDW24-SC1465A	24E0560-15							✓						✓	✓
24E0605	LDW24-SC1354A	24E0605-01							✓						✓	✓
24E0605	LDW24-SC1309A	24E0605-02							✓						✓	✓
24E0605	LDW24-SC1321A	24E0605-03							✓						✓	✓
24E0605	LDW24-SS1403	24E0605-04							✓						✓	✓
24E0605	LDW24-SS1404	24E0605-05							✓						✓	✓
24E0605	LDW24-SS1561	24E0605-06							✓						✓	✓
24E0605	LDW24-SS1564	24E0605-07							✓						✓	✓
24E0605	LDW24-SS1829	24E0605-08							✓						✓	✓
24E0605	LDW24-IT1829	24E0605-09							✓						✓	✓
24E0605	LDW24-SS1828	24E0605-10	✓						✓						✓	✓
24E0605	LDW24-IT1828	24E0605-11	✓						✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24E0605	LDW24-SS1568	24E0605-12							✓						✓	✓
24E0605	LDW24-SS1566	24E0605-13							✓						✓	✓
24E0605	LDW24-SS1417	24E0605-14							✓						✓	✓
24E0605	LDW24-SS1412	24E0605-15							✓						✓	✓
24E0608	LDW24-SC1507A	24E0608-01							✓						✓	✓
24E0608	LDW24-SC1507A-FD	24E0608-02							✓						✓	✓
24E0608	LDW24-IT1402A	24E0608-03	✓						✓			✓			✓	✓
24E0608	LDW24-SC1559A	24E0608-04							✓	✓	✓				✓	✓
24E0608	LDW24-SC1559B	24E0608-05							✓						✓	✓
24E0608	LDW24-SC1559C	24E0608-06							✓						✓	✓
24E0608	LDW24-SC1559E	24E0608-07							✓						✓	✓
24E0608	LDW24-SC1559G	24E0608-08							✓						✓	✓
24E0608	LDW24-SC1559I	24E0608-09							✓						✓	✓
24E0608	LDW24-SC1421C	24E0608-10							✓		✓				✓	✓
24E0608	LDW24-SC1421D	24E0608-11							✓		✓				✓	✓
24E0608	LDW24-SC1421F	24E0608-12							✓		✓				✓	✓
24E0608	LDW24-SC1421H	24E0608-13							✓		✓				✓	✓
24E0608	LDW24-SC1421J	24E0608-14							✓		✓				✓	✓
24E0608	LDW24-SC1421L	24E0608-15							✓		✓				✓	✓
24E0608	LDW24-SS1830	24E0608-16	✓						✓						✓	✓
24E0608	LDW24-SC1406B	24E0608-17							✓						✓	✓
24E0608	LDW24-SC1406C	24E0608-18							✓						✓	✓
24E0608	LDW24-SC1406E	24E0608-19							✓						✓	✓
24E0608	LDW24-SC1406E-FD	24E0608-20							✓						✓	✓
24E0608	LDW24-SC1406G	24E0608-21							✓						✓	✓
24E0608	LDW24-SC1406I	24E0608-22							✓						✓	✓
24E0608	LDW24-SS1317	24E0608-23							✓						✓	✓
24E0608	LDW24-SS1314	24E0608-24							✓						✓	✓
24E0608	LDW24-SS1313	24E0608-25							✓						✓	✓
24E0608	LDW24-SS1332	24E0608-26							✓						✓	✓
24E0608	LDW24-SS1316	24E0608-27							✓						✓	✓
24E0608	LDW24-SS1315	24E0608-28							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24E0608	LDW24-IT1389	24E0608-29							✓						✓	✓
24E0608	LDW24-SS1389	24E0608-30							✓						✓	✓
24E0608	LDW24-SS1834	24E0608-31	✓						✓						✓	✓
24E0608	LDW24-SS1833	24E0608-32	✓						✓						✓	✓
24E0608	LDW24-SS1832	24E0608-33	✓						✓						✓	✓
24E0608	LDW24-SS1831	24E0608-34	✓						✓						✓	✓
24E0631	LDW24-IT1566A	24E0631-01							✓						✓	✓
24E0631	LDW24-IT1565A	24E0631-02							✓						✓	✓
24E0631	LDW24-SC1335D	24E0631-03							✓						✓	✓
24E0631	LDW24-SC1335E	24E0631-04							✓						✓	✓
24E0631	LDW24-SC1335G	24E0631-05							✓						✓	✓
24E0631	LDW24-SC1335I	24E0631-06							✓						✓	✓
24E0631	LDW24-SC1335I-FD	24E0631-07							✓						✓	✓
24E0631	LDW24-SC1335K	24E0631-08							✓						✓	✓
24E0631	LDW24-SC1335M	24E0631-09							✓						✓	✓
24E0631	LDW24-SC1579A	24E0631-10							✓						✓	✓
24E0670	LDW24-SC1582B	24E0670-01							✓						✓	✓
24E0670	LDW24-SC1582C	24E0670-02							✓						✓	✓
24E0670	LDW24-SC1582C-FD	24E0670-03							✓						✓	✓
24E0670	LDW24-SC1582E	24E0670-04							✓						✓	✓
24E0670	LDW24-SC1582G	24E0670-05							✓						✓	✓
24E0670	LDW24-SC1356A	24E0670-06							✓						✓	✓
24E0716	LDW24-SC1344D	24E0716-01							✓		✓				✓	✓
24E0716	LDW24-SC1344E	24E0716-02							✓		✓				✓	✓
24E0716	LDW24-SC1344G	24E0716-03							✓		✓				✓	✓
24E0716	LDW24-SC1344I	24E0716-04							✓		✓				✓	✓
24E0716	LDW24-SC1344K	24E0716-05							✓		✓				✓	✓
24E0716	LDW24-SC1344M	24E0716-06							✓		✓				✓	✓
24E0716	LDW24-SC1344D-FD	24E0716-07							✓		✓				✓	✓
24E0716	LDW24-SC1339D	24E0716-08							✓						✓	✓
24E0716	LDW24-SC1339D-FD	24E0716-09							✓						✓	✓
24E0716	LDW24-SC1339E	24E0716-10							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24E0716	LDW24-SC1339G	24E0716-11							✓						✓	✓
24E0716	LDW24-SC1336D	24E0716-12							✓						✓	✓
24E0716	LDW24-SC1336E	24E0716-13							✓						✓	✓
24E0716	LDW24-SC1336G	24E0716-14							✓						✓	✓
24E0716	LDW24-SC1333	24E0716-15							✓						✓	✓
24F0006	LDW24-IT1540B	24F0006-01							✓			✓			✓	✓
24F0006	LDW24-IT1540C	24F0006-02							✓			✓			✓	✓
24F0008	LDW24-SC1416C	24F0008-01							✓						✓	✓
24F0008	LDW24-SC1416C-FD	24F0008-02							✓						✓	✓
24F0008	LDW24-SC1416D	24F0008-03							✓						✓	✓
24F0008	LDW24-SC1416F	24F0008-04							✓						✓	✓
24F0008	LDW24-SC1416H	24F0008-05							✓						✓	✓
24F0008	LDW24-SC1416J	24F0008-06							✓						✓	✓
24F0008	LDW24-IT1546A	24F0008-07							✓			✓			✓	✓
24F0008	LDW24-IT1546B	24F0008-08							✓	✓	✓				✓	✓
24F0008	LDW24-IT1546B-FD	24F0008-09							✓	✓	✓				✓	✓
24F0008	LDW24-IT1546C	24F0008-10							✓	✓	✓				✓	✓
24F0008	LDW24-IT1546E	24F0008-11							✓	✓	✓				✓	✓
24F0008	LDW24-IT1546G	24F0008-12							✓	✓	✓				✓	✓
24F0008	LDW24-IT1547A	24F0008-13							✓			✓			✓	✓
24F0008	LDW24-SC1357A	24F0008-14							✓						✓	✓
24F0008	LDW24-SC1353A	24F0008-15							✓						✓	✓
24F0010	LDW23-SS1273	24F0010-01							✓	✓	✓				✓	✓
24F0010	LDW23-SC1221A	24F0010-02	✓													
24F0010	LDW23-SC1221B	24F0010-03	✓													
24F0010	LDW23-IT1210	24F0010-04	✓													
24F0010	LDW23-SS1196	24F0010-05		✓			✓		✓	✓	✓				✓	✓
24F0010	LDW23-SC1206	24F0010-06	✓													
24F0010	LDW23-SC1213	24F0010-07	✓													
24F0010	LDW23-SC1139	24F0010-08		✓			✓	✓		✓	✓					
24F0010	LDW23-SC1145	24F0010-09		✓			✓	✓		✓	✓					
24F0010	LDW23-SC1125	24F0010-10		✓			✓	✓		✓	✓					

**Sample Index**  
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SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0010	LDW23-SC1132	24F0010-11		✓			✓	✓		✓	✓					
24F0010	LDW23-SC1132	24F0010-11	✓													
24F0010	LDW23-SC1165	24F0010-12	✓													
24F0010	LDW23-IT1067	24F0010-13	✓													
24F0050	LDW24-SS1537	24F0050-01							✓	✓	✓				✓	✓
24F0050	LDW24-SS1523	24F0050-02							✓	✓	✓				✓	✓
24F0050	LDW24-SS1523-FD	24F0050-03							✓	✓	✓				✓	✓
24F0050	LDW24-SS1514	24F0050-04							✓	✓	✓				✓	✓
24F0050	LDW24-IT1499	24F0050-05							✓			✓			✓	✓
24F0050	LDW24-SS1512	24F0050-06							✓	✓	✓				✓	✓
24F0050	LDW24-SS1427	24F0050-07							✓	✓	✓				✓	✓
24F0050	LDW24-IT1427A	24F0050-08							✓						✓	✓
24F0050	LDW24-IT1317A	24F0050-09							✓						✓	✓
24F0109	LDW24-SS1377	24F0109-01							✓						✓	✓
24F0109	LDW24-SS1374	24F0109-02							✓						✓	✓
24F0109	LDW24-IT1367A	24F0109-03							✓						✓	✓
24F0109	LDW24-SS1402	24F0109-04							✓	✓	✓				✓	✓
24F0109	LDW24-SS1402-FD	24F0109-05							✓	✓	✓				✓	✓
24F0109	LDW24-SS1367	24F0109-06							✓						✓	✓
24F0109	LDW24-SS1369	24F0109-07							✓						✓	✓
24F0109	LDW24-SS1363	24F0109-08							✓						✓	✓
24F0109	LDW24-SS1360	24F0109-09							✓						✓	✓
24F0109	LDW24-SS1358	24F0109-10							✓						✓	✓
24F0109	LDW24-SS1355	24F0109-11							✓						✓	✓
24F0109	LDW24-SS1352	24F0109-12							✓						✓	✓
24F0109	LDW24-SS1370	24F0109-13							✓						✓	✓
24F0109	LDW24-SS1359	24F0109-14							✓						✓	✓
24F0109	LDW24-SS1362	24F0109-15							✓						✓	✓
24F0134	LDW24-SC1382B	24F0134-01							✓		✓				✓	✓
24F0134	LDW24-SC1382C	24F0134-02							✓		✓				✓	✓
24F0134	LDW24-SC1382E	24F0134-03							✓		✓				✓	✓
24F0134	LDW24-SC1387A	24F0134-04							✓	✓	✓				✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0134	LDW24-IT1355A	24F0134-05							✓						✓	✓
24F0134	LDW24-IT1352A	24F0134-06							✓						✓	✓
24F0134	LDW24-SC1573	24F0134-07							✓						✓	✓
24F0134	LDW24-IT1351A	24F0134-08							✓						✓	✓
24F0134	LDW24-SC1586B	24F0134-09							✓						✓	✓
24F0134	LDW24-SC1586C	24F0134-10							✓						✓	✓
24F0134	LDW24-SC1586E	24F0134-11							✓						✓	✓
24F0134	LDW24-SC1586G	24F0134-12							✓						✓	✓
24F0134	LDW24-IT1361B	24F0134-13							✓						✓	✓
24F0134	LDW24-IT1359A	24F0134-14							✓						✓	✓
24F0134	LDW24-SS1351	24F0134-15							✓						✓	✓
24F0134	LDW24-SS1364	24F0134-16							✓						✓	✓
24F0134	LDW24-SS1368	24F0134-17							✓						✓	✓
24F0134	LDW24-SS1373	24F0134-18							✓						✓	✓
24F0134	LDW24-SS1376	24F0134-19							✓						✓	✓
24F0134	LDW24-SS1411	24F0134-20							✓						✓	✓
24F0134	LDW24-SS1411-FD	24F0134-21							✓						✓	✓
24F0222	LDW24-SC1460C	24F0222-01							✓						✓	✓
24F0222	LDW24-SC1460D	24F0222-02							✓						✓	✓
24F0222	LDW24-SC1460F	24F0222-03							✓						✓	✓
24F0222	LDW24-SC1460H	24F0222-04							✓						✓	✓
24F0222	LDW24-SC1460J	24F0222-05							✓						✓	✓
24F0222	LDW24-SC1460L	24F0222-06							✓						✓	✓
24F0222	LDW24-SC1440A	24F0222-07							✓						✓	✓
24F0223	LDW24-IT1462	24F0223-01							✓						✓	✓
24F0223	LDW24-IT1434A	24F0223-02							✓						✓	✓
24F0223	LDW24-IT1434B	24F0223-03							✓						✓	✓
24F0223	LDW24-SC1433B	24F0223-04							✓						✓	✓
24F0223	LDW24-SC1433C	24F0223-05							✓						✓	✓
24F0223	LDW24-SC1433E	24F0223-06							✓						✓	✓
24F0223	LDW24-SC1433G	24F0223-07							✓						✓	✓
24F0223	LDW24-SC1433I	24F0223-08							✓						✓	✓

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**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0223	LDW24-SC1425B	24F0223-09							✓						✓	✓
24F0223	LDW24-SC1425C	24F0223-10							✓						✓	✓
24F0223	LDW24-SC1425E	24F0223-11							✓						✓	✓
24F0223	LDW24-SC1425G	24F0223-12							✓						✓	✓
24F0223	LDW24-SC1425I	24F0223-13							✓						✓	✓
24F0260	LDW24-IT1363A	24F0260-01							✓						✓	✓
24F0260	LDW24-IT1360A	24F0260-02							✓						✓	✓
24F0260	LDW24-SC1466B	24F0260-03							✓						✓	✓
24F0260	LDW24-IT1358A	24F0260-04							✓						✓	✓
24F0260	LDW24-SC1441B	24F0260-05							✓						✓	✓
24F0260	LDW24-SC1441C	24F0260-06							✓						✓	✓
24F0260	LDW24-SC1441E	24F0260-07							✓						✓	✓
24F0260	LDW24-SC1441G	24F0260-08							✓						✓	✓
24F0260	LDW24-SC1441I	24F0260-09							✓						✓	✓
24F0260	LDW24-SC1441E-FD	24F0260-10							✓						✓	✓
24F0260	LDW24-IT1370A	24F0260-11							✓						✓	✓
24F0260	LDW24-IT1369A	24F0260-12							✓						✓	✓
24F0260	LDW24-IT1364A	24F0260-13							✓						✓	✓
24F0260	LDW24-SC1442B	24F0260-14							✓						✓	✓
24F0260	LDW24-SC1442C	24F0260-15							✓						✓	✓
24F0260	LDW24-SC1442E	24F0260-16							✓						✓	✓
24F0260	LDW24-SC1442G	24F0260-17							✓						✓	✓
24F0260	LDW24-SC1366A	24F0260-18							✓						✓	✓
24F0260	LDW24-IT1368A	24F0260-19							✓						✓	✓
24F0260	LDW24-SS1526	24F0260-20							✓	✓	✓				✓	✓
24F0260	LDW24-IT1362A	24F0260-21							✓						✓	✓
24F0261	LDW24-SC1365A	24F0261-01							✓						✓	✓
24F0261	LDW24-IT1330A	24F0261-02							✓	✓	✓				✓	✓
24F0261	LDW24-IT1437B	24F0261-03							✓						✓	✓
24F0261	LDW24-IT1437C	24F0261-04							✓						✓	✓
24F0261	LDW24-IT1443A	24F0261-05							✓						✓	✓
24F0261	LDW24-IT1443A-FD	24F0261-06							✓						✓	✓

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**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0288	LDW24-SC1371A	24F0288-01							✓						✓	✓
24F0288	LDW24-SC1388A	24F0288-02							✓	✓	✓				✓	✓
24F0288	LDW24-IT1498	24F0288-03							✓			✓			✓	✓
24F0288	LDW24-SC1407	24F0288-04							✓	✓	✓				✓	✓
24F0288	LDW24-SC1383B	24F0288-05							✓		✓				✓	✓
24F0288	LDW24-SC1383C	24F0288-06							✓		✓				✓	✓
24F0288	LDW24-SC1383C-FD	24F0288-07							✓		✓				✓	✓
24F0288	LDW24-SC1383E	24F0288-08							✓		✓				✓	✓
24F0288	LDW24-SC1424B	24F0288-09							✓						✓	✓
24F0288	LDW24-SC1424C	24F0288-10							✓						✓	✓
24F0288	LDW24-SC1424E	24F0288-11							✓						✓	✓
24F0288	LDW24-SC1301A	24F0288-12							✓						✓	✓
24F0288	LDW24-SC1303	24F0288-13													✓	✓
24F0332	LDW24-SC1432B	24F0332-01							✓						✓	✓
24F0332	LDW24-SC1432C	24F0332-02							✓						✓	✓
24F0332	LDW24-SC1432E	24F0332-03							✓						✓	✓
24F0332	LDW24-SC1432G	24F0332-04							✓						✓	✓
24F0332	LDW24-SC1432I	24F0332-05							✓						✓	✓
24F0332	LDW24-IT1508A	24F0332-06							✓	✓	✓				✓	✓
24F0332	LDW24-IT1519B	24F0332-07							✓						✓	✓
24F0332	LDW24-IT1519C	24F0332-08							✓						✓	✓
24F0332	LDW24-SC1452B	24F0332-09							✓						✓	✓
24F0332	LDW24-SC1452C	24F0332-10							✓						✓	✓
24F0332	LDW24-SC1452E	24F0332-11							✓						✓	✓
24F0332	LDW24-SC1452G	24F0332-12							✓						✓	✓
24F0332	LDW24-SC1452I	24F0332-13							✓						✓	✓
24F0332	LDW24-SC1453A	24F0332-14							✓						✓	✓
24F0332	LDW24-SC1431C	24F0332-15							✓		✓				✓	✓
24F0332	LDW24-SC1431C-FD	24F0332-16							✓		✓				✓	✓
24F0332	LDW24-SC1431F	24F0332-17							✓		✓				✓	✓
24F0332	LDW24-SC1431D	24F0332-18							✓		✓				✓	✓
24F0366	LDW24-SC1431H	24F0366-01							✓		✓				✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0366	LDW24-SC1431J	24F0366-02							✓		✓				✓	✓
24F0366	LDW24-SC1431L	24F0366-03							✓		✓				✓	✓
24F0366	LDW24-SC1302A	24F0366-04							✓						✓	✓
24F0366	LDW24-SC1323A	24F0366-05							✓						✓	✓
24F0366	LDW24-SC1343D	24F0366-06							✓		✓				✓	✓
24F0366	LDW24-SC1343E	24F0366-07							✓		✓				✓	✓
24F0366	LDW24-SC1343E-FD	24F0366-08							✓		✓				✓	✓
24F0366	LDW24-SC1343G	24F0366-09							✓		✓				✓	✓
24F0366	LDW24-SC1343I	24F0366-10							✓		✓				✓	✓
24F0424	LDW24-SS1458	24F0424-01							✓						✓	✓
24F0424	LDW24-SS1462	24F0424-02							✓						✓	✓
24F0424	LDW24-SS1469	24F0424-03							✓	✓	✓				✓	✓
24F0424	LDW24-SS1494	24F0424-04											✓	✓		✓
24F0424	LDW24-SS1548	24F0424-05							✓						✓	✓
24F0424	LDW24-SS1518	24F0424-06											✓	✓		✓
24F0424	LDW24-SS1497	24F0424-07							✓	✓	✓		✓	✓	✓	✓
24F0424	LDW24-SS1498	24F0424-08							✓	✓	✓				✓	✓
24F0424	LDW24-SS1392	24F0424-09											✓	✓		✓
24F0424	LDW24-SS1393	24F0424-10											✓	✓		✓
24F0424	LDW24-SS1396	24F0424-11											✓	✓		✓
24F0424	LDW24-SS1398	24F0424-12											✓	✓		✓
24F0424	LDW24-SS1410	24F0424-13											✓	✓		✓
24F0424	LDW24-SS1349	24F0424-14											✓	✓		✓
24F0424	LDW24-SC1482B	24F0424-15							✓						✓	✓
24F0424	LDW24-SC1490B	24F0424-16							✓						✓	✓
24F0424	LDW24-SC1490C	24F0424-17							✓						✓	✓
24F0424	LDW24-SC1490E	24F0424-18							✓						✓	✓
24F0424	LDW24-SC1490G	24F0424-19							✓						✓	✓
24F0424	LDW24-SC1495A	24F0424-20											✓	✓		✓
24F0424	LDW24-SC1494A	24F0424-21											✓	✓		✓
24F0424	LDW24-SS1496	24F0424-22							✓	✓	✓				✓	✓
24F0426	LDW24-SC1384B	24F0426-01							✓		✓				✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0426	LDW24-SC1384C	24F0426-02							✓		✓				✓	✓
24F0426	LDW24-SC1384E	24F0426-03							✓		✓				✓	✓
24F0426	LDW24-SC1384G	24F0426-04							✓		✓				✓	✓
24F0426	LDW24-SC1328D	24F0426-05							✓						✓	✓
24F0426	LDW24-SC1328E	24F0426-06							✓						✓	✓
24F0426	LDW24-SC1328G	24F0426-07							✓						✓	✓
24F0426	LDW24-SC1328I	24F0426-08							✓						✓	✓
24F0426	LDW24-SC1328K	24F0426-09							✓						✓	✓
24F0426	LDW24-SC1328M	24F0426-10							✓						✓	✓
24F0426	LDW24-IT1455A	24F0426-11							✓						✓	✓
24F0426	LDW24-IT1455A-FD	24F0426-12							✓						✓	✓
24F0459	LDW24-SC1325D	24F0459-01							✓						✓	✓
24F0459	LDW24-SC1325E	24F0459-02							✓						✓	✓
24F0459	LDW24-SC1325G	24F0459-03							✓						✓	✓
24F0459	LDW24-SC1325I	24F0459-04							✓						✓	✓
24F0459	LDW24-SC1325K	24F0459-05							✓						✓	✓
24F0459	LDW24-SC1325M	24F0459-06							✓						✓	✓
24F0459	LDW24-SC1422A	24F0459-07							✓						✓	✓
24F0459	LDW24-SC1502C	24F0459-08							✓						✓	✓
24F0459	LDW24-SC1503C	24F0459-09							✓						✓	✓
24F0459	LDW24-SC1503D	24F0459-10							✓						✓	✓
24F0459	LDW24-SC1503F	24F0459-11							✓						✓	✓
24F0459	LDW24-SC1503H	24F0459-12							✓						✓	✓
24F0459	LDW24-SC1503J	24F0459-13							✓						✓	✓
24F0459	LDW24-SS1477	24F0459-14							✓						✓	✓
24F0459	LDW24-SC1477	24F0459-15							✓						✓	✓
24F0459	LDW24-IT1467	24F0459-16							✓			✓			✓	✓
24F0459	LDW24-IT1444	24F0459-17							✓						✓	✓
24F0459	LDW24-IT1557	24F0459-18							✓			✓			✓	✓
24F0459	LDW24-IT1504	24F0459-19							✓						✓	✓
24F0459	LDW24-SS1572	24F0459-20											✓	✓		✓
24F0459	LDW24-SS1305	24F0459-21											✓	✓		✓

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**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0459	LDW24-SS1306	24F0459-22											✓	✓		✓
24F0459	LDW24-SS1399	24F0459-23							✓						✓	✓
24F0459	LDW24-SS1371	24F0459-24							✓						✓	✓
24F0459	LDW24-SS1365	24F0459-25							✓						✓	✓
24F0459	LDW24-SS1356	24F0459-26							✓						✓	✓
24F0459	LDW24-SS1357	24F0459-27							✓						✓	✓
24F0459	LDW24-SS1357-FD	24F0459-28							✓						✓	✓
24F0459	LDW24-SS1353	24F0459-29							✓						✓	✓
24F0459	LDW24-SS1551	24F0459-30							✓	✓	✓				✓	✓
24F0459	LDW24-SS1546	24F0459-31							✓	✓	✓				✓	✓
24F0459	LDW24-SS1517	24F0459-32											✓	✓		✓
24F0485	LDW24-IT1585	24F0485-01							✓						✓	✓
24F0485	LDW24-SS1476	24F0485-02							✓						✓	✓
24F0485	LDW24-SC1476A	24F0485-03							✓						✓	✓
24F0485	LDW24-SC1489C	24F0485-04							✓						✓	✓
24F0485	LDW24-SC1489D	24F0485-05							✓						✓	✓
24F0485	LDW24-SC1489F	24F0485-06							✓						✓	✓
24F0485	LDW24-SC1489H	24F0485-07							✓						✓	✓
24F0485	LDW24-SC1489J	24F0485-08							✓						✓	✓
24F0485	LDW24-SC1489L	24F0485-09							✓						✓	✓
24F0485	LDW24-SS1483	24F0485-10							✓						✓	✓
24F0485	LDW24-SC1483A	24F0485-11							✓						✓	✓
24F0485	LDW24-SS1480	24F0485-12							✓						✓	✓
24F0485	LDW24-SS1400	24F0485-13											✓	✓		✓
24F0485	LDW24-SS1394	24F0485-14											✓	✓		✓
24F0485	LDW24-SS1401	24F0485-15							✓	✓	✓				✓	✓
24F0485	LDW24-SS1584	24F0485-16											✓	✓		✓
24F0485	LDW24-SS1580	24F0485-17											✓	✓		✓
24F0485	LDW24-SS1574	24F0485-18											✓	✓		✓
24F0485	LDW24-SS1533	24F0485-19							✓						✓	✓
24F0485	LDW24-SS1375	24F0485-20							✓						✓	✓
24F0485	LDW24-SS1354	24F0485-21							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0485	LDW24-SS1434	24F0485-22							✓	✓	✓				✓	✓
24F0485	LDW24-SS1436	24F0485-23							✓						✓	✓
24F0485	LDW24-SC1480	24F0485-24							✓						✓	✓
24F0512	LDW24-SC1310B	24F0512-01							✓						✓	✓
24F0512	LDW24-SC1310C	24F0512-02							✓						✓	✓
24F0512	LDW24-SC1310E	24F0512-03							✓						✓	✓
24F0512	LDW24-SC1310G	24F0512-04							✓						✓	✓
24F0512	LDW24-SC1310I	24F0512-05							✓						✓	✓
24F0512	LDW24-SC1479B	24F0512-06							✓						✓	✓
24F0512	LDW24-SC1479C	24F0512-07							✓						✓	✓
24F0512	LDW24-SC1479E	24F0512-08							✓						✓	✓
24F0512	LDW24-SC1479G	24F0512-09							✓						✓	✓
24F0512	LDW24-SC1479I	24F0512-10							✓						✓	✓
24F0512	LDW24-SC1478	24F0512-12							✓						✓	✓
24F0512	LDW24-SS1478	24F0512-13							✓						✓	✓
24F0512	LDW24-SC1492A	24F0512-14							✓						✓	✓
24F0537	LDW24-SC1530	24F0537-01							✓						✓	✓
24F0537	LDW24-IT1561A	24F0537-02							✓						✓	✓
24F0537	LDW24-IT1564A	24F0537-03							✓						✓	✓
24F0537	LDW24-SS1827	24F0537-04											✓	✓		✓
24F0557	LDW24-SS1823	24F0557-01							✓						✓	✓
24F0557	LDW24-SS1824	24F0557-02							✓						✓	✓
24F0557	LDW24-IT1486B	24F0557-03							✓						✓	✓
24F0557	LDW24-IT1486C	24F0557-04							✓						✓	✓
24F0557	LDW24-IT1463A	24F0557-05							✓						✓	✓
24F0557	LDW24-SC1493A	24F0557-06							✓						✓	✓
24F0557	LDW24-SS1485	24F0557-07							✓						✓	✓
24F0557	LDW24-IT1485A	24F0557-08							✓						✓	✓
24F0557	LDW24-SS1456	24F0557-09							✓						✓	✓
24F0557	LDW24-IT1456A	24F0557-10							✓						✓	✓
24F0557	LDW24-SS1463	24F0557-11							✓						✓	✓
24F0557	LDW24-SS1454	24F0557-12							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24F0557	LDW24-IT1454A	24F0557-13							✓						✓	✓
24F0557	LDW24-IT1454A-FD	24F0557-14							✓						✓	✓
24F0557	LDW24-SS1449	24F0557-15							✓						✓	✓
24F0557	LDW24-IT1449A	24F0557-16							✓						✓	✓
24F0598	LDW24-IT1448B	24F0598-01							✓						✓	✓
24F0598	LDW24-IT1448B-FD	24F0598-02							✓						✓	✓
24F0598	LDW24-IT1448C	24F0598-03							✓						✓	✓
24F0598	LDW24-IT1457B	24F0598-04							✓						✓	✓
24F0598	LDW24-IT1457C	24F0598-05							✓						✓	✓
24F0598	LDW24-IT1457C-FD	24F0598-06							✓						✓	✓
24F0598	LDW24-IT1318B	24F0598-07							✓						✓	✓
24F0598	LDW24-IT1318C	24F0598-08							✓						✓	✓
24F0598	LDW24-IT1318E	24F0598-09							✓						✓	✓
24F0598	LDW24-IT1522B	24F0598-10							✓	✓	✓				✓	✓
24F0598	LDW24-IT1522C	24F0598-11							✓	✓	✓				✓	✓
24F0598	LDW24-SS1447	24F0598-12							✓						✓	✓
24F0598	LDW24-IT1447A	24F0598-13							✓						✓	✓
24F0598	LDW24-SS1444	24F0598-14							✓						✓	✓
24F0598	LDW24-SS1446	24F0598-15							✓						✓	✓
24G0166	LDW24-SC1311	24G0166-01							✓						✓	✓
24G0166	LDW24-SC1312A	24G0166-02							✓						✓	✓
24G0166	LDW24-SC1409E	24G0166-03							✓						✓	✓
24G0166	LDW24-SC1409D	24G0166-04							✓						✓	✓
24G0166	LDW24-SC1409G	24G0166-05							✓						✓	✓
24G0166	LDW24-SC1409I	24G0166-06							✓						✓	✓
24G0166	LDW24-SC1409K	24G0166-07							✓						✓	✓
24G0166	LDW24-IT1411A	24G0166-08							✓						✓	✓
24G0166	LDW24-IT1591	24G0166-09							✓	✓	✓				✓	✓
24G0166	LDW24-SS1567	24G0166-10							✓						✓	✓
24G0166	LDW24-SS1322	24G0166-11											✓	✓		✓
24G0166	LDW24-SS1474	24G0166-12											✓	✓		✓
24G0166	LDW24-SS1474-FD	24G0166-13											✓	✓		✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24G0166	LDW24-SS1308	24G0166-14											✓	✓		✓
24G0166	LDW24-SS1319	24G0166-15							✓						✓	✓
24G0166	LDW24-SS1307	24G0166-16							✓	✓	✓				✓	✓
24G0166	LDW24-SS1366	24G0166-17							✓						✓	✓
24G0166	LDW24-SS1391	24G0166-18							✓						✓	✓
24G0166	LDW24-SS1304	24G0166-19							✓	✓	✓				✓	✓
24G0166	LDW24-SS1300	24G0166-20											✓	✓		✓
24G0166	LDW24-SS1575	24G0166-21							✓						✓	✓
24G0166	LDW24-SS1576	24G0166-22							✓						✓	✓
24G0224	LDW24-SS1379	24G0224-01							✓	✓	✓		✓	✓	✓	✓
24G0224	LDW24-SS1380	24G0224-02							✓	✓	✓		✓	✓	✓	✓
24G0224	LDW24-SS1591	24G0224-03							✓	✓	✓				✓	✓
24G0224	LDW24-SS1484	24G0224-04											✓	✓		✓
24G0224	LDW24-SS1481	24G0224-05											✓	✓		✓
24G0224	LDW24-SS1482	24G0224-06							✓						✓	✓
24G0224	LDW24-SS1590	24G0224-07							✓	✓	✓				✓	✓
24G0224	LDW24-SS1565	24G0224-08							✓						✓	✓
24G0224	LDW24-SS1565-FD	24G0224-09							✓						✓	✓
24G0224	LDW24-SS1570	24G0224-10							✓						✓	✓
24G0224	LDW24-IT1413B	24G0224-11							✓						✓	✓
24G0224	LDW24-IT1413C	24G0224-12							✓						✓	✓
24G0224	LDW24-IT1413E	24G0224-13							✓						✓	✓
24G0224	LDW24-IT1413G	24G0224-14							✓						✓	✓
24G0227	LDW24-SC1340E	24G0227-01							✓						✓	✓
24G0227	LDW24-SC1340E-FD	24G0227-02							✓						✓	✓
24G0227	LDW24-SC1340F	24G0227-03							✓						✓	✓
24G0227	LDW24-SC1340H	24G0227-04							✓						✓	✓
24G0227	LDW24-SC1340J	24G0227-05							✓						✓	✓
24G0227	LDW24-SC1340L	24G0227-06							✓						✓	✓
24G0227	LDW24-SC1532A	24G0227-07							✓						✓	✓
24G0227	LDW24-SC1532A-FD	24G0227-08							✓						✓	✓
24G0227	LDW24-IT1527A	24G0227-09							✓			✓			✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24G0227	LDW24-IT1527A-FD	24G0227-10							✓			✓			✓	✓
24G0227	LDW24-IT1527B	24G0227-11							✓		✓				✓	✓
24G0227	LDW24-IT1527C	24G0227-12							✓		✓				✓	✓
24G0227	LDW24-SS1557	24G0227-15							✓	✓	✓				✓	✓
24G0227	LDW24-SS1560	24G0227-16							✓						✓	✓
24G0227	LDW24-SS1461	24G0227-17							✓						✓	✓
24G0227	LDW24-SS1455	24G0227-18							✓						✓	✓
24G0227	LDW24-SS1455-FD	24G0227-19							✓						✓	✓
24G0227	LDW24-SS1525	24G0227-20							✓						✓	✓
24G0227	LDW24-SS1471	24G0227-21											✓	✓		✓
24G0227	LDW24-SS1475	24G0227-22							✓						✓	✓
24G0227	LDW24-SS1516	24G0227-23							✓						✓	✓
24G0227	LDW24-IT1568A-FD	24G0227-24							✓						✓	✓
24G0227	LDW24-IT1527E	24G0227-25							✓		✓				✓	✓
24G0227	LDW24-IT1527G	24G0227-26							✓		✓				✓	✓
24G0227	LDW24-IT1528B	24G0227-27							✓						✓	✓
24G0227	LDW24-IT1528C	24G0227-28							✓						✓	✓
24G0227	LDW24-IT1528E	24G0227-29							✓						✓	✓
24G0227	LDW24-IT1528G	24G0227-30							✓						✓	✓
24G0227	LDW24-IT1528I	24G0227-31							✓						✓	✓
24G0227	LDW24-IT1528K	24G0227-32							✓						✓	✓
24G0227	LDW24-IT1528M	24G0227-33							✓						✓	✓
24G0227	LDW24-SS1558	24G0227-34							✓						✓	✓
24G0227	LDW24-SS1578	24G0227-35											✓	✓		✓
24G0227	LDW24-IT1568A	24G0227-36							✓						✓	✓
24G0270	LDW24-SC1468A	24G0270-01							✓	✓	✓				✓	✓
24G0270	LDW24-SC1468A-FD	24G0270-02							✓	✓	✓				✓	✓
24G0270	LDW24-SC1341E	24G0270-03							✓						✓	✓
24G0270	LDW24-SC1341E-FD	24G0270-04							✓						✓	✓
24G0270	LDW24-SC1341F	24G0270-05							✓						✓	✓
24G0270	LDW24-SC1341H	24G0270-06							✓						✓	✓
24G0270	LDW24-SC1341J	24G0270-07							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24G0270	LDW24-SC1372B	24G0270-08							✓						✓	✓
24G0270	LDW24-SC1372C	24G0270-09							✓						✓	✓
24G0270	LDW24-SC1372E	24G0270-10							✓						✓	✓
24G0270	LDW24-SC1372G	24G0270-11							✓						✓	✓
24G0270	LDW24-SC1372I	24G0270-12							✓						✓	✓
24G0270	LDW24-SC1372K	24G0270-13							✓						✓	✓
24G0270	LDW24-SC1372M	24G0270-14							✓						✓	✓
24G0270	LDW24-IT1374A	24G0270-15							✓						✓	✓
24G0270	LDW24-IT1373A	24G0270-16							✓						✓	✓
24G0270	LDW24-IT1376A	24G0270-17							✓						✓	✓
24G0270	LDW24-SC1347E	24G0270-18							✓		✓				✓	✓
24G0270	LDW24-SC1347F	24G0270-19							✓		✓				✓	✓
24G0270	LDW24-SC1347H	24G0270-20							✓		✓				✓	✓
24G0307	LDW24-IT1378A	24G0307-01							✓						✓	✓
24G0307	LDW24-IT1590A	24G0307-02							✓	✓	✓				✓	✓
24G0307	LDW24-IT1592B	24G0307-03							✓		✓				✓	✓
24G0307	LDW24-SC1346C	24G0307-04							✓		✓				✓	✓
24G0307	LDW24-SC1346D	24G0307-05							✓		✓				✓	✓
24G0307	LDW24-SC1346F	24G0307-06							✓		✓				✓	✓
24G0307	LDW24-SC1346H	24G0307-07							✓		✓				✓	✓
24G0307	LDW24-SC1558B	24G0307-08							✓						✓	✓
24G0340	LDW24-IT1594B	24G0340-01							✓		✓				✓	✓
24G0340	LDW24-IT1594C	24G0340-02							✓		✓				✓	✓
24G0340	LDW24-IT1594E	24G0340-03							✓		✓				✓	✓
24G0340	LDW24-IT1595B	24G0340-04							✓		✓				✓	✓
24G0340	LDW24-IT1595C	24G0340-05							✓		✓				✓	✓
24G0340	LDW24-IT1595E	24G0340-06							✓		✓				✓	✓
24G0340	LDW24-IT1596B	24G0340-07							✓		✓				✓	✓
24G0340	LDW24-IT1596C	24G0340-08							✓		✓				✓	✓
24G0390	LDW24-IT1601B	24G0390-01							✓		✓				✓	✓
24G0390	LDW24-IT1601C	24G0390-02							✓		✓				✓	✓
24G0390	LDW24-IT1601E	24G0390-03							✓		✓				✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24G0390	LDW24-IT1601G	24G0390-04							✓		✓				✓	✓
24G0390	LDW24-IT1601I	24G0390-05							✓		✓				✓	✓
24G0390	LDW24-IT1593B	24G0390-06							✓		✓				✓	✓
24G0390	LDW24-IT1593C	24G0390-07							✓		✓				✓	✓
24G0402	LDW24-IT1599B	24G0402-01							✓		✓				✓	✓
24G0402	LDW24-IT1599C	24G0402-02							✓		✓				✓	✓
24G0402	LDW24-IT1599E	24G0402-03							✓		✓				✓	✓
24G0402	LDW24-IT1599G	24G0402-04							✓		✓				✓	✓
24G0402	LDW24-IT1598B	24G0402-05							✓		✓				✓	✓
24G0402	LDW24-IT1600B	24G0402-06							✓		✓				✓	✓
24G0402	LDW24-IT1600C	24G0402-07							✓		✓				✓	✓
24G0402	LDW24-IT1600E	24G0402-08							✓		✓				✓	✓
24G0464	LDW24-IT1597B	24G0464-01							✓		✓				✓	✓
24G0464	LDW24-IT1602B	24G0464-02							✓		✓				✓	✓
24G0464	LDW24-IT1604B	24G0464-03							✓		✓				✓	✓
24G0464	LDW24-IT1377A	24G0464-04							✓						✓	✓
24G0471	LDW24-IT1607B	24G0471-01							✓		✓				✓	✓
24G0471	LDW24-IT1607C	24G0471-02							✓		✓				✓	✓
24G0471	LDW24-IT1607E	24G0471-03							✓		✓				✓	✓
24G0471	LDW24-IT1607G	24G0471-04							✓		✓				✓	✓
24G0471	LDW24-IT1603B	24G0471-05							✓		✓				✓	✓
24G0471	LDW24-IT1603C	24G0471-06							✓		✓				✓	✓
24G0471	LDW24-IT1606B	24G0471-07							✓		✓				✓	✓
24G0471	LDW24-IT1606C	24G0471-08							✓		✓				✓	✓
24G0471	LDW24-IT1606E	24G0471-09							✓		✓				✓	✓
24G0471	LDW24-IT1605B	24G0471-10							✓		✓				✓	✓
24G0471	LDW24-IT1605C	24G0471-11							✓		✓				✓	✓
24G0471	LDW24-IT1605E	24G0471-12							✓		✓				✓	✓
24G0471	LDW24-IT1605G	24G0471-13							✓		✓				✓	✓
24G0556	LDW24-SS1445	24G0556-01							✓						✓	✓
24G0556	LDW24-SS1472	24G0556-02											✓	✓		✓
24G0634	LDW24-IT1552B	24G0634-01							✓	✓	✓				✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24G0634	LDW24-IT1552C	24G0634-02							✓	✓	✓				✓	✓
24G0634	LDW24-IT1589B	24G0634-03										✓			✓	✓
24G0634	LDW24-IT1589C	24G0634-04										✓			✓	✓
24G0634	LDW24-IT1589E	24G0634-05										✓			✓	✓
24G0634	LDW24-IT1589G	24G0634-06										✓			✓	✓
24G0634	LDW24-IT1551A	24G0634-07							✓			✓			✓	✓
24G0634	LDW24-IT1556B	24G0634-08							✓	✓	✓				✓	✓
24G0634	LDW24-IT1556C	24G0634-09							✓	✓	✓				✓	✓
24G0634	LDW24-IT1556E	24G0634-10							✓	✓	✓				✓	✓
24G0634	LDW24-SC1451D	24G0634-11							✓						✓	✓
24G0634	LDW24-SC1451E	24G0634-12							✓						✓	✓
24G0634	LDW24-SC1451G	24G0634-13							✓						✓	✓
24G0634	LDW24-SC1451I	24G0634-14							✓						✓	✓
24G0634	LDW24-SC1451K	24G0634-15							✓						✓	✓
24G0634	LDW24-SC1451M	24G0634-16							✓						✓	✓
24H0461	LDW24-SS1587	24H0461-01													✓	✓
24H0461	LDW24-SS1588	24H0461-02													✓	✓
K2405555	LDW24-SC1390B	K2405555-001			✓											
K2405555	LDW24-SC1390C	K2405555-002			✓											
K2405555	LDW24-SC1390G	K2405555-003			✓											
K2405555	LDW24-SC1390E	K2405555-004			✓											
K2405555	LDW24-SC1390I	K2405555-005			✓											
K2405555	LDW24-IT1513A	K2405555-006					✓									
K2405555	LDW24-IT1513A-FD	K2405555-007					✓									
K2405555	LDW24-IT1545A	K2405555-008					✓									
K2405555	LDW24-IT1567	K2405555-009					✓									
K2405555	LDW24-IT1550A	K2405555-010					✓									
K2405555	LDW24-IT1550B	K2405555-011					✓									
K2405555	LDW24-IT1550C	K2405555-012					✓									
K2405555	LDW24-IT1550E	K2405555-013					✓									
K2405555	LDW24-IT1550G	K2405555-014					✓									
K2405555	LDW24-IT1543A	K2405555-015					✓									

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
K2405555	LDW24-IT1562B	K2405555-016		✓			✓									
K2405555	LDW24-IT1562C	K2405555-017		✓			✓									
K2405555	LDW24-IT1562E	K2405555-018		✓			✓									
K2405555	LDW24-SC1533	K2405555-019		✓			✓									
K2405555	LDW24-IT1516A	K2405555-020					✓									
K2405555	LDW24-IT1402A	K2405555-021					✓									
K2405555	LDW24-SS1389	K2405555-022			✓											
K2405555	LDW24-SC1559A	K2405555-023					✓									
K2405555	LDW24-IT1470B	K2405555-024			✓											
K2405555	LDW24-IT1470C	K2405555-025			✓											
K2405555	LDW24-IT1470E	K2405555-026			✓											
K2405555	LDW24-IT1470G	K2405555-027			✓											
K2405555	LDW24-SS1561	K2405555-028		✓			✓									
K2405555	LDW24-SS1564	K2405555-029		✓			✓									
K2405555	LDW24-SS1829	K2405555-030		✓			✓									
K2405555	LDW24-IT1829	K2405555-031					✓									
K2405555	LDW24-SS1828	K2405555-032					✓									
K2405555	LDW24-IT1828	K2405555-033					✓									
K2405555	LDW24-SS1568	K2405555-034		✓			✓									
K2405555	LDW24-SS1566	K2405555-035		✓			✓									
K2405555	LDW24-IT1566A	K2405555-036					✓									
K2405555	LDW24-IT1565A	K2405555-037					✓									
K2406559	LDW24-SS1497	K2406559-001		✓			✓									
K2406559	LDW24-SS1400	K2406559-002				✓										
K2406559	LDW24-SS1394	K2406559-003				✓										
K2406559	LDW24-SS1580	K2406559-004				✓										
K2406559	LDW24-SS1574	K2406559-005				✓										
K2406559	LDW24-SS1494	K2406559-006				✓										
K2406559	LDW24-SS1518	K2406559-007				✓										
K2406559	LDW24-SS1392	K2406559-008				✓										
K2406559	LDW24-SS1393	K2406559-009				✓										
K2406559	LDW24-SS1398	K2406559-010				✓										

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
K2406559	LDW24-SS1410	K2406559-011				✓										
K2406559	LDW24-SS1349	K2406559-012				✓										
K2406559	LDW24-SS1305	K2406559-013				✓										
K2406559	LDW24-SS1306	K2406559-014				✓										
K2406559	LDW24-SS1517	K2406559-015				✓										
K2406559	LDW24-SS1572	K2406559-016				✓										
K2406578	LDW24-SC1333	K2406578-001			✓		✓									
K2406578	LDW24-IT1546A	K2406578-002					✓									
K2406578	LDW24-IT1546B	K2406578-003					✓									
K2406578	LDW24-IT1546B-FD	K2406578-004					✓									
K2406578	LDW24-IT1546E	K2406578-005					✓									
K2406578	LDW24-IT1546G	K2406578-006					✓									
K2406578	LDW24-IT1547A	K2406578-007					✓									
K2406578	LDW24-IT1546C	K2406578-008					✓									
K2406578	LDW24-SS1537	K2406578-009					✓									
K2406578	LDW24-SS1523	K2406578-010					✓									
K2406578	LDW24-SS1523-FD	K2406578-011					✓									
K2406578	LDW24-SS1514	K2406578-012					✓									
K2406578	LDW24-IT1499	K2406578-013					✓									
K2406578	LDW24-SS1512	K2406578-014					✓									
K2406578	LDW24-SS1402	K2406578-015		✓			✓									
K2406578	LDW24-SS1402-FD	K2406578-016		✓			✓									
K2406578	LDW24-SS1377	K2406578-017			✓											
K2406578	LDW24-SS1374	K2406578-018			✓											
K2406578	LDW24-SS1373	K2406578-019			✓											
K2406578	LDW24-SS1376	K2406578-020			✓											
K2406578	LDW24-SS1526	K2406578-021					✓									
K2406588	LDW24-IT1443A	K2406588-001					✓									
K2406588	LDW24-IT1443A-FD	K2406588-002					✓									
K2406588	LDW24-IT1498	K2406588-003					✓									
K2406588	LDW24-SC1301A	K2406588-004					✓									
K2406588	LDW24-SC1303	K2406588-005					✓									

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
K2406588	LDW24-IT1508A	K2406588-006					✓									
K2406588	LDW24-SC1302A	K2406588-007					✓									
K2406588	LDW24-SS1469	K2406588-008			✓											
K2406588	LDW24-SS1548	K2406588-009					✓									
K2406588	LDW24-SS1498	K2406588-010		✓	✓		✓									
K2406588	LDW24-SS1496	K2406588-011		✓	✓		✓									
K2406588	LDW24-SS1551	K2406588-012					✓									
K2406588	LDW24-SS1546	K2406588-013					✓									
K2406588	LDW24-IT1557	K2406588-014					✓									
K2406588	LDW24-SS1401	K2406588-015		✓	✓		✓									
K2406588	LDW24-SS1533	K2406588-016		✓	✓		✓									
K2406588	LDW24-SC1530	K2406588-017					✓									
K2406588	LDW24-IT1561A	K2406588-018					✓									
K2406588	LDW24-IT1564A	K2406588-019					✓									
K2407252	LDW24-SS1471	K2407252-001				✓										
K2407252	LDW24-SS1578	K2407252-002				✓										
K2407252	LDW24-SS1481	K2407252-003				✓										
K2407252	LDW24-SS1379	K2407252-004		✓			✓									
K2407252	LDW24-SS1380	K2407252-005		✓			✓									
K2407252	LDW24-SS1322	K2407252-006				✓										
K2407252	LDW24-SS1474	K2407252-007				✓										
K2407252	LDW24-SS1474-FD	K2407252-008				✓										
K2407252	LDW24-SS1308	K2407252-009				✓										
K2407252	LDW24-SS1300	K2407252-010				✓										
K2407258	LDW24-SC1532A	K2407258-001		✓			✓									
K2407258	LDW24-SC1532A-FD	K2407258-002		✓			✓									
K2407258	LDW24-IT1527A	K2407258-003					✓									
K2407258	LDW24-IT1527A-FD	K2407258-004					✓									
K2407258	LDW24-SS1587	K2407258-005					✓									
K2407258	LDW24-SS1588	K2407258-006					✓									
K2407258	LDW24-SS1557	K2407258-007					✓									
K2407258	LDW24-IT1568A	K2407258-008					✓									

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
K2407258	LDW24-IT1568A-FD	K2407258-009					✓									
K2407258	LDW24-IT1522B	K2407258-010					✓									
K2407258	LDW24-IT1522C	K2407258-011					✓									
K2407258	LDW24-SS1591	K2407258-012		✓			✓									
K2407258	LDW24-SS1590	K2407258-013		✓			✓									
K2407258	LDW24-SS1565	K2407258-014		✓			✓									
K2407258	LDW24-SS1565-FD	K2407258-015		✓			✓									
K2407258	LDW24-SS1307	K2407258-016		✓			✓									
K2407258	LDW24-SS1391	K2407258-017			✓											
K2407258	LDW24-SS1304	K2407258-018		✓			✓									
K2407258	LDW24-SS1567	K2407258-019		✓			✓									
K2407258	LDW24-IT1591	K2407258-020		✓			✓									
K2407905	LDW24-SS1472	K2407905-001				✓										
K2407908	LDW24-IT1555A	K2407908-001					✓									
K2407908	LDW24-IT1553B	K2407908-002					✓									
K2407908	LDW24-IT1553C	K2407908-003					✓									
K2407908	LDW24-IT1552B	K2407908-004					✓									
K2407908	LDW24-IT1552C	K2407908-005					✓									
K2407908	LDW24-IT1589B	K2407908-006					✓									
K2407908	LDW24-IT1589C	K2407908-007					✓									
K2407908	LDW24-IT1589E	K2407908-008					✓									
K2407908	LDW24-IT1589G	K2407908-009					✓									
K2407908	LDW24-IT1551A	K2407908-010					✓									
K2407908	LDW24-IT1556B	K2407908-011					✓									
K2407908	LDW24-IT1556C	K2407908-012					✓									
K2407908	LDW24-IT1556E	K2407908-013					✓									
K2407908	LDW24-IT1590A	K2407908-014		✓			✓									
23314	LDW24-SC1341F-FD	23314001	✓													
23314	LDW24-SC1343H	23314002	✓													
23314	LDW24-SC1343J	23314003	✓													
23314	LDW24-SC1344H	23314004	✓													
23314	LDW24-SC1344J	23314005	✓													

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
23314	LDW24-IT1376A-FD	23314007	✓													
23314	LDW24-IT1376B	23314008	✓													
23314	LDW24-SC1533	23314009	✓													
23314	LDW24-SS1829	23314010	✓													
23314	LDW24-SC1382F	23314011	✓													
23314	LDW24-IT1829	23314012	✓													
23314	LDW24-SS1377	23314013	✓													
23314	LDW24-SC1383E	23314014	✓													
23314	LDW24-IT1522B	23314015	✓													
23314	LDW24-IT1522C	23314016	✓													
23314	LDW24-SC1544F	23314017	✓													
23314	LDW24-SC1544H	23314018	✓													
23314	LDW24-SC1532A	23314019	✓													
23314	LDW24-IT1594B	23314020	✓													
23314	LDW24-IT1594A	23314021	✓													
23315	LDW24-SS1533	23315001	✓													
23315	LDW24-IT1601I	23315002	✓													
23315	LDW24-IT1601C	23315003	✓													
23315	LDW24-IT1597B	23315004	✓													
23315	LDW24-IT1377A	23315005	✓													
23315	LDW24-IT1605E	23315006	✓													
24G0631	LDW24-IT1555A	24G0631-01							✓	✓	✓				✓	✓
24G0631	LDW24-IT1404A	24G0631-02							✓						✓	✓
24G0631	LDW24-IT1553B	24G0631-03							✓	✓	✓				✓	✓
24G0631	LDW24-IT1553C	24G0631-04							✓	✓	✓				✓	✓
24H0071	LDW24-SS1450	24H0071-01							✓						✓	✓
24H0071	LDW24-SS1331	24H0071-02							✓						✓	✓
24I0537	LDW24-SC1466A	24I0537-01							✓						✓	✓
24I0537	LDW24-SC1501A	24I0537-02							✓						✓	✓
24I0537	LDW24-SC1501B	24I0537-03							✓						✓	✓
24I0537	LDW24-SC1501C-FD	24I0537-04							✓						✓	✓
24I0537	LDW24-SC1502A	24I0537-05							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24I0537	LDW24-SC1502B	24I0537-06							✓						✓	✓
24I0537	LDW24-SC1520C	24I0537-07							✓						✓	✓
24I0539	LDW24-SC1342O	24I0539-01							✓		✓				✓	✓
24I0539	LDW24-SC1342P	24I0539-02							✓		✓				✓	✓
24I0539	LDW24-SC1343H	24I0539-03							✓		✓				✓	✓
24I0539	LDW24-SC1343J	24I0539-04							✓		✓				✓	✓
24I0539	LDW24-SC1344H	24I0539-05							✓		✓				✓	✓
24I0539	LDW24-SC1344J	24I0539-06							✓		✓				✓	✓
24I0539	LDW24-SC1384E-FD	24I0539-07							✓		✓				✓	✓
24I0539	LDW24-SC1386D	24I0539-08							✓		✓				✓	✓
24I0539	LDW24-SC1386F	24I0539-09							✓		✓				✓	✓
24I0539	LDW24-SC1386H	24I0539-10							✓		✓				✓	✓
24I0539	LDW24-SC1387B	24I0539-11							✓		✓				✓	✓
24I0539	LDW24-SC1387C	24I0539-12							✓		✓				✓	✓
24I0539	LDW24-SC1388B	24I0539-13							✓		✓				✓	✓
24I0539	LDW24-SC1388C	24I0539-14							✓		✓				✓	✓
24I0539	LDW24-SC1388D	24I0539-15							✓		✓				✓	✓
24I0539	LDW24-SC1388E	24I0539-16							✓		✓				✓	✓
24I0647	LDW24-SC1321C	24I0647-01							✓						✓	✓
24I0647	LDW24-SC1321D	24I0647-02							✓						✓	✓
24I0647	LDW24-SC1321E	24I0647-03							✓						✓	✓
24I0647	LDW24-SC1321F	24I0647-04							✓						✓	✓
24I0647	LDW24-SC1323B	24I0647-05							✓						✓	✓
24I0647	LDW24-SC1323C	24I0647-06							✓						✓	✓
24I0647	LDW24-SC1323E	24I0647-07							✓						✓	✓
24I0647	LDW24-SC1323G	24I0647-08							✓						✓	✓
24I0647	LDW24-SC1323I	24I0647-09							✓						✓	✓
24I0647	LDW24-SC1324B	24I0647-10							✓						✓	✓
24I0647	LDW24-SC1324C	24I0647-11							✓						✓	✓
24I0647	LDW24-SC1324E	24I0647-12							✓						✓	✓
24I0647	LDW24-SC1324G	24I0647-13							✓						✓	✓
24I0647	LDW24-SC1324I	24I0647-14							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24I0647	LDW24-SC1326H	24I0647-15							✓						✓	✓
24I0647	LDW24-SC1326J	24I0647-16							✓						✓	✓
24I0647	LDW24-SC1326L	24I0647-17							✓						✓	✓
24I0647	LDW24-SC1326N	24I0647-18							✓						✓	✓
24I0647	LDW24-SC1326P	24I0647-19							✓						✓	✓
24I0647	LDW24-SC1327D	24I0647-20							✓						✓	✓
24I0647	LDW24-SC1327E	24I0647-21							✓						✓	✓
24I0647	LDW24-SC1327G	24I0647-22							✓						✓	✓
24I0647	LDW24-SC1327I	24I0647-23							✓						✓	✓
24I0647	LDW24-SC1327K	24I0647-24							✓						✓	✓
24I0647	LDW24-SC1327M	24I0647-25							✓						✓	✓
24I0647	LDW24-SC1334L	24I0647-26							✓						✓	✓
24I0647	LDW24-SC1334M	24I0647-27							✓						✓	✓
24I0647	LDW24-SC1334N	24I0647-28							✓						✓	✓
24I0647	LDW24-SC1336D-FD	24I0647-29							✓						✓	✓
24I0647	LDW24-SC1337M	24I0647-30							✓						✓	✓
24I0647	LDW24-SC1337O	24I0647-31							✓						✓	✓
24I0647	LDW24-SC1337Q	24I0647-32							✓						✓	✓
24I0647	LDW24-SC1337S	24I0647-33							✓						✓	✓
24I0647	LDW24-SC1338M	24I0647-34							✓						✓	✓
24I0647	LDW24-SC1338O	24I0647-35							✓						✓	✓
24I0647	LDW24-SC1338Q	24I0647-36							✓						✓	✓
24I0647	LDW24-SC1338S	24I0647-37							✓						✓	✓
24I0647	LDW24-SC1350E	24I0647-39							✓						✓	✓
24I0647	LDW24-SC1350G	24I0647-40							✓						✓	✓
24I0648	LDW24-IT1351B	24I0648-01							✓						✓	✓
24I0648	LDW24-IT1351C	24I0648-02							✓						✓	✓
24I0648	LDW24-IT1351D	24I0648-03							✓						✓	✓
24I0648	LDW24-IT1351E	24I0648-04							✓						✓	✓
24I0648	LDW24-IT1351F	24I0648-05							✓						✓	✓
24I0648	LDW24-IT1352B	24I0648-06							✓						✓	✓
24I0648	LDW24-IT1352C	24I0648-07							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24I0648	LDW24-IT1352D	24I0648-08							✓						✓	✓
24I0648	LDW24-IT1352E	24I0648-09							✓						✓	✓
24I0648	LDW24-IT1352F	24I0648-10							✓						✓	✓
24I0648	LDW24-SC1353C	24I0648-11							✓						✓	✓
24I0648	LDW24-SC1353E	24I0648-12							✓						✓	✓
24I0648	LDW24-SC1353G	24I0648-13							✓						✓	✓
24I0648	LDW24-SC1353I	24I0648-14							✓						✓	✓
24I0648	LDW24-SC1353K	24I0648-15							✓						✓	✓
24I0648	LDW24-SC1353M	24I0648-16							✓						✓	✓
24I0648	LDW24-SC1353O	24I0648-17							✓						✓	✓
24I0648	LDW24-SC1353Q	24I0648-18							✓						✓	✓
24I0648	LDW24-SC1353S	24I0648-19							✓						✓	✓
24I0648	LDW24-SC1354C	24I0648-20							✓						✓	✓
24I0648	LDW24-SC1354E	24I0648-21							✓						✓	✓
24I0648	LDW24-SC1354G	24I0648-22							✓						✓	✓
24I0648	LDW24-SC1354I	24I0648-23							✓						✓	✓
24I0648	LDW24-SC1354K	24I0648-24							✓						✓	✓
24I0648	LDW24-SC1354M	24I0648-25							✓						✓	✓
24I0648	LDW24-SC1354O	24I0648-26							✓						✓	✓
24I0648	LDW24-SC1354Q	24I0648-27							✓						✓	✓
24I0648	LDW24-IT1355B	24I0648-28							✓						✓	✓
24I0648	LDW24-IT1355C	24I0648-29							✓						✓	✓
24I0648	LDW24-IT1355D	24I0648-30							✓						✓	✓
24I0648	LDW24-IT1355E	24I0648-31							✓						✓	✓
24I0648	LDW24-SC1356C	24I0648-32							✓						✓	✓
24I0648	LDW24-SC1356E	24I0648-33							✓						✓	✓
24I0648	LDW24-SC1356G	24I0648-34							✓						✓	✓
24I0648	LDW24-SC1356I	24I0648-35							✓						✓	✓
24I0648	LDW24-SC1356K	24I0648-36							✓						✓	✓
24I0648	LDW24-SC1356M	24I0648-37							✓						✓	✓
24I0648	LDW24-SC1356O	24I0648-38							✓						✓	✓
24I0648	LDW24-SC1356Q	24I0648-39							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24I0648	LDW24-SC1356S	24I0648-40							✓						✓	✓
24I0651	LDW24-SC1357C	24I0651-01							✓						✓	✓
24I0651	LDW24-SC1357E	24I0651-02							✓						✓	✓
24I0651	LDW24-SC1357G	24I0651-03							✓						✓	✓
24I0651	LDW24-IT1358B	24I0651-04							✓						✓	✓
24I0651	LDW24-IT1358C	24I0651-05							✓						✓	✓
24I0651	LDW24-IT1358D	24I0651-06							✓						✓	✓
24I0651	LDW24-IT1358E	24I0651-07							✓						✓	✓
24I0651	LDW24-IT1359B	24I0651-08							✓						✓	✓
24I0651	LDW24-IT1360B	24I0651-09							✓						✓	✓
24I0651	LDW24-IT1360C	24I0651-10							✓						✓	✓
24I0651	LDW24-IT1360D	24I0651-11							✓						✓	✓
24I0651	LDW24-IT1360E	24I0651-12							✓						✓	✓
24I0651	LDW24-IT1362B	24I0651-13							✓						✓	✓
24I0651	LDW24-IT1362C	24I0651-14							✓						✓	✓
24I0651	LDW24-IT1363B	24I0651-15							✓						✓	✓
24I0651	LDW24-IT1363C	24I0651-16							✓						✓	✓
24I0651	LDW24-IT1363D	24I0651-17							✓						✓	✓
24I0651	LDW24-IT1363E	24I0651-18							✓						✓	✓
24I0651	LDW24-IT1364B	24I0651-19							✓						✓	✓
24I0651	LDW24-SC1365C	24I0651-20							✓						✓	✓
24I0651	LDW24-SC1365E	24I0651-21							✓						✓	✓
24I0651	LDW24-SC1365G	24I0651-22							✓						✓	✓
24I0651	LDW24-SC1365I	24I0651-23							✓						✓	✓
24I0651	LDW24-SC1365K	24I0651-24							✓						✓	✓
24I0651	LDW24-SC1366C	24I0651-25							✓						✓	✓
24I0651	LDW24-SC1366E	24I0651-26							✓						✓	✓
24I0651	LDW24-IT1367B	24I0651-27							✓						✓	✓
24I0651	LDW24-IT1367C	24I0651-28							✓						✓	✓
24I0651	LDW24-IT1367D	24I0651-29							✓						✓	✓
24I0651	LDW24-IT1367E	24I0651-30							✓						✓	✓
24I0651	LDW24-IT1368B	24I0651-31							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24I0651	LDW24-IT1369B	24I0651-32							✓						✓	✓
24I0651	LDW24-IT1369C	24I0651-33							✓						✓	✓
24I0655	LDW24-SC1371C	24I0655-01							✓						✓	✓
24I0655	LDW24-SC1371E	24I0655-02							✓						✓	✓
24I0655	LDW24-SC1371G	24I0655-03							✓						✓	✓
24I0655	LDW24-SC1371I	24I0655-04							✓						✓	✓
24I0655	LDW24-SC1371K	24I0655-05							✓						✓	✓
24I0655	LDW24-SC1371M	24I0655-06							✓						✓	✓
24I0655	LDW24-SC1371O	24I0655-07							✓						✓	✓
24I0655	LDW24-SC1371Q	24I0655-08							✓						✓	✓
24I0655	LDW24-IT1373B	24I0655-09							✓						✓	✓
24I0655	LDW24-IT1374A-FD	24I0655-13							✓						✓	✓
24I0655	LDW24-IT1374B	24I0655-14							✓						✓	✓
24I0655	LDW24-IT1374C	24I0655-15							✓						✓	✓
24I0655	LDW24-IT1374D	24I0655-16							✓						✓	✓
24I0655	LDW24-IT1376B	24I0655-17							✓						✓	✓
24I0655	LDW24-IT1378B	24I0655-18							✓						✓	✓
24I0655	LDW24-SC1382F	24I0655-19							✓						✓	✓
24I0655	LDW24-SC1405G	24I0655-20							✓						✓	✓
24I0655	LDW24-SC1405I	24I0655-21							✓						✓	✓
24I0655	LDW24-SC1405K	24I0655-22							✓						✓	✓
24I0655	LDW24-SC1405M	24I0655-23							✓						✓	✓
24I0655	LDW24-SC1408F	24I0655-24							✓						✓	✓
24I0655	LDW24-SC1408H	24I0655-25							✓						✓	✓
24I0655	LDW24-SC1408J	24I0655-26							✓						✓	✓
24I0655	LDW24-SC1408L	24I0655-27							✓						✓	✓
24I0655	LDW24-IT1413B-FD	24I0655-28							✓						✓	✓
24I0655	LDW24-SC1415E	24I0655-29							✓						✓	✓
24I0655	LDW24-SC1415G	24I0655-30							✓						✓	✓
24I0655	LDW24-SC1415I	24I0655-31							✓						✓	✓
24I0655	LDW24-SC1415K	24I0655-32							✓						✓	✓
24I0655	LDW24-SC1420G	24I0655-33							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24I0655	LDW24-SC1420I	24I0655-34							✓						✓	✓
24I0655	LDW24-SC1420K	24I0655-35							✓						✓	✓
24I0655	LDW24-SC1420M	24I0655-36							✓						✓	✓
24I0655	LDW24-SC1425G-FD	24I0655-37							✓						✓	✓
24I0664	LDW24-SC1430E	24I0664-01							✓						✓	✓
24I0664	LDW24-SC1430G	24I0664-02							✓						✓	✓
24I0664	LDW24-SC1430I	24I0664-03							✓						✓	✓
24I0664	LDW24-SC1430K	24I0664-04							✓						✓	✓
24I0664	LDW24-SC1433G-FD	24I0664-05							✓						✓	✓
24I0664	LDW24-SC1442C-FD	24I0664-06							✓						✓	✓
24I0664	LDW24-SC1452E-FD	24I0664-07							✓						✓	✓
24I0664	LDW24-SC1453B	24I0664-08							✓						✓	✓
24I0664	LDW24-SC1453C	24I0664-09							✓						✓	✓
24I0664	LDW24-SC1453E	24I0664-10							✓						✓	✓
24I0664	LDW24-SC1453G	24I0664-11							✓						✓	✓
24I0664	LDW24-SC1453I	24I0664-12							✓						✓	✓
24I0664	LDW24-SC1460F-FD	24I0664-13							✓						✓	✓
24I0664	LDW24-SC1489D-FD	24I0664-14							✓						✓	✓
24I0664	LDW24-SC1503I	24I0664-15							✓						✓	✓
24I0664	LDW24-SC1503K	24I0664-16							✓						✓	✓
24I0664	LDW24-SC1507C	24I0664-17							✓						✓	✓
24I0664	LDW24-SC1507D	24I0664-18							✓						✓	✓
24I0664	LDW24-SC1507E	24I0664-19							✓						✓	✓
24I0664	LDW24-SC1509I	24I0664-20							✓						✓	✓
24I0664	LDW24-SC1509J	24I0664-21							✓						✓	✓
24I0664	LDW24-SC1509K	24I0664-22							✓						✓	✓
24I0664	LDW24-SC1510J	24I0664-23							✓						✓	✓
24I0664	LDW24-SC1510L	24I0664-24							✓						✓	✓
24I0664	LDW24-SC1511F	24I0664-25							✓						✓	✓
24I0664	LDW24-SC1511H	24I0664-26							✓						✓	✓
24I0664	LDW24-SC1515D	24I0664-27							✓						✓	✓
24I0664	LDW24-SC1515E	24I0664-28							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24I0664	LDW24-SC1515F	24I0664-29							✓						✓	✓
24I0664	LDW24-SC1515G	24I0664-30							✓						✓	✓
24I0664	LDW24-SC1515H	24I0664-31							✓						✓	✓
24I0664	LDW24-SC1515I	24I0664-32							✓						✓	✓
24I0664	LDW24-SC1515J	24I0664-33							✓						✓	✓
24I0664	LDW24-SC1529F	24I0664-34							✓						✓	✓
24I0664	LDW24-SC1529H	24I0664-35							✓						✓	✓
24I0664	LDW24-SC1529J	24I0664-36							✓						✓	✓
24I0664	LDW24-SC1534I	24I0664-37							✓						✓	✓
24I0664	LDW24-SC1534K	24I0664-38							✓						✓	✓
24I0664	LDW24-SC1535J	24I0664-39							✓						✓	✓
24I0669	LDW24-SC1538F	24I0669-01							✓						✓	✓
24I0669	LDW24-SC1538H	24I0669-02							✓						✓	✓
24I0669	LDW24-SC1538J	24I0669-03							✓						✓	✓
24I0669	LDW24-IT1540D	24I0669-04							✓						✓	✓
24I0669	LDW24-IT1543B	24I0669-05							✓						✓	✓
24I0669	LDW24-IT1543C	24I0669-06							✓						✓	✓
24I0669	LDW24-IT1543D	24I0669-07							✓						✓	✓
24I0669	LDW24-SC1544F	24I0669-08							✓						✓	✓
24I0669	LDW24-SC1544H	24I0669-09							✓						✓	✓
24I0669	LDW24-SC1563F	24I0669-10							✓						✓	✓
24I0669	LDW24-SC1563H	24I0669-11							✓						✓	✓
24I0669	LDW24-SC1586D	24I0669-12							✓						✓	✓
24K0260	LDW24-SC1459A	24K0260-01							✓						✓	✓
24K0260	LDW24-SC1549A	24K0260-02							✓						✓	✓
24K0260	LDW24-IT1603A	24K0260-03							✓		✓				✓	✓
24K0260	LDW24-IT1605A	24K0260-04							✓						✓	✓
24K0260	LDW24-IT1606A	24K0260-05							✓						✓	✓
24K0260	LDW24-IT1428A	24K0260-06							✓		✓				✓	✓
24K0260	LDW24-IT1560A	24K0260-07							✓						✓	✓
24K0260	LDW24-SC1489A	24K0260-08							✓						✓	✓
24K0260	LDW24-SC1489B	24K0260-09							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24K0260	LDW24-IT1553A	24K0260-10							✓						✓	✓
24K0260	LDW24-IT1556A	24K0260-11					✓		✓			✓			✓	✓
24K0260	LDW24-IT1552A	24K0260-12							✓			✓			✓	✓
24K0260	LDW24-IT1601A	24K0260-13							✓		✓				✓	✓
24K0260	LDW24-IT1593A	24K0260-14							✓						✓	✓
24K0260	LDW24-SC1482A	24K0260-15							✓						✓	✓
24K0260	LDW24-IT1596A	24K0260-16							✓		✓				✓	✓
24K0260	LDW24-IT1594A	24K0260-17							✓						✓	✓
24K0260	LDW24-IT1604A	24K0260-18							✓						✓	✓
24K0260	LDW24-IT1597A	24K0260-19							✓						✓	✓
24K0260	LDW24-IT1602A	24K0260-20							✓						✓	✓
24K0260	LDW24-IT1611A	24K0260-21							✓						✓	✓
24K0260	LDW24-IT1612A	24K0260-22							✓						✓	✓
24K0260	LDW24-SS1516	24K0260-23					✓									
24K0260	LDW24-IT1599A	24K0260-24							✓		✓				✓	✓
24K0260	LDW24-IT1610A	24K0260-25							✓		✓				✓	✓
24K0260	LDW24-IT1598A	24K0260-26							✓						✓	✓
24K0260	LDW24-IT1600A	24K0260-27							✓						✓	✓
24K0260	LDW24-SC1479A	24K0260-28							✓						✓	✓
24K0260	LDW24-IT1592A	24K0260-29							✓						✓	✓
24K0260	LDW24-SC1488A	24K0260-30							✓						✓	✓
24K0260	LDW24-SC1488B	24K0260-31							✓						✓	✓
24K0260	LDW24-SC1488C	24K0260-32							✓						✓	✓
24K0260	LDW24-SC1320A	24K0260-33							✓						✓	✓
24K0260	LDW24-SC1577	24K0260-34							✓						✓	✓
24K0260	LDW24-IT1609A	24K0260-35							✓		✓				✓	✓
24K0393	LDW24-SC1342K	24K0393-01							✓		✓				✓	✓
24K0393	LDW24-SC1342M	24K0393-02							✓		✓				✓	✓
24K0393	LDW24-SC1559A-FD	24K0393-03							✓		✓				✓	✓
24K0393	LDW24-IT1607F	24K0393-04							✓		✓				✓	✓
24K0393	LDW24-IT1402A-FD	24K0393-05					✓		✓			✓			✓	✓
24K0393	LDW24-IT1555B	24K0393-06					✓		✓			✓			✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24K0393	LDW24-IT1556D	24K0393-07					✓		✓			✓			✓	✓
24K0393	LDW24-IT1551B	24K0393-08							✓			✓			✓	✓
24K0393	LDW24-IT1551C	24K0393-09							✓			✓			✓	✓
24K0393	LDW24-IT1551D	24K0393-10							✓			✓			✓	✓
24K0393	LDW24-IT1552D	24K0393-11							✓			✓			✓	✓
24K0393	LDW24-SC1345L	24K0393-12							✓		✓				✓	✓
24K0393	LDW24-IT1601D	24K0393-13							✓		✓				✓	✓
24K0393	LDW24-IT1601F	24K0393-14							✓		✓				✓	✓
24K0393	LDW24-IT1601H	24K0393-15							✓		✓				✓	✓
24K0393	LDW24-IT1601J	24K0393-16							✓		✓				✓	✓
24K0393	LDW24-SC1345N	24K0393-17							✓		✓				✓	✓
24K0393	LDW24-SC1345P	24K0393-18							✓		✓				✓	✓
24K0393	LDW24-IT1599D	24K0393-19							✓		✓				✓	✓
24K0393	LDW24-IT1599F	24K0393-20							✓		✓				✓	✓
24K0393	LDW24-IT1376A-FD	24K0393-21							✓						✓	✓
24K0393	LDW24-SC1347E-FD	24K0393-22							✓		✓				✓	✓
24K0393	LDW24-IT1378A-FD	24K0393-23							✓						✓	✓
24K0562	LDW24-SC1405B	24K0562-01							✓						✓	✓
24K0562	LDW24-SC1405D	24K0562-02							✓						✓	✓
24K0562	LDW24-SC1420B	24K0562-03							✓						✓	✓
24K0562	LDW24-SC1420D	24K0562-04							✓						✓	✓
24K0562	LDW24-SC1491J	24K0562-05							✓						✓	✓
24K0562	LDW24-SC1501D	24K0562-06							✓						✓	✓
24K0562	LDW24-SC1408B	24K0562-07							✓						✓	✓
24K0562	LDW24-SC1408D	24K0562-08							✓						✓	✓
24K0562	LDW24-SC1529D	24K0562-09							✓						✓	✓
24K0562	LDW24-IT1560E	24K0562-10							✓						✓	✓
24K0562	LDW24-SC1460E	24K0562-11							✓						✓	✓
24K0562	LDW24-SC1460G	24K0562-12							✓						✓	✓
24K0562	LDW24-IT1605D	24K0562-13							✓						✓	✓
24K0562	LDW24-IT1605F	24K0562-14							✓						✓	✓
24K0562	LDW24-IT1605H	24K0562-15							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24K0562	LDW24-IT1606D	24K0562-16							✓						✓	✓
24K0562	LDW24-IT1418F	24K0562-17							✓						✓	✓
24K0562	LDW24-IT1418H	24K0562-18							✓						✓	✓
24K0562	LDW24-IT1426D	24K0562-19							✓						✓	✓
24K0562	LDW24-IT1426F	24K0562-20							✓						✓	✓
24K0562	LDW24-IT1560D	24K0562-21							✓						✓	✓
24K0562	LDW24-SC1466C	24K0562-22							✓						✓	✓
24K0562	LDW24-SC1466D	24K0562-23							✓						✓	✓
24K0562	LDW24-SC1549C	24K0562-24							✓						✓	✓
24K0562	LDW24-SC1415B	24K0562-25							✓						✓	✓
24K0562	LDW24-SC1415C	24K0562-26							✓						✓	✓
24K0562	LDW24-SC1334B	24K0562-27							✓						✓	✓
24K0562	LDW24-SC1334D	24K0562-28							✓						✓	✓
24K0562	LDW24-SC1334F	24K0562-29							✓						✓	✓
24K0562	LDW24-SS1317-FD	24K0562-30							✓						✓	✓
24K0562	LDW24-IT1560B	24K0562-31							✓						✓	✓
24K0562	LDW24-IT1560C	24K0562-32							✓						✓	✓
24K0562	LDW24-SC1502D	24K0562-33							✓						✓	✓
24K0562	LDW24-SC1489E	24K0562-34							✓						✓	✓
24K0562	LDW24-SC1489G	24K0562-35							✓						✓	✓
24K0562	LDW24-SC1451F	24K0562-36							✓						✓	✓
24K0562	LDW24-SC1451H	24K0562-37							✓						✓	✓
24K0562	LDW24-SC1326D	24K0562-38							✓						✓	✓
24K0562	LDW24-SC1329B	24K0562-39							✓						✓	✓
24K0562	LDW24-SC1329D	24K0562-40							✓						✓	✓
24K0644	LDW24-SC1329E	24K0644-01							✓						✓	✓
24K0644	LDW24-SC1554C	24K0644-02							✓						✓	✓
24K0644	LDW24-SC1337I	24K0644-03							✓						✓	✓
24K0644	LDW24-SC1337K	24K0644-04							✓						✓	✓
24K0644	LDW24-IT1404C	24K0644-05							✓						✓	✓
24K0644	LDW24-IT1404D	24K0644-06							✓						✓	✓
24K0644	LDW24-IT1404E	24K0644-07							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24K0644	LDW24-SC1554E	24K0644-08							✓						✓	✓
24K0644	LDW24-SC1531D	24K0644-09							✓						✓	✓
24K0644	LDW24-SC1531E	24K0644-10							✓						✓	✓
24K0644	LDW24-SC1531F	24K0644-11							✓						✓	✓
24K0644	LDW24-SC1326B	24K0644-12							✓						✓	✓
24K0644	LDW24-SC1482C	24K0644-13							✓						✓	✓
24K0644	LDW24-SC1482D	24K0644-14							✓						✓	✓
24K0644	LDW24-SC1482F	24K0644-15							✓						✓	✓
24K0644	LDW24-SC1490D	24K0644-16							✓						✓	✓
24K0644	LDW24-SC1490F	24K0644-17							✓						✓	✓
24K0644	LDW24-IT1411B	24K0644-18							✓						✓	✓
24K0644	LDW24-IT1411C	24K0644-19							✓						✓	✓
24K0644	LDW24-IT1411E	24K0644-20							✓						✓	✓
24K0644	LDW24-IT1411G	24K0644-21							✓						✓	✓
24K0644	LDW24-SC1312C	24K0644-22							✓						✓	✓
24K0644	LDW24-SC1312D	24K0644-23							✓						✓	✓
24K0644	LDW24-SC1312E	24K0644-24							✓						✓	✓
24K0644	LDW24-SC1312F	24K0644-25							✓						✓	✓
24K0644	LDW24-SC1493B	24K0644-26							✓						✓	✓
24K0644	LDW24-SC1493C	24K0644-27							✓						✓	✓
24K0644	LDW24-SC1493E	24K0644-28							✓						✓	✓
24K0644	LDW24-SC1438B	24K0644-29							✓						✓	✓
24K0644	LDW24-SC1438D	24K0644-30							✓						✓	✓
24K0644	LDW24-SC1438F	24K0644-31							✓						✓	✓
24K0644	LDW24-SC1493G	24K0644-32							✓						✓	✓
24K0644	LDW24-IT1595D	24K0644-33							✓		✓				✓	✓
24K0644	LDW24-IT1595F	24K0644-34							✓		✓				✓	✓
24K0644	LDW24-IT1611B	24K0644-35							✓						✓	✓
24K0644	LDW24-IT1611C	24K0644-36							✓						✓	✓
24K0644	LDW24-IT1611D	24K0644-37							✓						✓	✓
24K0644	LDW24-IT1611E	24K0644-38							✓						✓	✓
24K0644	LDW24-IT1611F	24K0644-39							✓						✓	✓

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
24K0644	LDW24-IT1612B	24K0644-40							✓						✓	✓
24K0648	LDW24-IT1612C	24K0648-01							✓						✓	✓
24K0648	LDW24-IT1612D	24K0648-02							✓						✓	✓
24K0648	LDW24-IT1612E	24K0648-03							✓						✓	✓
24K0648	LDW24-IT1612F	24K0648-04							✓						✓	✓
24K0648	LDW24-IT1612G	24K0648-05							✓						✓	✓
24K0648	LDW24-IT1600D	24K0648-06							✓						✓	✓
24K0648	LDW24-SC1492B	24K0648-07							✓						✓	✓
24K0648	LDW24-SC1492C	24K0648-08							✓						✓	✓
24K0648	LDW24-SC1492E	24K0648-09							✓						✓	✓
24K0648	LDW24-SC1341F-FD	24K0648-10							✓						✓	✓
24K0648	LDW24-SC1558C	24K0648-11							✓						✓	✓
24K0648	LDW24-SC1302B	24K0648-12							✓						✓	✓
24K0648	LDW24-SC1302C	24K0648-13							✓						✓	✓
24K0648	LDW24-SC1549E	24K0648-14							✓						✓	✓
24K0648	LDW24-SC1430B	24K0648-15							✓						✓	✓
24K0648	LDW24-IT1528B-FD	24K0648-16							✓						✓	✓
24K0648	LDW24-SC1488D	24K0648-17							✓						✓	✓
24K0648	LDW24-SC1488E	24K0648-18							✓						✓	✓
24K0648	LDW24-SC1488G	24K0648-19							✓						✓	✓
24K0648	LDW24-SC1430C	24K0648-20							✓						✓	✓
24K0648	LDW24-SC1549B	24K0648-21							✓						✓	✓
24K0648	LDW24-SC1549G	24K0648-22							✓						✓	✓
24L0182	LDW24-SC1350C	24L0182-01							✓						✓	✓
K2408853	LDW24-SC1341E	L2757140-1	✓													
K2408853	LDW24-SC1343I	L2757140-10	✓													
K2408853	LDW24-SC1344D	L2757140-11	✓													
K2408853	LDW24-SC1344D-FD	L2757140-12	✓													
K2408853	LDW24-SC1344E	L2757140-13	✓													
K2408853	LDW24-SC1344G	L2757140-14	✓													
K2408853	LDW24-SC1344I	L2757140-15	✓													
K2408853	LDW24-SC1344K	L2757140-16	✓													

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
K2408853	LDW24-SC1344M	L2757140-17	✓													
K2408853	LDW24-SC1346C	L2757140-18	✓													
K2408853	LDW24-SC1346D	L2757140-19	✓													
K2408853	LDW24-SC1341E-FD	L2757140-2	✓													
K2408853	LDW24-SC1346F	L2757140-20	✓													
K2408853	LDW24-SC1346H	L2757140-21	✓													
K2408853	LDW24-SC1347E	L2757140-22	✓													
K2408853	LDW24-SC1347F	L2757140-23	✓													
K2408853	LDW24-SC1347H	L2757140-24	✓													
K2408853	LDW24-IT1352A	L2757140-25	✓													
K2408853	LDW24-SS1352	L2757140-26	✓													
K2408853	LDW24-SS1356	L2757140-27	✓													
K2408853	LDW24-SS1357	L2757140-28	✓													
K2408853	LDW24-SS1357-FD	L2757140-29	✓													
K2408853	LDW24-SC1341F	L2757140-3	✓													
K2408853	LDW24-IT1361B	L2757140-30	✓													
K2408853	LDW24-IT1364A	L2757140-31	✓													
K2408853	LDW24-SS1364	L2757140-32	✓													
K2408853	LDW24-IT1373A	L2757140-33	✓													
K2408853	LDW24-SS1373	L2757140-34	✓													
K2408853	LDW24-IT1376A	L2757140-35	✓													
K2408853	LDW24-SS1376	L2757140-36	✓													
K2408853	LDW24-IT1378A	L2757140-37	✓													
K2408853	LDW24-SS1399	L2757140-38	✓													
K2408853	LDW24-SS1402	L2757140-39	✓													
K2408853	LDW24-SC1341H	L2757140-4	✓													
K2408853	LDW24-SS1402-FD	L2757140-40	✓													
K2408853	LDW24-IT1444	L2757140-41	✓													
K2408853	LDW24-SS1444	L2757140-42	✓													
K2408853	LDW24-SS1446	L2757140-43	✓													
K2408853	LDW24-SS1447	L2757140-44	✓													
K2408853	LDW24-SC1468A	L2757140-45	✓													

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
K2408853	LDW24-SC1468A-FD	L2757140-46	✓													
K2408853	LDW24-IT1485A	L2757140-47	✓													
K2408853	LDW24-SS1485	L2757140-48	✓													
K2408853	LDW24-IT1486B	L2757140-49	✓													
K2408853	LDW24-SC1341J	L2757140-5	✓													
K2408853	LDW24-IT1486C	L2757140-50	✓													
K2408853	LDW24-IT1519B	L2757140-51	✓													
K2408853	LDW24-IT1519C	L2757140-52	✓													
K2408853	LDW24-IT1524A	L2757140-53	✓													
K2408853	LDW24-SS1525	L2757140-54	✓													
K2408853	LDW24-SS1526	L2757140-55	✓													
K2408853	LDW24-IT1527A	L2757140-56	✓													
K2408853	LDW24-IT1527A-FD	L2757140-57	✓													
K2408853	LDW24-IT1527B	L2757140-58	✓													
K2408853	LDW24-IT1527C	L2757140-59	✓													
K2408853	LDW24-SC1343D	L2757140-6	✓													
K2408853	LDW24-IT1527E	L2757140-60	✓													
K2408853	LDW24-IT1527G	L2757140-61	✓													
K2408853	LDW24-IT1528B	L2757140-62	✓													
K2408853	LDW24-IT1528C	L2757140-63	✓													
K2408853	LDW24-IT1528E	L2757140-64	✓													
K2408853	LDW24-IT1528G	L2757140-65	✓													
K2408853	LDW24-IT1528I	L2757140-66	✓													
K2408853	LDW24-IT1528K	L2757140-67	✓													
K2408853	LDW24-IT1528M	L2757140-68	✓													
K2408853	LDW24-SC1530	L2757140-69	✓													
K2408853	LDW24-SC1343E	L2757140-7	✓													
K2408853	LDW24-IT1546A	L2757140-70	✓													
K2408853	LDW24-IT1546B	L2757140-71	✓													
K2408853	LDW24-IT1546B-FD	L2757140-72	✓													
K2408853	LDW24-IT1546C	L2757140-73	✓													
K2408853	LDW24-IT1546E	L2757140-74	✓													

**Sample Index**  
**LDW AOC5 Phase II**

SDG	Sample ID	Lab ID	Dioxins 1613B	SVOC Full List	SVOC Phthalates Only	SVOC Phenol Only	PAH	HCB	PCB	Metals	Hg	Arsenic Only	Sulfide	NH3	TOC	TS
K2408853	LDW24-IT1546G	L2757140-75	✓													
K2408853	LDW24-SS1546	L2757140-76	✓													
K2408853	LDW24-IT1590A	L2757140-77	✓													
K2408853	LDW24-SS1590	L2757140-78	✓													
K2408853	LDW24-IT1591	L2757140-79	✓													
K2408853	LDW24-SC1343E-FD	L2757140-8	✓													
K2408853	LDW24-SS1591	L2757140-80	✓													
K2408853	LDW24-SC1343G	L2757140-9	✓													
K2411658	LDW24-IT1590A	K2411658-001		✓												

**DATA VALIDATION REPORT**  
**AOC5 Phase II – LDW MR**  
**Dioxin/Furan Compounds by EPA 1613B**

This report documents the review of analytical data from the analysis of sediment samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Analytical Resources, LLC., Tukwila, Washington; ALS, Burlington, Ontario, Canada; and Cape Fear Analytical, LLC., Wilmington, North Carolina. Refer to the **Sample Index** for a complete list of samples.

SDG	LABORATORY	NUMBER OF SAMPLES	VALIDATION LEVEL
24E0341	Analytical Resources LLC	1 Sediment	EPA Stage 2B
24E0373	Analytical Resources LLC	6 Sediment	EPA Stage 2B
24E0404	Analytical Resources LLC	8 Sediment	EPA Stage 2B
24E0429	Analytical Resources LLC	2 Sediment	EPA Stage 2B
24E0517	Analytical Resources LLC	5 Sediment	EPA Stage 2B
24E0605	Analytical Resources LLC	2 Sediment	EPA Stage 2B
24E0608	Analytical Resources LLC	6 Sediment	EPA Stage 2B
24F0010	Analytical Resources LLC	8 Sediment	EPA Stage 2B
K2408853	ALS	80 Sediment	EPA Stage 2B/4
23314	Cape Fear Analytical	20 Sediment	EPA Stage 2B
23315	Cape Fear Analytical	6 Sediment	EPA Stage 2B

**DATA PACKAGE COMPLETENESS**

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes, and all anomalies were discussed in the case narrative.

*SDG K2408853:* For batch WG3790328, the batch QC laboratory duplicate results were not included in the PDF. The laboratory submitted an addendum with the required information.

**EDD TO HARDCOPY VERIFICATION**

All sample IDs reported in the electronic data deliverable (EDD) were verified (100%) by comparing the EDD to the hardcopy laboratory data package. Sample results and laboratory quality control sample results were also verified (10%).

*SDG 24E0517:* For Sample LDW24-IT1470E, the 1,2,3,7,8,9-HpCDF result and associated labeled compound result from the 10x analysis was missing from the EDD. The laboratory submitted a revised EDD with the required information.

*SDG K2408853:* All extraction dates in the EDD did not match the laboratory report. The dates in the laboratory report are correct. No action was taken.

In the PDF, the estimated maximum possible concentration (EMPC) values, which are R-flagged by the laboratory, have a "<" in the concentration column, indicating that the results are considered non-detects. In the EDD, these EMPC values are correctly reported as positive results.

## TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table.

2	Sample Receipt, Preservation, and Holding Times	2	Laboratory Duplicates
✓	System Performance and Resolution Checks	2	Standard Reference Material
✓	Initial Calibration (ICAL)	1	Field Duplicates
2	Calibration Verification (CCV)	✓	Target Analyte List
2	Laboratory Blanks	1	Reporting Limits
1	Field Blanks	2	Compound Identification
2	Labeled Compound Recovery	✓	Compound Quantitation
1	Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)	2	Reported Results
1	Matrix Spike/Matrix Spike Duplicates (MS/MSD)	1	Calculation Verification

✓ *Method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.*

1 *Quality control results are discussed below, but no data were qualified.*

2 *Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.*

### Sample Receipt, Preservation, and Holding Times

#### Cooler Temperature:

As stated in validation guidance documents, sample shipping coolers should arrive at the laboratory within the advisory temperature range of  $\leq 6^{\circ}\text{C}$ . Several cooler temperatures were greater than the  $6^{\circ}\text{C}$  control limit. For the following circumstances, no action was taken for the temperature outliers:

- The sample cooler was received at the laboratory the same day as collection and did not have time to chill to  $< 6^{\circ}\text{C}$ . This outlier did not impact data quality; no results were qualified.
- The sample cooler was received at the laboratory within one day of collection, and the cooler temperature was  $< 12^{\circ}\text{C}$ . This outlier did not impact data quality; no results were qualified.

The SDGs with cooler temperature outliers in these categories are as follows:

24E0373	24E0404	24E0605
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#### Chain of Custody (COC):

**SDG 23314:** Sample LDW24-SS1533 was listed on the COC but was not received by the laboratory. This sample was included in a follow-up shipment and reported in SDG 23315.

**SDG 23315:** Sample LDW24-IT1600C is listed on the COC with a collection date of 7/16/24. As per email communication included in the PDF, the correct collection date is 7/15/24.

For two of the three Chains of Custody (COC), the "Released By" section was not signed by the courier.

*SDG 24E0527:* The following samples had a collection time of 09:33 listed on the chains-of-custody (COC), but had 09:23 listed on the containers:

LDW24-IT1470B	LDW24-IT1470E
LDW24-IT1470C	LDW24-IT1470G

***Holding Time Exceedance:***

*SDG 24F0010:* All samples were pulled from frozen archive and were extracted past the 365-day holding time between 434-531 days; all results were estimated (J/UJ-1).

**Calibration Verification**

With the following exceptions, all calibration verification (CCAL) criteria were met.

*SDGs 24E0373, 24E0404:* For the CCAL analyzed 6/12/24 at 15:54, the percent difference (%D) values for 2,3,7,8-TCDF and OCDF were outside the control limits, indicating a potential low bias. Results for 2,3,7,8-TCDF and OCDF in the associated samples were estimated (J-5BL).

*SDG 24F0010:* For the CCALs analyzed on 6/28/24 at 10:04 and 14:14, the %D values for 2,3,7,8-TCDF were outside the control limits, indicating a potential low bias; results for 2,3,7,8-TCDF in the associated samples were estimated (J/UJ-5BL).

For the CCAL analyzed 6/28/24 at 14:14, the %D value for 1,2,3,7,8,9-HxCDD was outside the control limit, indicating a potential high bias; positive results for 1,2,3,7,8,9-HxCDD in the associated samples were estimated (J-5BH).

**Laboratory Blanks**

Method blanks were analyzed at the appropriate frequency. To assess the impact of any blank contaminant on the reported sample results, an action level is established at five times (5x) the concentration reported in the blank. If a contaminant is reported in an associated field sample and the concentration is less than the action level, the result is qualified as not detected (U-7). No action is taken if the sample result is greater than the action level, or for non-detected results.

The laboratory assigned flags (see **Compound Identification** section) to values when a peak was detected but did not meet ion abundance identification criteria. These values are “estimated maximum possible concentrations”. When these occurred in the method blank and the concentrations were less than the reporting limit (RL), the results were considered false positives; no action levels were established for these analytes. EMPC values greater than the RL in the method blank were considered positive results, and action levels were established.

Total dioxins and furans in the method blank may not be directly comparable to total dioxins and furans in the field samples. Therefore, no qualifiers are assigned based on positive results for total dioxins and furans in the method blank.

*SDG 24F0010*: For method blank BMF0331-BLK1, there was a positive result for 2,3,7,8-TCDD; positive results in the associated samples and laboratory duplicate sample that were less than the 5x action level were qualified as not detected (U-7).

*SDG K2408853*: For all method blanks where one or more analytes were detected, associated field sample results were greater than the action levels; no data were qualified.

*SDG 23314*: For method blank 12038304, there were positive results for OCDD and 2,3,4,6,7,8-HxCDF. Positive results in the associated samples that were less than the 5x action levels were qualified as not detected (U-7).

*SDG 23315*: For method blank 12038209, there were positive results for OCDD, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8-HxCDF, and 1,2,3,7,8,9-HxCDD. All field sample results were greater than the action levels; no data were qualified.

### **Field Blanks**

No field blanks were submitted.

### **Labeled Compound Recovery**

Isotope-stable labeled compounds were added to each field and QC sample. With the following exceptions, all percent recovery (%R) values were within acceptance criteria.

Although some outliers were noted for calibration verification standards and laboratory QC samples, no qualifiers were assigned based on these outliers.

*SDG 24E0605*: The %R value for <sup>13</sup>C<sub>12</sub>-1,2,3,7,8,9-HxCDF was less than the lower control limit for Sample LDW24-IT1828. The associated native compound result was estimated (J-13L).

### **Laboratory Control Sample/Laboratory Control Sample Duplicates**

The QAPP indicates that an LCS/LCSD should be performed to evaluate accuracy and precision. Instead, unless otherwise noted, an LCS was performed to evaluate accuracy, and a laboratory duplicate was performed to evaluate precision.

### **Matrix Spike/Matrix Spike Duplicates**

Matrix spike/matrix spike duplicate (MS/MSD) analyses are not required for this method. When no MS/MSD was analyzed, accuracy was assessed using labeled compound, LCS, and certified reference material analyses. Precision was evaluated using the laboratory duplicate analyses.

### **Laboratory Duplicates**

For sediment samples, the relative percent difference (RPD) control limit is 25% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the difference between the sample and duplicate must be less than 2x the RL.

**SDG 24E0341:** For batch BME0752, Sample LDW24-SC1525 was analyzed as the laboratory duplicate sample. The difference value for total TCDF was greater than the control limit; the parent sample and laboratory duplicate results were estimated (J-9A).

**SDG 24E0373, 24E0404:** For batch BME0752, a laboratory duplicate was performed on a sample from another project. The results were not included in the data package. However, the case narrative documented that the relative percent difference (RPD) values for 1,2,3,7,8-PeCDF and 2,3,4,6,7,8-HxCDF were outside the control limits. Since the parent sample was not from this SDG, no qualifiers were assigned.

**SDG 24E0429, SDG 24E0517:** For batch BME0753, Sample LDW24-IT1545A from SDG 24E0429 was analyzed as the laboratory duplicate sample. The RPD value for total PeCDD was greater than the control limit; the parent sample and laboratory duplicate results were estimated (J-9A).

**SDG 24E0605, 24E0608:** For batch BMF0088, Sample LDW24-SS1828 from SDG 24E0605 was analyzed as the laboratory duplicate sample. The following outliers resulted in qualification of associated results in the parent and laboratory duplicate sample:

ANALYTE	OUTLIER TYPE	QUALIFIER
1,2,3,4,6,7,8-HpCDD	RPD	J-9A
1,2,3,4,6,7,8-HpCDF	RPD	J-9A
1,2,3,4,7,8,9-HpCDF	Difference	J-9A
1,2,3,4,7,8-HxCDD	Difference	J-9A
1,2,3,6,7,8-HxCDD	RPD	J-9A
1,2,3,7,8,9-HxCDD	RPD	J-9A
1,2,3,7,8,9-HxCDF	Difference	J-9A
OCDD	RPD	J-9A
OCDF	RPD	J-9A
Total HpCDD	RPD	J-9A
Total HpCDF	RPD	J-9A
Total HxCDD	RPD	J-9A
Total HxCDF	RPD	J-9A
Total PeCDD	Difference	J-9A
Total PeCDF	Difference	J-9A

**SDG 24F0010:** Sample LDW23-SC1221A was analyzed as the laboratory duplicate sample. The RPD value for total HxCDD was greater than the control limit; the parent sample and laboratory duplicate results were estimated (J-9A).

**SDG K2408853:** There were five analytical batches in this SDG. Laboratory duplicates for each batch are summarized below:

BATCH	PARENT CLIENT ID	ANALYTE	OUTLIER TYPE	QUALIFIER
WG3790321	LDW24-SC1341E	1,2,3,4,6,7,8-HpCDF	RPD	J-9A
		OCDF	RPD	J-9A
		Total PeCDD	RPD	J-9A
		Total HpCDF	Difference	J-9A
WG3790323	LDW24-IT1546B	Total TCDD	Difference	J-9A
WG3790575	LDW24-SS1402	Total TCDD	RPD	J-9A
		Total TCDF	RPD	J-9A
WG3790325	None	Precision evaluated using the field duplicate: LDW24-SC1468A / LDW24-SC1468A-FD		
WG3790328	Batch QC – Parent from an unrelated project	No outliers		
WG3790331	LDW24-SC1546F	1,2,3,4,6,7,8-HpCDD	RPD	J-9A
		1,2,3,4,6,7,8-HpCDF	RPD	J-9A
		OCDF	RPD	J-9A
		Total TCDD	Difference	J-9A
		Total PeCDF	RPD	J-9A
		Total HPCDD	RPD	J-9A
		Total HPCDF	RPD	J-9A

**SDG 23314:** Laboratory duplicates for this SDG are summarized below:

BATCH	PARENT CLIENT ID	ANALYTE	OUTLIER TYPE	QUALIFIER
58354	LDW24-SC1344J	Total HxCDD	RPD	J/UJ-9A
		Total TCDD	RPD	J/UJ-9A

**SDG 23315:** A laboratory duplicate was not performed. Precision was evaluated using the LCS/LCSD.

### Standard Reference Material

A standard reference material (SRM) was analyzed with each batch. With the following exceptions, all recoveries were within the advisory limits of 50% – 150%.

**SDG 24F0010:** The Puget Sound Reference Material was analyzed. The recovery values for 1,2,3,4,6,7,8-HpCDD, 1,2,3,4,6,7,8-HpCDF, and OCDF were greater than the upper control limit; positive results in the associated samples and laboratory duplicate sample were estimated (J-12H).

**SDG K2408853:** An SRM was not extracted with five of the six (6) extraction batches. Accuracy was evaluated using the LCS.

SDG 23315: An SRM was not extracted. Accuracy was evaluated using the LCS.

### Field Duplicates

For sediment samples, the relative percent difference (RPD) control limit is 50% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the difference between the sample and replicate must be less than 2x the RL.

SDG	PARENT SAMPLE	FIELD DUPLICATE	ANALYTE WITH OUTLIER	OUTLIER
24E0404	LDW24-IT1513A	LDW24-IT1513A-FD	--	--
	LDW24-SC1544G	LDW24-SC1544G-FD	OCDD	57.8%
			total HpCDF	50.1%
K2408853	LDW24-SC1341E	LDW24-SC1341E-FD	total HxCDF	51.9%
			1,2,3,4,6,7,8-HpCDF	54.4%
			total PeCDF	Diff > 2x RL
			total PeCDD	Diff > 2x RL
	LDW24-SC1343E	LDW24-SC1343E-FD	total TCDD	Diff > 2x RL
			--	--
	LDW24-SC1344D	LDW24-SC1344D-FD	OCDF	56.1%
			OCDD	53.1%
			1,2,3,4,6,7,8-HpCDD	51.3%
			total HpCDF	52.1%
	LDW24-SS1357	LDW24-SS1357-FD	OCDF	75.6%
			total HpCDF	54.3%
			1,2,3,7,8-PeCDF	Diff > 2x RL
LDW24-SS1402	LDW24-SS1402-FD	--	--	
LDW24-SC1468A	LDW24-SC1468A-FD	total TCDD	89.9%	
LDW24-IT1527A	LDW24-IT1527A-FD	--	--	
LDW24-IT1546B	LDW24-IT1546B-FD	--	--	

For the following field duplicate sets, the parent sample was analyzed during Tier 1 and the field duplicates were analyzed during Tier 2.

PARENT CLIENT ID	FIELD DUP CLIENT ID	ANALYTE WITH OUTLIER	OUTLIER
LDW24-SC1341F SDG K2408853 Extracted 10/5/2024	LDW24-SC1341F-FD SDG 23314 Extracted 12/16/24	--	--
LDW24-IT1376A SDG K2408853 Extracted 8/30/2024	LDW24-IT1376A-FD SDG 23314 Extracted 12/16/24	1,2,3,4,6,7,8-HpCDD	135%
		1,2,3,4,6,7,8-HpCDF	155%
		1,2,3,4,7,8,9-HpCDF	Diff > 2x RL
		1,2,3,4,7,8-HxCDF	148%
		1,2,3,4,7,8-HxCDD	Diff > 2x RL
		1,2,3,6,7,8-HxCDD	Diff > 2x RL
		1,2,3,6,7,8-HxCDF	Diff > 2x RL
		1,2,3,7,8,9-HxCDD	Diff > 2x RL
		1,2,3,7,8,9-HxCDF	Diff > 2x RL

PARENT CLIENT ID	FIELD DUP CLIENT ID	ANALYTE WITH OUTLIER	OUTLIER
LDW24-IT1376A SDG K2408853 Extracted 8/30/2024 (continued)		1,2,3,7,8-PeCDD	Diff > 2x RL
		2,3,4,6,7,8-HxCDF	Diff > 2x RL
		1,2,3,7,8-PeCDF	Diff > 2x RL
		2,3,4,7,8-PeCDF	147%
		2,3,7,8-TCDD	Diff > 2x RL
		OCDD	143%
		OCDF	165%
		Total HpCDD	134%
		Total HpCDF	156%
		Total HxCDD	112%
		Total HxCDF	151%
		Total PeCDD	127%
		Total PeCDF	150%
		Total TCDD	144%
		Total TCDF	139%

### Reporting Limits

*SDG K2408853*: One or more samples were analyzed at required dilutions due to matrix interferences and/or high concentrations of reported analytes. Reporting limits were adjusted accordingly.

### Compound Identification

The method requires the confirmation of 2,3,7,8-TCDF using an alternate GC column if the primary column does not fully separate 2,3,7,8-TCDF from closely eluting non-target TCDF isomers.

- **Analytical Resources LLC**: The laboratory uses an RTX-Dioxin2 column which has unique isomer separation for 2,3,7,8-TCDF. No confirmation analyses were required.
- **ALS**: The laboratory uses a ZB-DX-1172891 column which has unique isomer separation for 2,3,7,8-TCDF. No confirmation analyses were required.
- **Cape Fear Analytical**: The laboratory uses a DB-5MS column which does not fully separate 2,3,7,8-TCDF from closely eluting non-target TCDF isomers. When a 2,3,7,8-TCDF result was detected above the reporting limit, confirmation analyses were performed on a DB-225 column, and both sets of data were reported. When both sets of data were reported the DB-5MS results were flagged as do-not-report (DNR-11) to indicate multiple results were reported for a given analyte.

EMPC values, or "estimated maximum possible concentrations", were reported when a peak was detected but did not meet the ion abundance identification criteria as required by the method. Native EMPC values less than the RL were qualified as not detected (U-25) as per project guidelines. Native EMPC values greater than the RL and homolog group EMPC values were estimated (J-25).

- *Cape Fear Analytical*: The laboratory assigned "K" flags to indicate EMPC values.
- *Analytical Resources LLC*: The laboratory assigned "EMPC" flags to indicate EMPC values.
- *ALS*: The laboratory assigned "R" flags to indicate EMPC values.

For several results, diphenyl ether interferences were present. These results were estimated (J/UJ-23H).

- *Cape Fear Analytical*: The laboratory assigned "Q" flags to indicate that diphenyl ether interference was present.
- *Analytical Resources LLC*: The laboratory assigned "X" flags to indicate that diphenyl ether interference was present.
- *ALS*: The laboratory assigned "EMPC" flags to indicate that diphenyl ether interference was present.

### **Reported Results**

*SDGs 24E0605, 24F0010, 23314*: The laboratory E-flagged results to indicate that the concentration exceeded the calibration range of the instrument. E-flagged results were estimated (J-20).

### **Calculation Verification**

*SDG K2408853*: Calculation verifications were performed on batch WG3790321 from this SDG. No calculation or transcription errors were found.

### **OVERALL ASSESSMENT**

As determined by this evaluation, the laboratory performed the specified analytical method. With the noted exceptions, accuracy was acceptable as demonstrated by the labeled compound, LCS, and standard reference material recoveries, and precision was acceptable as indicated by the laboratory duplicate and field duplicate RPD values.

Data were qualified as not detected due to method blank contamination. EMPC values that were less than the RL were also flagged as not detected at an elevated reporting limit. EMPC values greater than the reporting limit were estimated. Results were estimated due to holding time outliers, labeled compound accuracy outliers, diphenyl ether interferences, laboratory duplicate precision outliers, calibration range exceedances, and CCAL %D outliers.

Data were flagged as do-not-report (DNR) to indicate which result from multiple results should not be used.

Data flagged as DNR should not be used. All other data, as qualified, are acceptable for use.

**DATA VALIDATION REPORT**  
**LDW AOC5 MR Phase 2**  
**Semivolatile Organic Compounds (SVOC)**  
**by EPA SW8270D, SW8270E, and SW8270E-SIM**

This report documents the review of analytical data from the analysis of sediment samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Analytical Resources, LLC (ARL), Tukwila, Washington and ALS Environmental, Kelso, Washington. Refer to the Sample Index for a complete list of samples.

SDG	NUMBER OF SAMPLES	FRACTION	VALIDATION LEVEL	METHOD	LABORATORY
K2405555	9 Sediment	SVOC	EPA Stage 2B	SW8270D	ALS
	10 Sediment	Phthalates Only			
K2406559	1 Sediment	SVOC	EPA Stage 2B	SW8270D	ALS
	15 Sediment	Phenol Only			
K2406578	2 Sediment	SVOC	EPA Stage 2B	SW8270D	ALS
	5 Sediment	Phthalates Only			
K2406588	4 Sediment	SVOC	Stage 4	SW8270D	ALS
	1 Sediment	Phthalates Only			
K2407252	2 Sediment	SVOC	EPA Stage 2B	SW8270D	ALS
	8 Sediment	Phenol Only			
K2407258	10 Sediment	SVOC	EPA Stage 2B	SW8270D	ALS
	1 Sediment	Phthalates Only			
K2407905	1 Sediment	Phenol Only	EPA Stage 2B	SW8270D	ALS
K2407908	1 Sediment	SVOC	EPA Stage 2B	SW8270D	ALS
K2411658	1 Sediment	SVOC	EPA Stage 2B	SW8270D	ALS
24F0010	4 Sediment	SVOC	EPA Stage 2B	SW8270E/ SW8270E-SIM	ARL

Semivolatiles (SVOC) target compound list:

1,2,4-trichlorobenzene	benzo(a)anthracene	bis(2-ethylhexyl)phthalate*	hexachlorobenzene
1,2-dichlorobenzene	benzo(a)pyrene	butyl benzyl phthalate*	indeno(1,2,3-cd)pyrene
1,4-dichlorobenzene	benzo(b)fluoranthene	chrysene	naphthalene
2,4-dimethylphenol	benzo(g,h,i)perylene	dibenzo(a,h)anthracene	n-nitrosodiphenylamine
2-methylnaphthalene	benzo(j)fluoranthene	dibenzofuran	pentachlorophenol
4-methylphenol	benzo(k)fluoranthene	dimethyl phthalate*	phenanthrene
acenaphthene	benzoic acid	fluoranthene	phenol
acenaphthylene	benzyl alcohol	fluorene	pyrene
anthracene			

\* Phthalates only

## DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. With the noted exception, the laboratory followed adequate corrective action processes, and all anomalies were discussed in the case narrative.

*SDG 24F0010:* Due to calibration outliers, Sample LDW23-SC1125 required additional analysis for pentachlorophenol. The laboratory provided a revised PDF and EDD.

*SDG K2407252:* For batch 441481, the MS/MSD was performed on a sample with only phenol as the target compound; only phenol was reported in the MS/MSD. However, other samples from this batch required the full SVOC target compound list (TCL). The laboratory submitted a revised PDF and EDD with the full SVOC TCL for the MS/MSD.

*SDGs K2407908, K2411658:* For the laboratory control sample (LCS) associated with Sample LDW24-IT1590A, benzoic acid was not recovered in the initial extraction (SDG K2407908), resulting in a potential rejection of data. The laboratory was contacted; the sample was re-extracted and reported in SDG K2411658.

## EDD TO HARDCOPY VERIFICATION

All sample IDs reported in the electronic data deliverable (EDD) were verified (100%) by comparing the EDD to the hardcopy laboratory data package. Sample results and laboratory quality control sample results were also verified (10%).

## TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table:

2	Sample Receipt, Preservation, and Holding Times	1	Field Duplicates
✓	GC/MS Instrument Performance	✓	Target Analyte List
1	Initial Calibration (ICAL)	✓	Internal Standards
2	Continuing Calibration (CCAL)	1	Standard Reference Material (SRM)
2	Laboratory Blanks	1	Reporting Limits
1	Field Blanks	2	Reported Results
2	Surrogate Compounds	✓	Compound Identification
2	Laboratory Control Samples (LCS/LCSD)	1	Calculation Verification (Stage 4 Only)
2	Matrix Spike/Matrix Spike Duplicates (MS/MSD)		

✓ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

<sup>1</sup> Quality control results are discussed below, but no data were qualified.

<sup>2</sup> Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

## Sample Receipt, Preservation, Holding Times

### *Cooler Temperatures:*

As stated in validation guidance documents, sample shipping coolers should arrive at the laboratory within the advisory temperature range of  $\leq 6^{\circ}\text{C}$ . All samples were stored frozen upon receipt at the laboratory.

**SDG K2407252:** One of two coolers received by the laboratory at a temperature greater than the upper control limit (maximum temperature of  $15.2^{\circ}\text{C}$ ). The sample receipt log indicated that Samples LDW24-SS1471 and LDW24-SS1578 were transported in this cooler. The samples were received by the laboratory on the same day as collection; as such, there was insufficient time for the temperature to equilibrate. Data was judged to not be significantly impacted by the temperature outlier; no qualifiers were assigned.

**SDG K2407258:** One of two coolers received by the laboratory at a temperature greater than the upper control limit (maximum temperature of  $15.2^{\circ}\text{C}$ ). The sample receipt log indicated that Samples LDW24-SC1532A and LDW24-SC1532A-FD were transported in the cooler. All results for these samples were estimated (J/UJ-1).

**SDG 24F0010:** All samples were extracted past the 1-year holding time for samples stored frozen (at 504 to 643 days). All sample results were estimated (J/UJ-1). These samples required re-extractions due to laboratory control sample (LCS) accuracy outliers and pentachlorophenol calibration outliers. Analytical batches and reported results are summarized below:

BATCH	SAMPLE				COMMENT
	<i>LDW23-SC1139</i>	<i>LDW23-SC1145</i>	<i>LDW23-SC1132</i>	<i>LDW23-SC1125</i>	
BMF0114	Initial Extraction			--	All but 2,4-dimethylphenol reported
BMG0143	Re-extraction			--	Only 2,4-dimethylphenol reported
BMG0204	--			Re-extraction	All but benzoic acid and pentachlorophenol reported
	--			Re-analysis of Re-extraction	Only benzoic acid reported
BMJ0453	--			Re-extraction (second)	Only pentachlorophenol reported

### Initial Calibration

Initial calibrations (ICAL) were analyzed at the proper frequency. The laboratory used a calibration curve if the percent relative standard deviation (RSD) was greater than 15%. With the noted exceptions, all curve coefficients of determination (COD) were within the control limit ( $\text{COD} > 0.990$ ). Second source initial calibration verification (SCV) standards were analyzed at the required frequency. With the noted exceptions, the percent drift (%D) values were within the method limit of  $\pm 30\%$ .

*SDGs K2406578, K2406588, K2407252, K2407258, K2411658:* For the SCV associated with ICALs KC2400317 and K2400415, the %D values for n-nitrosodiphenylamine were outside the control limit, indicating a potential high bias. N-nitrosodiphenylamine was not detected in the associated samples; no qualifiers were assigned.

*SDG 24F0010:*

- *8270E-SIM ICAL HF00092:* The COD values for benzoic acid and pentachlorophenol were less than the lower control limit at 0.9769 and 0.9867, respectively. These compounds were not detected in the associated samples; no qualifiers were assigned.
- *8270E-SIM ICAL HG00046:* The COD values for benzoic acid and pentachlorophenol were less than the control limit at 0.9824 and 0.9805, respectively. These compounds for the associated samples were reported from analyses associated with a different calibration; no qualifiers were assigned. The RSD value for surrogate p-terphenyl-d14 was greater than the control limit at 16%. No action was taken for the surrogate RSD outlier.

For the SCV standard, the %D values for benzoic acid and pentachlorophenol were less than the lower control limit. These compounds for the associated samples were reported from analyses associated with a different calibration; no qualifiers were assigned.

- *8270E-SIM ICAL HG00083:* The COD value for benzoic acid was less than the control limit at 0.9577. The positive result for benzoic acid in the associated sample was estimated (J-5A). The COD value for pentachlorophenol was less than the lower control limit at 0.9230. Pentachlorophenol for the associated sample was reported from an analysis associated with a different calibration; no qualifiers were assigned.

The SCV was analyzed twice. For the initial analysis, the %D value for benzoic acid was less than the lower control limit, indicating a potential low bias. For the second analysis, the %D value for benzoic acid was greater than the control limit, indicating a potential high bias. The benzoic acid result in the associated sample was estimated (J-5C) without bias. Although there were outliers for pentachlorophenol, no action was required as pentachlorophenol was reported from an analysis associated with another calibration.

- *8270E-SIM ICAL HJ00070:* The COD for pentachlorophenol was less than the control limit at 0.9883. Pentachlorophenol was not detected in the associated sample; no qualifiers were assigned.

### **Continuing Calibration**

A continuing calibration verification (CCAL) standard was analyzed at the required frequency. With the noted exceptions, the percent difference (%D) values were within the required control limits of  $\pm 20\%$  ( $\pm 50\%$  for low level CCAL). When the CCAL %D values indicate a potential low bias, associated results are estimated (J/UJ-5BL). Only the associated positive results are estimated (J-5BH) if the %D value indicates a potential high bias. In cases where an analyte response was inconsistent (low bias and high bias in a 12-hour analytical sequence), results were estimated

(J/UJ-5B) with no bias. No qualifiers were assigned for CCAL %D outliers that were only associated with laboratory QC samples. No qualifiers were assigned for CCAL surrogate %D outliers.

The following CCAL outliers resulted in qualification:

SDG	METHOD	CCAL DATE	COMPOUND	POTENTIAL BIAS	QUALIFIER
24F0010	8270E	7/18/24 @ 14:26	Phenol	High	J-5BH
			Butyl Benzyl Phthalate	Low	J-5BL
		7/18/24 @ 20:29	Butyl Benzyl Phthalate	Low	J-5BL
			Bis(2-ethylhexyl)phthalate	Low	J-5BL
			Dibenzo(a,h)anthracene	Low	J-5BL
	8270E-SIM	7/3/24 @ 2:45	Pentachlorophenol	Low	UJ-5BL
		7/19/24 @ 14:57	Benzyl Alcohol	Low	J-5BL
		7/19/24 @ 15:36	Benzyl Alcohol	Low	J-5BL
		7/19/24 @ 16:14	Benzyl Alcohol	Low	J-5BL
		7/25/24 @ 16:46	Benzoic Acid	Low	J-5BL
		10/25/24 @ 13:59	Pentachlorophenol	Low	UJ-5BL
K2405555	8270D	6/24/24 @ 16:06	Benzyl alcohol	Low	UJ-5BL
K2406559		7/2/24 @ 17:04	Benzoic acid	Low	J-5BL
K2406578 K2406588		7/3/24 @ 16:55	Pentachlorophenol	High	J-5BH
K2407252		7/19/24 @ 14:15	Benzoic acid	Low	J/UJ-5BL
K2407258		7/26/24 @ 09:21	Benzyl alcohol	Low	J-5BL
			Butyl benzyl phthalate	High	J-5BH
K2407908		8/7/24 @ 11:46	Benzyl alcohol	Low	DNR-11

### Laboratory Blanks

A method blank was analyzed at the required frequency of one per batch of 20 or fewer samples. Action levels were established at five times (5x) the concentration reported in the blank. If a contaminant is reported in an associated field sample and the concentration is less than the action level, the result is qualified as not detected (U-7). No action is taken if the sample result is greater than the action level, or for non-detected results.

The following outliers were noted. Positive results in the associated samples that were less than the action levels were qualified.

SDG	BATCH	ANALYTE	QUALIFIER
K2406559	440658	phenol	U-7
K2406578	440706	phenol	U-7
K2406588			
K2407252	441481	phenol	U-7
K2407258	441593	phenol	U-7
K2411658	447677	phenol	U-7

### Field Blanks

No field blanks were submitted.

### Surrogate Compounds

Surrogate compounds were added to all field and laboratory QC samples.

LABORATORY	METHOD	TARGET COMPOUNDS	SURROGATES
ARL	SW8270E	SVOC	4 acid surrogates, 4 base-neutral surrogates
	SW8270E-SIM	SVOC	1 acid surrogate, 1 base-neutral surrogate
ALS	8270D	SVOC	2 acid surrogates, 3 base-neutral surrogates

For samples with four acid and four base-neutral surrogates, qualifiers are assigned to acid compounds if two or more acid surrogate percent recovery (%R) values are outside control limits, and qualifiers are assigned to base-neutral compounds if two or more base-neutral surrogate %R values are outside control limits.

For samples with one acid and one base-neutral surrogate, qualifiers are assigned to acid compounds if the surrogate %R value is outside control limits, and qualifiers are assigned to base-neutral compounds if the base-neutral surrogate %R value is outside control limits.

For samples with two acid and three base-neutral surrogates, qualifiers are assigned to acid compounds if one or more surrogate %R values are outside control limits, and qualifiers are assigned to base-neutral compounds if two or more base-neutral surrogate %R value is outside control limits.

When the surrogate %R values were less than the lower control limits, associated results were estimated (J/UJ-13L). When the surrogate %R values were greater than the upper control limit, only the positive results were estimated (J-13H).

**SDG K2405555:** For Sample LDW24-IT1562B, the %R value for phenol-d6 was less than the lower control limit. Results for all acid compounds for the sample were estimated (J/UJ-13L).

For the SRM associated with batch 439371, the %R value for phenol-d6 was less than the lower control limit. No qualifiers were assigned to laboratory QC samples based on surrogate outliers.

*SDG K2406559:* For the following samples, the %R values for phenol-d6 were less than the lower control limit. Phenol results for these samples were estimated (J/UJ-13L).

LDW24-SS1394	LDW24-SS1580
LDW24-SS1494	LDW24-SS1392
LDW24-SS1393	LDW24-SS1398
LDW24-SS1410	LDW24-SS1349

*SDG 24F0010:* For the 8270E analysis of Sample LDW23-SC1139, the %R value for phenol-d5 was less than the lower control limit. The %R values for the other three acid surrogates were acceptable; no qualifiers were assigned for the single outlier.

For the 8270E-SIM analysis of Sample LDW23-SC1139, the %R value for 2-fluorophenol was less than the lower control limit. The results for the acid compounds in the sample were estimated (UJ-13L).

### **Laboratory Control Samples**

When the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) %R values indicate a potential low bias, associated results are estimated (J/UJ-10L). Only the associated positive results are estimated (J-10H) if the %R values indicate a potential high bias. Associated positive results are estimated (J-9A) if the RPD values for the LCS/LCSD indicate uncertainty.

#### ***8270D Analyses:***

Laboratory control samples (LCS) or LCS/LCSD were analyzed at the required frequency of one per batch of 20 or fewer samples. Although some LCS %R values were greater than the laboratory upper control limits, it should be noted that these control limits are statistically derived and are centered around the average recovery. In some cases, the upper control limit was less than 100%. Qualifiers are issued to all samples in the extraction batch.

*SDG K2405555:* For batch 439371, only an LCS was performed. The LCS %R value for benzoic acid was greater than the upper control limit. Benzoic acid was not detected in the associated samples; no qualifiers were assigned.

*SDGs K2406578, K2406588:* For batch 440706, LCS/LCSD were performed. Several LCSD %R values were greater than the upper control limits. The corresponding LCS %R values were acceptable; no qualifiers were assigned.

For benzoic acid, due to a software limitation, the LCS %R value was listed as 0% on the summary form. This was noted in the case narrative. A review of the raw data indicated that there was a positive result for benzoic acid in the LCS and that the %R value was within control limits. The LCS/LCSD RPD value for benzoic acid was greater than the control limit at 44%. Positive benzoic acid results for the associated samples were estimated (J-9A).

*SDG K2407258:* For batch 441593, only an LCS was performed. The LCS %R value for benzoic acid was greater than the upper control limit, indicating a potential high bias. Positive benzoic acid results for the associated samples were estimated (J-10H).

*SDG K2407908:* For batch 442500, only an LCS was performed. Benzoic acid was not detected in the LCS. The associated sample, LDW24-IT1590A, was re-extracted and reported in SDG K2411658. Results from the re-extraction should be used. Results for Sample LDW24-IT1590A from this SDG were flagged as do-not-report (DNR-10L for benzoic acid, DNR-11 for all other compounds).

The LCS %R value for 1,2-dichlorobenzene was greater than the upper control limit, indicating a potential high bias. The results in the associated sample were DNR-flagged as described above; no further action was necessary.

*SDG K2411658:* For batch 447677, the LCS %R values for 1,2-dichlorobenzene, 1,4-dichlorobenzene, and phenol were greater than the upper control limits. There were no positive results for these compounds in the associated sample; no qualifiers were assigned. The LCS %R value for pentachlorophenol was less than the lower control limit. The pentachlorophenol result in the associated sample was estimated (UJ-10L).

#### ***SW8270E & 8270E-SIM Analyses:***

Laboratory control sample/laboratory control sample duplicates (LCS/LCSD) were analyzed at the required frequency of one per batch of 20 or fewer samples.

*SDG 24F0010:* For the 8270E-SIM analyses, for batch BMF0114, the LCS/LCSD %R values for 2,4-dimethylphenol were less than 10%. The samples were re-extracted. The 2,4-dimethylphenol results were reported from the re-extractions. The 2,4-dimethylphenol results from this batch were qualified as do-not-report (DNR-10L) and should not be used.

For the 8270E-SIM analyses, for batch BMG0204, the RPD value for benzoic acid was greater than the control limit. The positive result for benzoic acid in the associated sample was estimated (J-9A).

#### **Matrix Spike/Matrix Spike Duplicates**

Matrix spike/matrix spike duplicate (MS/MSD) samples were analyzed at the appropriate frequency. No action is taken unless both the MS and MSD percent recovery (%R) values are outside the control limits. MS/MSD %R values are not evaluated when the parent concentration is greater than 4x the spike concentration. Precision is evaluated using the relative percent difference (RPD) values calculated between the MS and MSD results. Any RPD values outside the control limits indicate uncertainty in the measured results for the sample. Qualifiers were only issued to the parent sample.

When the MS/MSD %R values indicate a potential low bias, associated results are estimated (J/UJ-8L). Only the associated positive results are estimated (J-8H) if the %R values indicate a potential high bias. Associated positive results are estimated (J-9A) if the RPD values indicate uncertainty.

*SDG K2406559:* Sample LDW24-SS1497 was used for the MS/MSD analyses. The %R values for benzoic acid were less than the lower control limit at 7% and 9%. The positive result for benzoic acid in the parent sample was estimated (J-8L).

*SDG K2406578, K2406588:* For batch 440706, an MS/MSD was not performed. Accuracy and precision were evaluated using the LCS/LCSD.

*SDG K2407252:* For batch 441481, Sample LDW24-SS1471 was used for the MS/MSD analyses. The MS/MSD %R values for benzoic acid were less than the lower control limit. Benzoic acid was not a target compound for the parent sample; no qualifiers were applied. The MS/MSD RPD values demonstrated acceptable batch precision for all SVOC target compounds.

*SDG K2407258:* For batch 441593, Sample LDW24-SC1532A was used for the MS/MSD analyses. The MSD %R value for benzoic acid was less than the lower control limit but the MS %R value was acceptable; no qualifiers were assigned based on the single outlier. The RPD value for benzoic acid was greater than the control limit. The benzoic acid result for the parent sample was estimated (J-9A).

*SDG 24F0010:* For 8270E-SIM batch BMG0204, Sample LDW23-SC1125 was used for the MS/MSD. The MS/MSD %R values for N-nitrosodiphenylamine were less than the lower control limit. The result for this compound was estimated (J-8L) in the parent sample.

For 8270E-SIM batch BMF0114, an MS/MSD was not performed. Accuracy and precision were evaluated using the LCS/LCSD.

### **Field Duplicates**

For sediment samples, the RPD control limit is 50% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the absolute difference between the sample and replicate must be less than 2x the RL. No data were qualified based on field duplicate precision outliers. Users of the data should consider the impact of field precision outliers on the reported results.

*SDG K2406578:* One set of field duplicates, LDW24-SS1402 and LDW24-SS1402-FD, were submitted. Field precision was acceptable.

*SDG K2407252:* One set of field duplicates, LDW24-SS1474 and LDW24-SS1474-FD, were submitted. Field precision was acceptable.

*SDG K2407258:* Two sets of field duplicates were submitted:

- LDW24-SC1532A and LDW24-SC1532A-FD. The difference value for dibenzofuran was greater than the control limit. Dibenzofuran results were reported by 8270D-SIM. No qualifiers were assigned.
- LDW24-SS1565 and LDW24-SS1565-FD. Field precision was acceptable.

### **Standard Reference Material**

SVOC standard reference material (SRM) was not extracted with these samples. Accuracy was evaluated based on the LCS %R values.

## Reporting Limits

The laboratory method reporting limits (MRLs) and method detection limits (MDLs) for several compounds, analyzed by method 8270, were greater than the MRLs from the QAPP, which listed method 8270-SIM.

## Reported Results

For several samples, dibenzofuran was reported from both an 8270D analysis and an 8270D-SIM analysis. In these cases, the results from the 8270D analysis were qualified as do-not-report (DNR-11).

*SDG 24F0010:* For Sample LDW23-SC1125, for the initial analysis, the calibration for pentachlorophenol was not acceptable. The sample was re-extracted on 10/23/24. The pentachlorophenol result from the re-extraction should be used. The result from the initial extraction (on 7/10/24) was qualified as do-not-report (DNR-5A, 5BL) and should not be used.

*SDGs K2407908, K2411658:* Sample LDW24-IT1590A was initially analyzed with SDG K2407908. Benzoic acid was not detected in the LCS. The laboratory re-extracted the sample with SDG K2411658. Results from the re-extraction should be used. Results from the initial extraction were flagged as do-not-report (DNR-11); the benzoic acid result from the initial extraction was flagged DNR-10L to indicate that it should not be used due to the poor recovery for benzoic acid in the associated LCS.

## Calculation Verification

*SDG K2406588:* Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

## OVERALL ASSESSMENT

As was determined by this evaluation, the laboratory followed the specified analytical method. With the noted exceptions, accuracy was acceptable as demonstrated by the surrogate, LCS/LCSD, and MS/MSD recovery values. With the exceptions noted above, precision was acceptable as demonstrated by the RPD values for the LCS/LCSD, MS/MSD, and field duplicate analyses.

Reporting limits were elevated due to method blank contamination. Results were estimated due to cooler temperature and holding time exceedances; initial and continuing calibration outliers; LCS/LCSD, surrogate, and MS/MSD accuracy outliers; and LCS/LCSD and MS/MSD precision outliers.

Data were flagged as do-not-report (DNR) to indicate which result from multiple reported analyses should not be used. Data that have been flagged DNR should not be used.

All other data, as qualified, are acceptable for use.

**DATA VALIDATION REPORT**  
**LDW AOC5 MR Phase 2**  
**Polycyclic Aromatic Hydrocarbons (PAH)**  
**by EPA SW8270D-SIM and SW8270E**

This report documents the review of analytical data from the analysis of sediment samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Analytical Resources, LLC (ARL), Tukwila, Washington and ALS Environmental, Kelso, Washington. Refer to the **Sample Index** for a complete list of samples.

SDG	NUMBER OF SAMPLES	VALIDATION LEVEL	METHOD	LABORATORY
K2405555	27 Sediment	EPA Stage 2B	SW8270D-SIM	ALS - Kelso
K2406559	1 Sediment	EPA Stage 2B	SW8270D-SIM	ALS - Kelso
K2406578	17 Sediment	EPA Stage 2B	SW8270D-SIM	ALS - Kelso
K2406588	17 Sediment	EPA Stage 4	SW8270D-SIM	ALS - Kelso
K2407252	2 Sediment	EPA Stage 2B	SW8270D-SIM	ALS - Kelso
K2407258	19 Sediment	EPA Stage 2B	SW8270D-SIM	ALS - Kelso
K2407908	14 Sediment	EPA Stage 2B	SW8270D-SIM	ALS - Kelso
24F0010	5 Sediment	EPA Stage 2B	SW8270E	ARL
24K0260	2 Sediment	EPA Stage 2B	SW8270E	ARL
24K0393	3 Sediment	EPA Stage 2B	SW8270E	ARL

Polycyclic aromatic hydrocarbons (PAH) target compound list:

2-methylnaphthalene	benzo(a)pyrene	chrysene	indeno(1,2,3-cd)pyrene
acenaphthene	benzo(b)fluoranthene*	dibenzo(a,h)anthracene	naphthalene
acenaphthylene	benzo(g,h,i)perylene	dibenzofuran	phenanthrene
anthracene	benzo(j)fluoranthene*	fluoranthene	pyrene
benzo(a)anthracene	benzo(k)fluoranthene*	fluorene	

\* ARL analyzed using 8270E and reported total benzo(a)fluoranthenes. ALS used 8270D-SIM and reported benzo(b)fluoranthene and benzo(k)fluoranthene (no results for benzo(j)fluoranthene).

### DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. With the noted exception, the laboratory followed adequate corrective action processes, and all anomalies were discussed in the case narrative.

### EDD TO HARDCOPY VERIFICATION

All sample IDs reported in the electronic data deliverable (EDD) were verified (100%) by comparing the EDD to the hardcopy laboratory data package. Sample results and laboratory quality control sample results were also verified (10%).

For the SDGs analyzed at ALS-Kelso by SW8270D-SIM, the “preservative” field is incorrectly populated with “HCl”. These samples were not preserved. The “preserved” field is correctly populated with “N”.

## TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table:

2	Sample Receipt, Preservation, and Holding Times	1	Field Duplicates
✓	GC/MS Instrument Performance	✓	Target Analyte List
2	Initial Calibration (ICAL)	1	Internal Standards
2	Continuing Calibration (CCAL)	2	Standard Reference Material
2	Laboratory Blanks	1	Reporting Limits
1	Field Blanks	2	Reported Results
2	Surrogate Compounds	✓	Compound Identification
2	Laboratory Control Samples (LCS)	1	Calculation Verification (Stage 4 Only)
2	Matrix Spike/Matrix Spike Duplicates (MS/MSD)		

✓ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

<sup>1</sup> Quality control results are discussed below, but no data were qualified.

<sup>2</sup> Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

### Sample Receipt, Preservation, Holding Times

#### *Cooler Temperatures:*

As stated in validation guidance documents, sample shipping coolers should arrive at the laboratory within the advisory temperature range of  $\leq 6^{\circ}\text{C}$ . All samples were stored frozen upon receipt at the laboratory.

**SDG K2407258:** Several samples were received by the laboratory at a temperature greater than the upper control limit (maximum temperature of  $15.2^{\circ}\text{C}$ ). Samples were delivered to the laboratory on the same day as sample collection; samples did not have sufficient time to cool to  $6^{\circ}\text{C}$ . No qualifiers were assigned.

**SDG 24K0260:** Some sample coolers were received by the laboratory at a temperature greater than the upper control limit (maximum temperature of  $20.3^{\circ}\text{C}$ ). The samples were received by the laboratory on the same day as collection; as such, there was insufficient time for the temperature to equilibrate. Data was judged to not be significantly impacted by the temperature outlier; no qualifiers were assigned.

**24K0393:** Some sample coolers were received by the laboratory at temperatures that exceeded the upper control limit (maximum temperature of  $20.3^{\circ}\text{C}$ ). The samples were received by the laboratory on the same day as collection; as such, there was insufficient time for the temperature to equilibrate. Data was judged to not be significantly impacted by the temperature outlier; no qualifiers were assigned.

### *Chain of Custody (COC):*

*SDGs 24K0260, 24K0393:* For some COCs, the courier did not sign the “released by” section of the COC. No action was taken for the oversight.

### *Holding Time Exceedances:*

*SDG 24F0010:* All samples were extracted past the 1-year holding time for samples stored frozen, at 504 to 538 days. All sample results were estimated (J/UJ-1).

*24K0393:* Some sample coolers were received by the laboratory at temperatures that exceeded the upper control limit (maximum temperature of 20.3°C). The samples were received by the laboratory on the same day as collection; as such, there was insufficient time for the temperature to equilibrate. Data was judged to not be significantly impacted by the temperature outlier; no qualifiers were assigned.

### **Initial Calibration**

*SDGs 24K0260, 24K0393:* For the second-source calibration verification (SCV) standard associated with ICAL HK00080, the percent difference (%D) values for indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene were outside the control limits, indicating a potential high bias. Positive results for these compounds for the associated samples were estimated (J-5CH).

### **Continuing Calibration**

A continuing calibration verification (CCAL) standard was analyzed at the required frequency. With the noted exceptions, the percent difference (%D) values were within the required control limits of  $\pm 20\%$  ( $\pm 50\%$  for low-level and closing CCALs). When the CCAL %D values indicate a potential low bias, associated results were estimated (J/UJ-5BL). Only the associated positive results were estimated (J-5BH) if the %D value indicates a potential high bias. In cases where an analyte response was inconsistent (low bias and high bias in a 12-hour analytical sequence), results were estimated (J/UJ-5B) with no bias. No qualifiers were assigned for CCAL %D outliers that were only associated with laboratory QC samples. No qualifiers were assigned for CCAL surrogate %D outliers.

The following CCAL outliers resulted in qualification:

SDG	CCAL DATE	COMPOUND	POTENTIAL BIAS	ACTION
K2405555	6/4/24 @ 16:10	Benzo(a)pyrene	High	J-5BH
	6/5/24 @ 09:28	Benzo(a)pyrene	High	J-5BH
		Indeno(1,2,3-cd)pyrene	High	J-5BH
K2406559 K2406578	7/1/24 @ 12:11	Dibenzo(a,h)anthracene	High	J-5BH
		Indeno(1,2,3-cd)pyrene	High	J-5BH

SDG	CCAL DATE	COMPOUND	POTENTIAL BIAS	ACTION
K2406578	7/1/24 @ 22:53	Dibenzo(a,h)anthracene	High	J-5BH
		Indeno(1,2,3-cd)pyrene	High	J-5BH
	7/8/24 @ 08:58	Benzo(a)pyrene	High	J-5BH
K2407252	7/18/24 @ 13:41	Benzo(a)pyrene	High	J-5BH
K2407258	7/22/24 @ 09:10	Benzo(a)pyrene	High	J-5BH
		Fluoranthene	High	J-5BH
24K0393	12/11/24 @ 13:35	Indeno(1,2,3-cd)pyrene	High	J-5BH
		Dibenzo(a,h)anthracene	High	J-5BH
		Benzo(g,h,i)perylene	High	J-5BH
	12/12/24 @ 01:30	Benzo(g,h,i)perylene	High	J-5BH
24K0260 24K0393	12/13/24 @ 13:12	Indeno(1,2,3-cd)pyrene	High	J-5BH
		Dibenzo(a,h)anthracene	High	J-5BH
		Benzo(g,h,i)perylene	High	J-5BH
	12/13/24 @ 14:29	Indeno(1,2,3-cd)pyrene	High	J-5BH
		Dibenzo(a,h)anthracene	High	J-5BH
		Benzo(g,h,i)perylene	High	J-5BH
	12/13/24 @ 15:07	Indeno(1,2,3-cd)pyrene	High	J-5BH
		Dibenzo(a,h)anthracene	High	J-5BH
		Benzo(g,h,i)perylene	High	J-5BH

### Laboratory Blanks

A method blank was analyzed at the required frequency of one per batch of 20 or fewer samples. Action levels were established at five times (5x) the concentration reported in the blank. If a contaminant is reported in an associated field sample and the concentration is less than the action level, the result is qualified as not detected (U-7). No action is taken if the sample result is greater than the action level, or for non-detected results.

**SDG K2405555:** For batch 439368, benzo(a)anthracene was detected in the method blank. Results for the associated samples were greater than the action level; no qualifiers were assigned.

For batch 439370, benzo(a)anthracene and acenaphthene were detected in the method blank. Results for the associated samples were greater than the action levels; no qualifiers were assigned.

**SDG K2406588:** For batch 440705, benzo(a)anthracene was detected in the method blank. Results for the associated samples were greater than the action level; no qualifiers were assigned.

**SDG K2407252:** For batch 441585, benzo(a)anthracene was detected in the method blank. Results for the associated samples were greater than the action level; no qualifiers were assigned.

*SDG K2407258:* For batch 441592, 2-methylnaphthalene, dibenzofuran, fluoranthene, naphthalene, phenanthrene and pyrene were detected in the method blank. Results in the associated samples that were less than the action levels were qualified as not detected (U-7).

*SDG K2407908:* For batch 442499, 2-methylnaphthalene, benzo(a)anthracene, and naphthalene were detected in the method blank. Results in the associated samples that were less than the action levels were qualified as not detected (U-7).

### **Field Blanks**

No field blanks were submitted.

### **Surrogate Compounds**

*SDG K2407252:* For Sample LDW24-SS1379, the %R values for all surrogates were less than the lower control limits, indicating a potential low bias. All results for the sample were estimated (J-13L).

For Sample LDW24-SS1380, the %R value for p-terphenyl-d14 was less than the lower control limit. The %R values for the other two surrogates were acceptable; no qualifiers were assigned for the single outlier.

For the matrix spike duplicate sample, the %R value for p-terphenyl-d14 was less than the lower control limit. No qualifiers were assigned to laboratory QC samples based on surrogate outliers.

*SDG K2407908:* For Sample LDW24-IT1555A, the %R values for fluoranthene-d10 and terphenyl-d14 were greater than the upper control limits, indicating a potential high bias. All positive results for the sample were estimated (J-13H).

*SDGs 24K0260, 24K0393:* For the method blank and laboratory control samples associated with batch BMK0608, several surrogate outliers were noted. No qualifiers were assigned to laboratory QC samples based on these surrogate outliers.

*SDG 24K0393:* For Sample LDW24-IT1556D, the %R values for all surrogates were greater than the upper control limits, indicating a potential high bias. Positive results for the sample were estimated (J-13H).

### **Laboratory Control Samples**

When the LCS %R values indicate a potential low bias, associated results are estimated (J/UJ-10L). Only the associated positive results are estimated (J-10H) if the %R values indicate a potential high bias. Qualifiers are issued to all samples in the extraction batch.

#### ***8270D-SIM Analyses:***

Laboratory control samples (LCS) were analyzed at the required frequency of one per batch of 20 or fewer samples. Although some LCS %R values were greater than the laboratory upper control limits, it should be noted that these control limits are statistically derived and are centered around the average recovery. In some cases, the upper control limit was less than 100%.

*SDG K2405555:* For batch 439368, the LCS %R values for acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, dibenzofuran, and pyrene were greater than the upper control limits. Positive results for these compounds in the associated samples were estimated (J-10H).

For batch 439370, the LCS %R values for acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, and dibenzofuran were greater than the upper control limits. Positive results for these compounds in the associated samples were estimated (J-10H).

#### ***8270E Analyses:***

Laboratory control sample/laboratory control sample duplicates (LCS/LCSD) were analyzed at the required frequency of one per batch of 20 or fewer samples. Qualifiers are only issued when the %R values were outside the control limits for both the LCS and LCSD.

*SDGs 24K0260, 24K0393:* For batch BMK0608, the LCS %R values for most compounds were greater than the upper control limits. The corresponding LCSD %R values were acceptable; no qualifiers were assigned based on the single outliers. The LCS/LCSD %R values for benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene were greater than the upper control limits, indicating a potential high bias. Positive results for these compounds for the associated samples were estimated (J-10H).

#### **Matrix Spike/Matrix Spike Duplicates**

Matrix spike/matrix spike duplicate (MS/MSD) samples were analyzed at the appropriate frequency. No action is taken unless both the MS and MSD percent recovery (%R) values are outside the control limits. MS/MSD %R values are not evaluated when the parent concentration is greater than 4x the spike concentration. Precision is evaluated using the relative percent difference (RPD) values calculated between the MS and MSD results. Any RPD values outside the control limits indicate uncertainty in the measured results for the sample. Qualifiers were only issued to the parent sample.

When the MS/MSD %R values indicate a potential low bias, associated results are estimated (J/UJ-8L). Only the associated positive results are estimated (J-8H) if the %R values indicate a potential high bias. Associated positive results are estimated (J-9A) if the RPD values indicate uncertainty.

*SDG K2405555:* Sample LDW24-IT1829 was used for the MS/MSD analyses. The MSD %R value for chrysene was less than the lower control limit but the MS %R value was acceptable; no qualifiers were assigned for the single outlier.

*SDG K2407252:* Sample LDW24-SS1379 was used for the MS/MSD analyses. The MS/MSD %R values for dibenzo(a,h)anthracene were less than the control limits. The dibenzo(a,h)anthracene result for the parent sample was estimated (J-8L). For several other compounds, the MSD %R values were outside the control limits but the corresponding MS %R values were acceptable; no qualifiers were assigned for the single outliers.

Several RPD outliers were noted. Results for the parent sample were estimated (J-9A). The following compounds were qualified:

Benzo(a)anthracene	Benzo(a)pyrene,
Benzo(b)fluoranthene	Benzo(g,h,i)perylene
Benzo(k)fluoranthene	Dibenz(a,h)anthracene
Indeno(1,2,3-cd)pyrene	

**SDG K2407258:** Sample LDW24-SC1532A was used for the MS/MSD analyses. The MS/MSD %R values for benzo(a)anthracene, fluoranthene, and pyrene were greater than the upper control limits. Results for these compounds for the parent sample were estimated (J-8H). The MS %R value for benzo(b)fluoranthene was greater than the control limit but the MSD %R value was acceptable; no qualifiers were assigned for the single outlier.

**SDG K2407908:** Sample LDW24-IT1555A was used for the MS/MSD analyses. The following outliers were noted:

COMPOUND	MS %R	MSD %R	RPD	QUALIFIER
2-Methylnaphthalene	Low	Low	OK	J-8L
Anthracene	na*	na*	High	J-9A
Dibenzofuran	Low	Low	OK	J-8L
Naphthalene	OK	Low	OK	None
Phenanthrene	na*	na*	High	J-9A

\* Parent concentration > 4x spike concentration

**SDG 24F0010:** For batch BMG0114, an MS/MSD was not extracted with the field samples. Accuracy and precision were evaluated using the LCS/LCSD.

**SDG 24K0260:** Sample LDW24-SS1516 was used for the MS/MSD analyses. The MSD %R value for phenanthrene was greater than the upper control limit but the MS %R value for phenanthrene was acceptable; no qualifiers were assigned based on the single outlier. The RPD values for phenanthrene, fluoranthene, pyrene, total benzofluoranthenes, and benzo(a)pyrene were greater than the control limits. Positive results for these compounds for the parent sample were estimated (J-9A).

### Field Duplicates

For sediment samples, the RPD control limit is 50% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the absolute difference between the sample and duplicate must be less than 2x the RL. No data were qualified based on field duplicate precision outliers. Users of the data should consider the impact of field precision outliers on the reported results.

SDG	PARENT SAMPLE	FIELD DUPLICATE	ANALYTE WITH OUTLIER	OUTLIER
K2405555	LDW24-IT1513A	LDW24-IT1513A-FD	--	--

SDG	PARENT SAMPLE	FIELD DUPLICATE	ANALYTE WITH OUTLIER	OUTLIER
K2406578	LDW24-IT1546B	LDW24-IT1546B-FD	Anthracene	79.2
			Benzo(a)anthracene	123
			Benzo(a)pyrene	94.7
			Benzo(b)fluoranthene	98.9
			Benzo(g,h,i)perylene	80.0
			Benzo(k)fluoranthene	98.5
			Chrysene	133
			Dibenzo(a,h)anthracene	90.4
			Fluoranthene	98.0
			Indeno(1,2,3-cd)pyrene	86.7
			Phenanthrene	62.8
	Pyrene	98.0		
	LDW24-SS1523	LDW24-SS1523-FD	Anthracene	Diff > 2x RL
			Benzo(a)anthracene	169
			Benzo(a)pyrene	143
			Benzo(b)fluoranthene	139
			Benzo(g,h,i)perylene	87.8
			Benzo(k)fluoranthene	140
			Chrysene	161
			Dibenzo(a,h)anthracene	Diff > 2x RL
			Fluoranthene	143
	Indeno(1,2,3-cd)pyrene	105		
	Pyrene	146		
	LDW24-SS1402	LDW24-SS1402-FD	Anthracene	89.7
			Benzo(a)anthracene	100
			Benzo(a)pyrene	54.0
			Chrysene	68.6
Fluoranthene			100	
Phenanthrene			103	
Pyrene	100			
K2406588	LDW24-IT1443A	LDW24-IT1443A-FD	phenanthrene	53.8
K2407258	LDW24-SC1532A	LDW24-SC1532A-FD	--	--
	LDW24-IT1527A	LDW24-IT1527A-FD	--	--
	LDW24-IT1568A	LDW24-IT1568A-FD	Benzo(a)anthracene	170
			Benzo(a)pyrene	176
			Benzo(b)fluoranthene	168
			Benzo(g,h,i)perylene	149
			Benzo(k)fluoranthene	167
			Chrysene	165
			Dibenzo(a,h)anthracene	Diff > 2x RL
			Fluoranthene	146
Indeno(1,2,3-cd)pyrene	160			
Pyrene	161			

SDG	PARENT SAMPLE	FIELD DUPLICATE	ANALYTE WITH OUTLIER	OUTLIER
K2407258 (cont)	LDW24-SS1565	LDW24-SS1565-FD	Acenaphthene	Diff > 2x RL
			Anthracene	Diff > 2x RL
			Fluoranthene	124
			Fluorene	Diff > 2x RL
			Indeno(1,2,3-cd)pyrene	45.8
			Phenanthrene	165
			Pyrene	63.6

For the following field duplicate sets, the parent sample was analyzed during Tier 1 and the field duplicates were analyzed during Tier 2.

SDG	PARENT SAMPLE (AS PART OF TIER 1)	DATE EXTRACTED	FIELD DUPLICATE ID (AS PART OF TIER 2)	DATE EXTRACTED	OUTLIER
K2405555 24K0393	LDW24-IT1402A	6/5/24 (8270D-SIM)	LDW24-IT1402A-FD	11/26/24 (8270E)	Benzo(ghi)perylene (55.3) Indeno(123-cd)pyrene (71.7) Phenanthrene (54.0)

### Internal Standards

Internal standards were added to all samples as required by the method. With the following exception, all internal standard responses were within the method specified control limits of 50%-200% of the response in the associated calibration verification standard. No action is taken for internal standard outliers in laboratory QC samples.

**SDG K2407908:** For Sample LDW24-IT1555A (1X), chrysene-d12 and perylene-d12 were not detected. The sample was re-analyzed at 100X with acceptable results. Compounds associated with the internal standards were reported from the dilution; no qualifiers were assigned.

**SDGs 24K0260, 24K0393:** For the matrix spike sample associated with batch BMK0608, the responses for di-n-octylphthalate-d4 and perylene-d12 were greater than the upper control limits. No qualifiers were assigned to laboratory QC samples based on internal standard outliers.

### Standard Reference Material

Standard reference material (SRM) 1941b was analyzed with these analytical data sets. The criteria of  $\pm 20\%$  of the 95% confidence interval was used to evaluate the recoveries of analytes with a certified value that were greater than 5x the reporting limit. With the noted exceptions, all criteria were met.

In cases where benzo(b)fluoranthene and benzo(k)fluoranthene peaks co-eluted in the SRM, the sum of the SRM true values and uncertainties were used to evaluate the sum of the SRM results. The compounds were evaluated as the sum "total benzofluoranthenes."

#### ***8270D-SIM Analyses:***

***SDG K2405555:*** For batches 439368 and 439370, the SRM %R values for benzo(a)pyrene, fluorene, naphthalene, and pyrene were less than the lower control limits. All sample results for these compounds were estimated (J/UJ-12L).

***SDGs K2406559, K2406578:*** For batch 440657, an SRM was not reported. Laboratory accuracy was evaluated using the laboratory control samples.

***SDG K2406588:*** For batch 440705, the SRM %R values for most compounds were less than the lower control limits, indicating a potential low bias. Associated field sample results were estimated (J-12L).

***SDG K2407252:*** For batch 441585, the SRM %R values for most compounds were less than the lower control limits, indicating a potential low bias. Associated field sample results were estimated (J-12L).

***SDG K2407258:*** For batch 441592, the SRM %R values for most compounds were less than the lower control limits, indicating a potential low bias. Associated field sample results were estimated (J/UJ-12L).

***SDG K2407908:*** For batch 442499, the SRM %R values for most compounds were less than the lower control limits, indicating a potential low bias. Associated field sample results were estimated (J/UJ-12L).

#### ***8270E Analyses:***

***SDG 24F0010:*** An SRM was not reported. Laboratory accuracy was evaluated using the laboratory control samples.

### **Reported Results**

***SDG K2405555:*** For Samples LDW24-IT1402A and LDW24-SC1559A, the peaks for benzo(b)fluoranthene and benzo(k)fluoranthene could not be resolved by the laboratory and were X-flagged. A single peak was integrated and reported as benzo(b)fluoranthene. Results for benzo(b)fluoranthene were estimated (J-23H) and results for benzo(k)fluoranthene were estimated (UJ-23L).

***SDG K2407258:*** For Samples LDW24-SC1532A and LDW24-SC1532A-FD, the peaks for benzo(b)fluoranthene and benzo(k)fluoranthene could not be resolved by the laboratory and were X-flagged. A single peak was integrated and reported as benzo(b)fluoranthene. Results for benzo(b)fluoranthene were estimated (J-23H) and results for benzo(k)fluoranthene were estimated (UJ-23L).

***SDG 24F0010:*** For Sample LDW23-SS1196, the concentration of pyrene exceeded the calibration range and was E-flagged by the laboratory. The sample was re-analyzed under a calibration with a wider concentration range. The E-flagged pyrene result from the initial analysis was qualified as

do-not-report (DNR-20). Results for the remaining compounds were qualified as do-not-report (DNR-11) in the re-analysis.

### **Calculation Verification**

*SDG K2406588:* Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

### **OVERALL ASSESSMENT**

As was determined by this evaluation, the laboratory followed the specified analytical method. With the noted exceptions, accuracy was acceptable as demonstrated by the surrogate, LCS/LCSD, MS/MSD, and SRM recovery values. With the exceptions noted above, precision was acceptable as demonstrated by the RPD values for the LCS/LCSD, MS/MSD, and field duplicate analyses.

Reporting limits were elevated due to method blank contamination. Results were estimated due to poor peak separation, continuing calibration outliers, LCS, MS/MSD, surrogate, and SRM accuracy outliers, and MS/MSD precision outliers.

Data were flagged as do-not-report (DNR) to indicate which result from multiple reported analyses should not be used. Data that have been flagged DNR should not be used.

All other data, as qualified, are acceptable for use.

**DATA VALIDATION REPORT**  
**LDW 2023 AOC5 MR**  
**Hexachlorobenzene by SW8081B and SW8270D**

This report documents the review of analytical data from the analysis of sediment samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Analytical Resources, LLC. (ARL), Tukwila, Washington and ALS Environmental, Kelso, Washington. Refer to the **Sample Index** for a complete list of samples.

SDG	NUMBER OF SAMPLES	VALIDATION LEVEL	METHOD	LABORATORY
24F0010	4 Sediment	EPA Stage 2B	SW8081B GC/ECD	ARL
K2405555	9 Sediment	EPA Stage 2B	SW8270D GC/MS	ALS
K2406559	1 Sediment	EPA Stage 2B	SW8270D GC/MS	ALS
K2406578	2 Sediment	EPA Stage 2B	SW8270D GC/MS	ALS
K2406588	4 Sediment	EPA Stage 4	SW8270D GC/MS	ALS
K2407252	2 Sediment	EPA Stage 2B	SW8270D GC/MS	ALS
K2407258	10 Sediment	EPA Stage 2B	SW8270D GC/MS	ALS
K2407908	1 Sediment	EPA Stage 2B	SW8270D GC/MS	ALS
K2411658	1 Sediment	EPA Stage 2B	SW8270D GC/MS	ALS

**DATA PACKAGE COMPLETENESS**

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes, and all anomalies were discussed in the case narrative.

**EDD TO HARDCOPY VERIFICATION**

All sample IDs reported in the electronic data deliverable (EDD) were verified (100%) by comparing the EDD to the hardcopy laboratory data package. Sample results and laboratory quality control sample results were also verified (10%).

**Method SW8081B:** The surrogate decachlorobiphenyl (DCBP) on the summary forms in the PDF were entered as PCB-209 in the EDD.

Laboratory quality control samples were reported from two analytical columns in the EDD. No action was taken.

## TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table:

2	Sample Receipt, Preservation, and Holding Times	1	Standard Reference Material (SRM)
2	Initial Calibration (ICAL)	1	Field Duplicates
✓	Continuing Calibration (CCAL)	✓	Target Analyte List
1	Breakdown (Endrin and 4,4'-DDT) (8081B Only)	✓	Internal Standards
✓	Laboratory Blanks	✓	Reporting Limits
1	Field Blanks	2	Reported Results
✓	Surrogate Compounds	1	Compound Identification
✓	Laboratory Control Samples (LCS/LCSD)	1	Calculation verification (Stage 4 only)
1	Matrix Spike/Matrix Spike Duplicates (MS/MSD)		

✓ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

<sup>1</sup> Quality control results are discussed below, but no data were qualified.

<sup>2</sup> Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

### Sample Receipt, Preservation, and Holding Times

As stated in validation guidance documents, sample shipping coolers should arrive at the laboratory within the advisory temperature range of  $\leq 6^{\circ}\text{C}$ . With the exceptions noted below, all samples were stored frozen upon receipt at the laboratory.

**SDG 24F0010:** Samples were analyzed beyond the holding time listed in the QAPP at greater than 500-days. Hexachlorobenzene results for the samples were estimated (UJ-1).

**SDG K2407258:** One of two coolers received by the laboratory had a recorded temperature of  $15.2^{\circ}\text{C}$ . The sample receipt log indicated that Samples LDW24-SC1532A and LDW24-SC1532A-FD were transported in the cooler and were delivered to the laboratory the day after collection. All results for these samples were estimated (UJ-1).

### Initial Calibration

**SDG 24F0010:** For the initial calibration HF00065, a second source calibration verification (SCV) standard for hexachlorobenzene was not analyzed. Hexachlorobenzene results for the associated samples were estimated (UJ-5C).

### Breakdown

**SDG 24F0010:** For the 8081 analyses, a performance evaluation mixture (PEM) standard was analyzed before the initial calibration to evaluate the breakdown of endrin and 4,4'-DDT but not on the day of sample analysis. The target analyte for this project, hexachlorobenzene, is not impacted by the breakdown of endrin and 4,4'-DDT.

## Matrix Spike/Matrix Spike Duplicates

With the noted exceptions, matrix spike/matrix spike duplicate (MS/MSD) samples were analyzed at the appropriate frequency.

*SDG K2406578, K2406588:* For batch 440706, a matrix spike/matrix spike duplicate was not performed. Accuracy and precision were evaluated using the laboratory control sample/laboratory control sample duplicate (LCS/LCSD).

## Standard Reference Material

Standard reference material (SRM) for hexachlorobenzene was analyzed with these analytical data sets. For SVOC analyses, SRM NIST\_1944\_NY\_NJ Waterway Sediment was used. The criteria of  $\pm 20\%$  of the 95% confidence interval was used to evaluate the recoveries of analytes with a certified value greater than the reporting limit. For the following SDGs, hexachlorobenzene (HCB) was not detected. The certified true value for HCB was less than the reporting limit. The %R values for the laboratory control samples were acceptable. No qualifiers were assigned.

K2405555	K2407252
K2406559	K2407258
K2406578	K2407908
K2406588	K2411658

*SDG 24F0010:* An SRM was not extracted with these samples. Accuracy was evaluated using the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries.

## Field Blanks

Field blanks were not collected with these samples.

## Field Duplicates

For sediment samples, the relative percent difference (RPD) control limit is 50% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the absolute difference between the sample and duplicate must be less than 2x the RL. No data were qualified based on field duplicate precision outliers. Users of the data should consider the impact of field precision outliers on the reported results.

*SDG K2406578:* One set of field duplicates, LDW24-SS1402 and LDW24-SS1402-FD, were submitted. Field precision was acceptable.

*SDG K2407258:* Two sets of field duplicates were submitted.

- LDW24-SC1532A and LDW24-SC1532A-FD: Field precision was acceptable.
- LDW24-SC1565 and LDW24-SC1565-FD: Field precision was acceptable.

## **Reporting Limits**

*8270D Analyses:* The laboratory reporting limits for hexachlorobenzene exceeded the reporting limit listed in the QAPP.

## **Reported Results**

*88270D Analyses:* Sample LDW24-IT1590A was initially reported in SDG K2407908. This sample was re-extracted due to laboratory control sample (LCS) outliers and reported in SDG K2411658. The result from the re-extraction should be used. The result from the initial extraction was flagged as do-not-report (DNR-11).

## **Compound Identification**

*8081A Analyses:* Matrix spike/matrix spike duplicate (MS/MSD) results for hexachlorobenzene were P1-flagged by the laboratory. No action was taken for dual column RPD outliers for laboratory QC samples.

## **Calculation Verification**

*SDG K2406588:* Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

## **OVERALL ASSESSMENT**

As was determined by this evaluation, the laboratory followed the specified analytical methods. Accuracy was acceptable as demonstrated by the surrogate, LCS/LCSD, and MS/MSD %R values. Precision was acceptable as demonstrated by the MS/MSD and LCS/LCSD relative percent difference (RPD) values.

Data were qualified based on holding time and cooler temperature exceedances and due to the fact that a second source calibration verification standard was not analyzed.

Data were flagged as do-not-report (DNR) to indicate which result of multiple results should not be used.

Data that were qualified DNR should not be used. All other data, as qualified, are acceptable for use.

**DATA VALIDATION REPORT**  
**AOC5 Phase II – LDW MR**  
**PCB Aroclors by SW8082A**

This report documents the review of analytical data from the analysis of sediment samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Analytical Resources, LLC (ARL), Tukwila, Washington. Refer to the **Sample Index** for a complete list of samples.

SDG	NUMBER OF SAMPLES	VALIDATION LEVEL
24E0313	6 Sediment	EPA Stage 2B
24E0341	19 Sediment	EPA Stage 2B
24E0373	20 Sediment	EPA Stage 2B
24E0404	16 Sediment	EPA Stage 2B
24E0429	18 Sediment	EPA Stage 2B
24E0457	8 Sediment	EPA Stage 2B
24E0517	14 Sediment	EPA Stage 2B
24E0560	15 Sediment	EPA Stage 2B
24E0605	15 Sediment	EPA Stage 2B
24E0608	34 Sediment	EPA Stage 4
24E0631	10 Sediment	EPA Stage 2B
24E0670	6 Sediment	EPA Stage 2B
24E0716	15 Sediment	EPA Stage 2B
24F0006	2 Sediment	EPA Stage 2B
24F0008	15 Sediment	EPA Stage 2B
24F0010	2 Sediment	EPA Stage 2B
24F0050	9 Sediment	EPA Stage 2B
24F0109	15 Sediment	EPA Stage 2B
24F0134	21 Sediment	EPA Stage 2B
24F0222	7 Sediment	EPA Stage 2B
24F0223	13 Sediment	EPA Stage 2B
24F0260	21 Sediment	EPA Stage 2B
24F0261	6 Sediment	EPA Stage 2B
24F0288	13 Sediment	EPA Stage 2B
24F0332	18 Sediment	EPA Stage 2B
24F0366	10 Sediment	EPA Stage 2B
24F0424	12 Sediment	EPA Stage 2B
24F0426	12 Sediment	EPA Stage 2B
24F0459	29 Sediment	EPA Stage 4
24F0485	19 Sediment	EPA Stage 2B
24F0512	13 Sediment	EPA Stage 2B
24F0537	3 Sediment	EPA Stage 2B
24F0557	16 Sediment	EPA Stage 2B

SDG	NUMBER OF SAMPLES	VALIDATION LEVEL
24F0598	15 Sediment	EPA Stage 2B
24G0166	17 Sediment	EPA Stage 4
24G0224	12 Sediment	EPA Stage 2B
24G0227	32 Sediment	EPA Stage 2B
24G0270	20 Sediment	EPA Stage 2B
24G0307	8 Sediment	EPA Stage 2B
24G0340	8 Sediment	EPA Stage 2B
24G0390	7 Sediment	EPA Stage 2B
24G0402	8 Sediment	EPA Stage 2B
24G0464	4 Sediment	EPA Stage 2B
24G0471	13 Sediment	EPA Stage 2B
24G0556	1 Sediment	EPA Stage 2B
24G0631	4 Sediment	EPA Stage 2B
24G0634	12 Sediment	EPA Stage 2B
24H0071	2 Sediment	EPA Stage 2B
24I0537	7 Sediment	EPA Stage 2B
24I0539	16 Sediment	EPA Stage 2B
24I0647	39 Sediment	EPA Stage 2B
24I0648	40 Sediment	EPA Stage 2B
24I0651	33 Sediment	EPA Stage 2B
24I0655	34 Sediment	EPA Stage 2B
24I0664	39 Sediment	EPA Stage 2B
24I0669	12 Sediment	EPA Stage 2B
24K0260	34 Sediment	EPA Stage 2B
24K0393	23 Sediment	EPA Stage 2B
24K0562	40 Sediment	EPA Stage 2B
24K0644	40 Sediment	EPA Stage 2B
24K0648	22 Sediment	EPA Stage 2B
24L0182	1 Sediment	EPA Stage 2B

## DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes, and all anomalies were discussed in the case narrative.

**SDG 24E0404:** The case narrative indicated that a standard reference material (SRM) was extracted with samples in this SDG but there were not any SRM results in the data package. The laboratory submitted a revised PDF, correcting the case narrative to indicate that an SRM was not extracted with these samples.

**SDG 24E0608:** For the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) for batch BME0767, there was an error on the summary form. The LCS %R value for Aroclor 1016 listed on the summary form is from column 2. The LCSD %R value and the RPD value listed on the summary

form is from column 1. The raw data was reviewed, and all criteria were met on column 1 and column 2. No action was taken for the summary form error.

*SDG 24F0459:* One field duplicate set, LDW24-SS1357 and LDW24-SS1357-FD, were submitted. In the original submission, Aroclor 1248 was identified in the parent sample and Aroclor 1242 was identified in the field duplicate. Because there are multiple Aroclors present in each of these samples, and there is overlap of congeners in Aroclor 1242 and Aroclor 1248, the laboratory was asked to re-evaluate the identification of Aroclor 1242 in the field duplicate. The laboratory submitted a revised PDF and EDD.

### **EDD TO HARDCOPY VERIFICATION**

All sample IDs reported in the electronic data deliverable (EDD) were verified (100%) by comparing the EDD to the hardcopy laboratory data package. Sample results and laboratory quality control sample results were also verified (10%).

The surrogate decachlorobiphenyl (DCBP) on the summary forms in the PDF were entered as PCB 209 in the EDD.

Laboratory quality control samples were reported from both analytical columns in the EDD but only one analytical column in the PDF. No action was taken.

The laboratory defines a P1-flag as an indication that the relative percent difference (RPD) value between results from two analytical columns is greater than 40%. For several samples, surrogate values were P1-flagged in the EDD but not in the PDF. No action was taken.

For several SDGs, several sample results were incorrectly P1-flagged on the sample summary forms in the PDF and in the EDD. See the **Compound Identification** section for further details.

*SDG 24F0512, 24F0537:* The chains-of-custody (COC) indicates that that sample matrix is sediment. In the EDD, the "sample\_matrix\_code" field is populated with "SO" indicating soil samples. No action was taken.

## TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table:

2	Sample Receipt, Preservation, and Holding Times	1	Field Duplicates
2	Initial Calibration (ICAL)	✓	Target Analyte List
2	Continuing Calibration (CCAL)	2	Internal Standards
2	Laboratory Blanks	2	Standard Reference Material
1	Field Blanks	1	Reporting Limits
2	Surrogate Compounds	2	Reported Results
2	Laboratory Control Samples (LCS/LCSD)	2	Compound Identification
2	Matrix Spike/Matrix Spike Duplicates (MS/MSD)	1	Calculation Verification (Full Validation Only)

✓ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

<sup>1</sup> Quality control results are discussed below, but no data were qualified.

<sup>2</sup> Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

### Sample Receipt, Preservation, and Holding Times

#### *Cooler Temperature:*

As stated in validation guidance documents, sample shipping coolers should arrive at the laboratory within the advisory temperature range of  $\leq 6^{\circ}\text{C}$ . Several cooler temperatures were greater than the  $6^{\circ}\text{C}$  control limit. For the following circumstances, no action was taken for the temperature outliers:

- The sample cooler was received at the laboratory the same day as collection and did not have time to chill to  $< 6^{\circ}\text{C}$ . This outlier did not impact data quality; no results were qualified.
- The sample cooler was received at the laboratory within one day of collection, and the cooler temperature was  $> 6^{\circ}\text{C}$ . Since PCBs are stable compounds, this outlier did not impact data quality; no results were qualified.

The SDGs with cooler temperature outliers in these categories are as follows:

24E0313	24F0109	24F0512	24G0307	24H0461	24I0655	24K0644
24E0373	24F0134	24F0537	24G0340	24I0537	24I0664	24K0648
24E0404	24F0223	24F0557	24G0402	24I0539	24I0669	24L0182
24E0605	24F0332	24G0166	24G0556	24I0647	24K0260	
24E0716	24F0459	24G0224	24G0631	24I0648	24K0393	
24F0008	24F0485	24G0227	24G0634	24I0651	24K0562	

#### *Chain of Custody (COC):*

For several SDGs, for one or more Chains of Custody (COC), the "Released By" section was not signed by the courier.

**SDG 24I0651:** For the COC for Samples LDW24-IT1362B and LDW24-IT1362C, the collection date was not filled in. This is one of four COCs; all other samples were collected on 6/6/24 or 6/7/24, and samples were received at the laboratory on 6/7/24. The Tier 2 Batch 1 Table, included in the PDF, indicated that the samples were collected on 6/7/24. No action was taken.

*Sample Condition:*

*SDG 24G0402:* For LDW24-IT1599E, the lid of the sample container was cracked upon receipt at the laboratory. The lid was replaced. Data was judged as not impacted.

*Holding Time Exceedance:*

*SDG 24F0010:* Samples LDW23-SS1273 and LDW23-SS1196 were analyzed 517 -519 days from sample collection, beyond the 1-year holding time for samples stored frozen. All results for the samples were estimated (J/UJ-1).

**Initial Calibration (ICAL)**

Initial calibrations (ICAL) were analyzed at the proper frequency. The laboratory used a calibration curve if the percent relative standard deviation (RSD) was greater than 20%. All curve coefficients of determination (COD) were within the control limit (COD > 0.990). Second source initial calibration verification (SCV) standards were analyzed at the required frequency. With the noted exceptions, the percent drift (%D) values were within the method limit of ±20%.

All samples were analyzed using dual column confirmation. In cases where there was an outlier on only one column, and the associated result was reported from the column with acceptable %D values, no qualifiers were assigned. Although outliers were noted for surrogate compounds tetrachloro-m-xylene (TCMX) and decachlorobiphenyl (DCBP), qualifiers were not assigned to surrogate results based on %D value outliers in calibration standards.

SDG	ICAL	STANDARD	OUTLIER	BIAS	ACTION
24E0341 24E0373 24E0404	HE00026	SCV – AR1232/1268 5/6/24 @ 19:26	DCBP both columns	High	None
24E0429	HF00037	SCV – AR1248 6/8/24 @ 22:32	AR1248 Column 2	Low	UJ-5CL
24E0341 24E0608 24E0631 24E0716 24F0006 24F0008 24F0010 24F0050 24F0109 24F0134 24F0222 24F0223 24F0260 24F0261 24F0424	HF00039	SCV – AR1232/1268 6/12/24 @ 02:22	DCBP both columns	High	None

SDG	ICAL	STANDARD	OUTLIER	BIAS	ACTION
24F0109 24F0260 24F0459 24F0485 24F0557 24G0224	HG00026	SCV – AR1232/1268 7/10/24 @ 18:45	DCBP both columns	High	None
24F0260 24F0485	HG00014	SCV – AR1232/1268 7/5/24 @ 23:22	DCBP both columns	High	None
24F0288 24F0332 24F0366 24F0426 24F0459 24F0537 24F0557 24F0598 24G0166 24G0224 24G0227 24G0270 24G0307 24G0340 24G0390 24G0402	HG00027	SCV – AR1232/1268 7/5/24 @ 22:39	DCBP both columns	High	None
24G0390 24G0402 24G0464 24G0471 24G0631	HH00068	SCV – AR1232/1268 8/21/24 @ 16:46	DCBP both columns	High	None
24G0471 24G0631		SCV – AR1016/1260 8/21/24 @ 15:01	AR1260 Both columns	High	J-5CH
24G0464 24G0471 24G0556 24G0634	HH00043	SCV – AR1232/1268 8/14/24 @ 20:04	DCBP both columns	High	None
24G0464 24G0471 24G0634	HH00059	SCV – AR1242, AR1248, AR1254, AR1221/1262 8/19/24 @ 20:06-21:08	DCBP Column 1	High	None
24G0634		SCV – AR1232/1268 8/19/24 @ 21:29	DCBP both columns	High	None
24G0631 24H0071	HH00069	SCV – AR1232/1268 8/21/24 @ 16:49	DCBP both columns	High	None
24I0537 24I0539	HI00077	SCV – AR1232/1268 9/20/24 @ 15:37	DCBP both columns	High	None

SDG	ICAL	STANDARD	OUTLIER	BIAS	ACTION
24I0647 24I0648 24I0651 24I0655 24I0664 24I0669	HI00041	SCV – AR1016/1260, AR1242, AR1248, AR1254, AR1221/1262 9/11/24 @ 19:48-21:14	DCBP Column 1	High	None
		SCV – AR1232/1268 9/11/24 @ 21:35	DCBP both columns	High	None
24I0647 24I0648 24I0651	HJ00066	SCV – AR1232/1268 10/19/24 @ 07:18	DCBP both columns	High	None
24I0648 24I0664 24K0260 24K0393	HK00083	SCV – AR1232/1268 11/19/24 @ 07:01	DCBP both columns	High	None
24K0260 24K0393 24K0562 24K0644	HL00087	SCV – AR1232/1268 12/18/24 @ 23:13	DCBP both columns	High	None
		SCV – AR1242 12/18/24 @ 21:49	TCMX Column 1	High	None
24K0260 24K0562 24K0644 24K0648 24L0182	HL00092	SCV – AR1232/1268 12/19/24 @ 02:33	DCBP both columns	High	None

For ICALs HF00037 and HF00039, the Aroclor 1221 standard used was expired. All Aroclor 1221 peaks were present on the ICAL chromatograms. Aroclor 1221 was not detected in the associated samples. Since Aroclors are stable, and since no Aroclor results were quantitated using the expired standard, no qualifiers were assigned.

### Continuing Calibration (CCAL)

A continuing calibration verification (CCAL) standard was analyzed at the required frequency. With the noted exceptions, the percent difference (%D) values were within the required control limits of  $\pm 20\%$ . When the CCAL %D values indicate a potential low bias, associated results were estimated (J/UJ-5BL). Only the associated positive results were estimated (J-5BH) if the %D value indicates a potential high bias.

All samples were analyzed using dual column confirmation. For several CCALs, there were %D outliers on only one column, and the associated result was reported from the column with acceptable %D values. No qualifiers were assigned in these cases.

For several CCALs, there were %D value outliers for surrogate compounds. No qualifiers were assigned to surrogate compound results based on CCAL surrogate %D outliers.

The following CCAL outliers resulted in qualification:

SDG	CCAL DATE	COMPOUND	COLUMN	POTENTIAL BIAS	ACTION	SAMPLES
24E0716	6/20/24 @ 02:19	Aroclor 1260	2	High	J-5BH	LDW24-SC1344M
24F0485	7/6/24 @ 00:46	Aroclor 1260	1	High	J-5BH	LDW24-SC1489H LDW24-SS1354
24F0512	7/12/24 @ 08:17	Aroclor 1260	1	High	J-5BH	LDW24-SC1479B
24G0402	8/10/24 @ 09:20	Aroclor 1248	2	Low	J-5BL	LDW24-IT1600B
24G0471	8/17/24 @ 10:28	Aroclor 1260	2	Low	J-5BL	LDW24-IT1605E
24G0631	8/21/24 @ 20:19	Aroclor 1260	1	Low	UJ-5BL	LDW24-IT1553C
	8/22/24 @ 02:56	Aroclor 1260	1	Low	UJ-5BL	
24K0393	12/23/24 @ 16:26	Aroclor 1248	1 and 2	Low	J/UJ-5BL	LDW24-IT1551C LDW24-IT1551D LDW24-IT1552D LDW24-SC1345L LDW24-IT1599D LDW24-IT1376A-FD LDW24-SC1347E-FD LDW24-IT1378A-FD

### Laboratory Blanks

A method blank was analyzed at the required frequency of one per batch of 20 or fewer samples. Action levels were established at five times (5x) the concentration reported in the blank. If a contaminant is reported in an associated field sample and the concentration is less than the action level, the result was qualified as not detected (U-7). No action is taken if the sample result is greater than the action level, or for non-detected results.

**SDGs 24G0390, 24G0402:** For batch BMH0005, Aroclor 1254 was detected in the method blank. For the associated samples, Aroclor 1254 was either not detected, or the results were greater than 5x the established action level; no qualifiers were assigned.

**SDGs 24G0464, 24G0471, 24G0556:** For batch BMH0107, Aroclor 1254 was detected in the method blank. For the associated samples, Aroclor 1254 results that were less than the established 5x action level were qualified as not-detected (U-7).

**SDG 24I0651:** For batch BMJ0051, Aroclors 1248, 1254, and 1260 were detected in the method blank. For the associated samples, all Aroclor positive results were greater than the established 5x action level; no qualifiers were assigned.

**SDG 24I0655:** For batch BMJ0052, Aroclors 1016, 1221, 1232, and 1242 were tentatively identified in the method blank; the RPD values between the two analytical columns were greater than 150%, indicating co-elution with non-target compounds on one column. In addition, the peak pattern in the method blank was not a good match to the Aroclor standard patterns. There were no positive results for these Aroclors in the associated samples; no qualifiers were required.

Low levels of Aroclors 1248, 1254 and 1260 were reported in the method blank. For the associated samples, all Aroclor positive results were greater than the established 5x action level; no qualifiers were assigned.

**SDG 24I0664:** For batch BMJ0054, Aroclors 1016, 1221, 1232, 1248, 1254 and 1260 were detected in the method blank. For Sample LDW24-SC1453G, the positive result for Aroclor 1248 was less than the established 5x action level and was qualified as not-detected (U-7). For all other associated samples, all Aroclor positive results were greater than the established 5x action level; no qualifiers were assigned. Several samples were re-extracted due to the method blank contamination. See the **Reported Results** section for further discussion.

### Field Blanks

No Field blanks were collected with these samples.

### Surrogate Compounds

Surrogate compounds tetrachloro-m-xylene (TCMX) and decachlorobiphenyl (DCBP) were added to all samples and laboratory QC samples. The samples were analyzed using dual column confirmation. Percent recovery (%R) values were reported from both columns. No qualifiers were assigned if three of the four %R values were within control limits.

If more than one of the four surrogate %R values were outside the control limits and indicated a potential low bias, all results in the sample were estimated (J/UJ-13L). If more than one of the four surrogate %R values were outside the control limits and indicated a potential high bias, only positive results in the sample were estimated (J-13H).

Although several surrogate %R value outliers were noted for laboratory QC samples, no qualifiers were assigned to laboratory QC sample results.

The following outliers resulted in qualification:

SDG	SAMPLE	SURROGATE	BIAS	ACTION
24E0313	LDW24-SC1515B	TCMX/DCBP	Low	J/UJ-13L
24E0373	LDW24-SC1541C-FD (1x)	DCBP	High	J-13H
	LDW24-SC1541C-FD (5x)	DCBP	High	DNR-11 (reported from 1x)
24E0605	LDW24-SS1404	DCBP	High	J-13H
24E0716	LDW24-SC1339D	TCMX/DCBP	Low	J/UJ-13L
24F0008	LDW24-IT1546C	DCBP	High	J-13H
24F0485	LDW24-SC1489H	DCBP	High	J-13H
24F0598	LDW24-SS1446	DCBP	High	J-13H
24G0634	LDW24-SC1451D (1x)	DCBP	High	None – reported from 10x
	LDW24-SC1451G (1x)	DCBP	High	None – reported from 10x
	LDW24-IT1556C	TCMX	Low	J/UJ-13
		DCBP	High	
LDW24-SC1451K	DCBP	High	J-13H	

Several samples were analyzed at high dilutions; surrogate compounds were diluted beyond the level of accurate quantitation. No qualifiers were assigned based on surrogate outliers.

SDG	SAMPLE	DILUTION	SDG	SAMPLE	DILUTION	
24E0605	LDW24-SC1354A	100x	24I0651 (cont)	LDW24-IT1360B	20x	
24F0006	LDW24-IT1540B	10x		LDW24-IT1360C	10x	
24F0109	LDW24-SS1355	50x		LDW24-IT1360D	250x	
	LDW24-SS1352	100x		LDW24-IT1360E	1000x	
24F0134	LDW24-IT1361B	1000x		LDW24-IT1362B	1000x	
	LDW24-IT1359A	100x		LDW24-IT1362C	1000x	
	LDW24-SS1351	50x		LDW24-IT1363B	10x	
24F0260	LDW24-IT1370A	100x		LDW24-IT1363E	40x	
	LDW24-IT1368A	1000x		LDW24-IT1364B	1000x	
	LDW24-IT1362A	500x		LDW24-SC1365I	100x	
24F0557	LDW24-SS1456	100x		LDW24-SC1365K	200x	
	LDW24-IT1456A	1000x		LDW24-SC1366C	400x	
24G0270	LDW24-SC1372G	100x		LDW24-SC1366E	200x	
	LDW24-SC1372I	100x		LDW24-IT1367E	20x, 200x	
	LDW24-SC1372K	1000x		LDW24-IT1368B	400x	
	LDW24-SC1372M	100x		24I0655	LDW24-SC1371K	40x
	LDW24-IT1373A	100x			LDW24-IT1373B	1000x, 5000x
	LDW24-IT1376A	1000x			LDW24-IT1374B	100x
24G0340	LDW24-IT1596B	1000x			LDW24-IT1374C	100x
24G0390	LDW24-IT1601C	100x			LDW24-IT1374D	50x
24G0402	LDW24-IT1599B	100x	LDW24-IT1376B		50x	
	LDW24-IT1598B	200x	LDW24-SC1408H		100x	
24G0471	LDW24-IT1607C	100x	LDW24-SC1408L		100x	
	LDW24-IT1603B	500x	24I0648	LDW24-IT1351D	100x	
	LDW24-IT1603C	500x		LDW24-IT1351E	500x	
24I0539	LDW24-SC1386F	10x		LDW24-IT1351F	500x	
	LDW24-SC1388B	10x		LDW24-IT1352F	500x	
24I0651	LDW24-SC1357C	100x		LDW24-SC1353O	100x	
	LDW24-SC1357E	50x		LDW24-SC1354C	100x	
	LDW24-SC1357G	500x		LDW24-IT1355D	100x	
	LDW24-IT1358C	500x		LDW24-IT1355E	500x	
	LDW24-IT1358D	1000x		LDW24-SC1356M	10x	
	LDW24-IT1358E	500x		LDW24-SC1356O	20x, 40x	
	LDW24-IT1359B	1000x	LDW24-SC1356Q	50x, 100x		
24K0260	LDW24-IT1603A	2000x	24K0393	LDW24-IT1601D	100x	
	LDW24-IT1605A	2000x		LDW24-IT1601F	50x	
	LDW24-IT1428A	50x		LDW24-SC1345N	50x	
	LDW24-IT1594A	20x		LDW24-SC1345P	25x	
	LDW24-IT1596A	50x		LDW24-IT1376A-FD	100x	
	LDW24-IT1612A	50x	24L0182	LDW24-SC1350C	100x	
	LDW24-IT1599A	50x				
	LDW24-IT1610A	20x, 200x				

**SDG 24K0260:** For Sample LDW24-IT1606A, analyzed at 10x dilution, the %R values for DCBP were not reported on the summary form and were flagged “NRS” by the laboratory to indicate that no result was reported due to chromatographic interference. The raw data chromatogram did not show any interferences. The DCBP %R values reported in the raw data were greater than the upper control limit. Positive results in this sample were estimated (J-13H).

### Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed at the required frequency of one per batch of 20 or fewer samples. No action is taken unless both the LCS and LCSD percent recovery (%R) values are outside the control limits. Precision is evaluated using the relative percent difference (RPD) values calculated between the LCS and LCSD results. Any RPD values outside the control limits indicate uncertainty in the measured results. Qualifiers are issued to all samples in the extraction batch.

When the LCS/LCSD %R values indicate a potential low bias, all associated results are estimated (J/UJ-10L). Only the associated positive results are estimated (J-10H) if the %R values indicate a potential high bias. Associated positive results are estimated (J-9A) if the RPD values indicate uncertainty.

SDG	BATCH	COMPOUND	LCS %R OUTLIER	LCSD %R OUTLIER	RPD OUTLIER	ACTION
24E0313	BMF0195	AR1260	High	High	--	J-10H
24E0605	BME0766	AR1016	Low	--		None for single outlier
					High	None – parent ND
24E0670	BMF0093	AR1260	High	High	--	J-10H
24F0134	BMF0257	AR1260	High	High	--	J-10H
24F0537 24F0598	BMF0749	AR1260	High	High	--	J-10H
		AR1016	High	--	--	None for single outlier
24F0557	BMF0710	AR1260	--	High	--	None for single outlier
		AR1016	--	High	--	None for single outlier
24G0227	BMG0431	AR1260	High	--	--	None for single outlier
24G0270	BMG0469	AR1016	--	High	--	None for single outlier
24G0340	BMG0471	AR1260	High	High	--	J-10H
24G0464	BMH0642	AR1016	High	High		None – parent ND
24G0464 24G0471 24G0556	BMH0107	AR1260	High	--	--	None for single outlier
24G0634	BMH0011	AR1260	High	High	--	J-10H
24I0651	BMJ0051	AR1016	High	--		None for single outlier
					High	None – parent ND
24I0655	BMJ0052	AR1016	--	High		None for single outlier
					High	None – parent ND
	BMJ0053	AR1016	High	--		None for single outlier
					High	None – parent ND

### Matrix Spike/Matrix Spike Duplicates (MS/MSD)

Matrix spike/matrix spike duplicate (MS/MSD) samples were analyzed at the appropriate frequency. No action is taken unless both the MS and MSD percent recovery (%R) values are outside the control limits. MS/MSD %R values are not evaluated when the parent concentration is greater than 4x the spike concentration. Precision is evaluated using the relative percent difference (RPD) values calculated between the MS and MSD results. Any RPD values outside the control limits indicate uncertainty in the measured results for the sample. Qualifiers were only issued to the parent sample.

When the MS/MSD %R values indicate a potential low bias, associated results are estimated (J/UJ-8L). Only the associated positive results are estimated (J-8H) if the %R values indicate a potential high bias. Associated positive results are estimated (J-9A) if the RPD values indicate uncertainty.

SDG	BATCH	PARENT SAMPLE	COMPOUND	MS %R	MSD %R	RPD OUTLIER	ACTION
24E0341	BME0513	LDW24-SC1525	AR1016	Low	Low	--	J/UJ-8L
			AR1260	Low	Low	--	
24E0429	BME0591	LDW24-SC1536B-FD	AR1016	--	Low	--	None – parent ND
24E0457	BME0592	LDW24-SC1439M	AR1016	High	High	--	None – parent ND
			AR1260	Low	--	--	None for single outlier
24E0517	BME0686	LDW24-SC1385E	AR1016	Low	Low	--	J/UJ-8L
			AR1260	Low	Low	--	
24E0605	BME0766	LDW24-SS1412	AR1260	--	Low	--	None for single outlier
24F00062 4F005024 F0261	BMF0500	LDW24-SS1512 From SDG 24F0050	AR1016	--	Low	High	None – parent ND
			AR1260	--	--	High	J-9A
24F0008	BMF0113	LDW24-IT1546C	AR1260	Low	Low	--	J-8L
24F0109	BMF0382	LDW24-SS1362	AR1016	High	High	--	None – parent ND
24F0134	BMF0253	LDW24-SC1586C	AR1016	Low	--	--	None for single outlier
24F02222 4F0223	BMF0384	LDW24-SC1425I From SDG 24F0223	AR1016	Low	Low	--	UJ-8L
			AR1260	Low	Low	--	
24F0260	BMF0470	LDW24-IT1363A	AR1016	High	High	--	None – parent ND
			AR1260	High	--		None for single outlier
						High	J-9A
	BMF0472	LDW24-IT1370A	AR1016	High	High	--	100x Dilution – No action
AR1260			Low	Low	--		
24F0366	BMF0559	LDW24-SC1343E-FD	AR1016	High	High	--	None – parent ND
			AR1260	--	Low		None for single outlier
						High	J-9A
24F0424	BMF0595	LDW24-SS1496	AR1260	Low	Low	--	J-8L
24F0426	BMF0560	LDW24-IT1455A-FD	AR1260	Low	--	--	None for single outlier

SDG	BATCH	PARENT SAMPLE	COMPOUND	MS %R	MSD %R	RPD OUTLIER	ACTION
24F0485	BMF0647	LDW24-SC1489L	AR1016	High	High	--	None – parent ND
24F0512	BMF0680	LDW24-SC1479B	AR1016	High	High	--	None – parent ND
24F0537 24F0598	BMF0749	LDW24-IT1318C From SDG 24F0598	AR1260	--	High	--	None for single outlier
24F0557	BMF0710	LDW24-IT1449A	AR1260	--	Low	--	None for single outlier
24G0166	BMG0279	LDW24-SC1409E	AR1016	High	High	--	None – parent ND
			AR1260	--	--	High	J-9A
24G0307	BMG0435	LDW24-SC1558B	AR1016	High	High	--	None – parent ND
24G0390 24G0402	BMH0005	LDW24-IT1601B From SDG 24G0390	AR1016	High	High	--	None – parent ND
24G0464 24G0471* 24G0556	BMH0107	LDW24-IT1607C From SDG 24G0471	AR1016	High	High	High	None – parent ND
			AR1260	NA -parent > 4x spike		High	J-9A
24G0634	BMH0011	LDW24-IT1556E	AR1260	Low	Low	--	J-8L
24I0537	BMI0760	LDW24-SC1501C-FD	AR1260	Low	High		J-8
						High	J-9A
24I0539	BMI0761	LDW24-SC1388E	AR1016	High	High	--	None – parent ND
			AR1260	Low	Low	--	J-8L
24I0648	BMJ0048	LDW24-SC1353S	AR1016	High	High	--	None – parent ND
			AR1260	Low	--	High	J-9A
		LDW24- SC1353S RE	AR1016	High	High	--	None – parent ND
			AR1260	--	High		None for single outlier
		High	J-9A				
24I0651*	BMJ0050	LDW24-IT1363E	AR1016	High	High	--	None – parent ND
	BMJ0051	LDW24-SC1366C	AR1016	High	High	--	None – parent ND
24I0655*	BMJ0052	LDW24-SC1371C	AR1016	--	High	--	None for single outlier
	BMJ0053	LDW24-SC1408H	AR1016	High	High	High	None – parent ND
		LDW24-SC1408H RE	AR1016	High	High	High	None – parent ND
24I0664	BMJ0054	LDW24-SC1503I	AR1016	Low	--	--	None for single outlier
			AR1260	Low	--		None – reported from re-extract
					High		
24K0260	BMK0605	LDW24-SC1577	AR1016	High	--	--	None for single outlier
24K0393*	BMK0564	LDW24-IT1551B	AR1016	High	Low	--	None – parent ND
			AR1260	Low	Low	--	J-8L
	BMK0566	LDW24-SC1345P	AR1016	--	High	--	None for single outlier
			AR1260	--	Low	--	

SDG	BATCH	PARENT SAMPLE	COMPOUND	MS %R	MSD %R	RPD OUTLIER	ACTION
24K0562	BML0253	LDW24-IT1560E	AR1260	High	Low		J-8
						High	J-9A
24K0644	BML0302	LDW24-SC1531E	AR1260	Low	Low	--	J-8L

\* Positive results for Aroclor 1016 were reported in the MS/MSD but not in the parent sample. The peaks used for quantitating Aroclor 1016 in the MS/MSD were attributed to the high levels of Aroclor 1248 in the parent sample rather than the Aroclor 1016 in the spike solution (which would have been diluted out at high dilutions). Therefore, no qualifiers were assigned based on the Aroclor 1016 MS/MSD outliers.

**SDGs 24G0464:** For batch BMH0642, an MS/MSD was not analyzed with this SDG. Laboratory accuracy and precision were evaluated using the LCS/LCSD.

### Field Duplicates

For sediment samples, the RPD control limit is 50% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the absolute difference between the sample and replicate must be less than 2x the RL. No data were qualified based on field duplicate precision outliers. Users of the data should consider the impact of field precision outliers on the reported results.

SDG	PARENT SAMPLE	FIELD DUPLICATE	COMPOUND	OUTLIER
24E0373	LDW24-SC1541C	LDW24-SC1541C-FD	--	--
24E0404	LDW24-SC1520B	LDW24-SC1520B-FD	AR1260	101%
	LDW24-IT1513A	LDW24-IT1513A-FD	--	--
	LDW24-SC1544G	LDW24-SC1544G-FD	--	--
24E0429	LDW24-SC1536B	LDW24-SC1536B-FD	--	--
24E0457	LDW24-SC1439G	LDW24-SC1439G-FD	--	--
24E0517	LDW24-SC1386E	LDW24-SC1386E-FD	--	--
24E0560	LDW24-IT1428C	LDW24-IT1428C-FD	--	--
	LDW24-IT1426B	LDW24-IT1426B-FD	--	--
24E0608	LDW24-SC1507A	LDW24-SC1507A-FD	--	--
	LDW24-SC1406E	LDW24-SC1406E-FD	--	--
24E0631	LDW24-SC1335I	LDW24-SC1335I-FD	--	--
24E0670	LDW24-SC1582C	LDW24-SC1582C-FD	--	--
24E0716	LDW24-SC1339D	LDW24-SC1339D-FD	--	--
	LDW24-SC1344D	LDW24-SC1344D-FD	--	--
24F0008	LDW24-SC1416C	LDW24-SC1416C-FD	--	--
	LDW24-IT1546B	LDW24-IT1546B-FD	--	--
24F0050	LDW24-SS1523	LDW24-SS1523-FD	--	--
24F0109	LDW24-SS1402	LDW24-SS1402-FD	--	--
24F0134	LDW24-SS1411	LDW24-SS1411-FD	--	--
24F0260	LDW24-SC1441E	LDW24-SC1441E-FD	--	--
24F0261	LDW24-IT1443A	LDW24-IT1443A-FD	--	--
24F0288	LDW24-SC1383C	LDW24-SC1383C-FD	--	--
24F0332	LDW24-SC1431C	LDW24-SC1431C-FD	--	--
24F0366	LDW24-SC1343E	LDW24-SC1343E-FD	--	--
24F0426	LDW24-IT1455A	LDW24-IT1455A-FD	--	--
24F0459	LDW24-SS1357	LDW24-SS1357-FD	AR1254	79.5%

SDG	PARENT SAMPLE	FIELD DUPLICATE	COMPOUND	OUTLIER
24F0557	LDW24-IT1454A	LDW24-IT1454A-FD	AR1254	Diff > 2x RL
			AR1260	Diff > 2x RL
24F0598	LDW24-IT1448B	LDW24-IT1448B-FD	--	--
	LDW24-IT1457C	LDW24-IT1457C-FD	--	--
24G0224	LDW24-SS1565	LDW24-SS1565-FD	--	--
24G0227	LDW24-SC1340E	LDW24-SC1340E-FD	--	--
	LDW24-SC1532A	LDW24-SC1532A-FD	--	--
	LDW24-IT1527A	LDW24-IT1527A-FD	--	--
	LDW24-SS1455	LDW24-SS1455-FD	--	--
24G0270	LDW24-SC1468A	LDW24-SC1468A-FD	AR1248	Diff > 2x RL
			AR1254	82.5%
			AR1260	68.3%
	LDW24-SC1341E	LDW24-SC1341E-FD	--	--

For the following field duplicate sets, the parent sample was analyzed during Tier 1 and the field duplicates were analyzed during Tier 2.

SDG	PARENT SAMPLE (AS PART OF TIER 1)	DATE EXTRACTED	FIELD DUPLICATE ID (AS PART OF TIER 2)	DATE EXTRACTED	COMPOUND	OUTLIER
24E0457 24I0537	LDW24-SC1501C	5/24/24	LDW24-SC1501C-FD	10/1/24	AR1260	101%
24F0426 24I0539	LDW24-SC1384E	6/27/24	LDW24-SC1384E-FD	10/1/24	AR1260	125%
24E0716 24I0647	LDW24-SC1336D	6/5/24	LDW24-SC1336D-FD	10/14/24	--	--
24G0270 24I0655	LDW24-IT1374A	7/22/24	LDW24-IT1374A-FD	10/22/24	--	--
24G0224 24I0655	LDW24-IT1413B	7/18/24	LDW24-IT1413B-FD	10/24/24	AR1248	Diff > 2xRL
24F0223 24I0655	LDW24-SC1425G	6/19/24	LDW24-SC1425G-FD	10/24/24	--	--
24F0223 24I0664	LDW24-SC1433G	6/19/24	LDW24-SC1433G-FD	11/25/24	--	--
24F0260 24I0664	LDW24-1442C	6/20/24	LDW24-SC1442C-FD	11/25/24	AR1254	60.3%
24F0332 24I0664	LDW24-SC1452E	6.24/24	LDW24-SC1452E-FD	10/24/24	AR1260	59.1%
24F0222 24I0664	LDW24-SC1460F	6/19/24	LDW24-SC1460F-FD	11/25/24	AR1248	Diff > 2xRL
					AR1254	Diff > 2xRL
24F0485 24I0664	LDW24-SC1489D	6/28/24	LDW24-SC1489D-FD	11/25/24	AR1248	62.3%
					AR1254	66.8%
24E0608 24K0393	LDW24-SC1559A	5/31/24	LDW24-SC1559A-FD	12/12/24	AR1254	67.2%
24E0608 24K0393	LDW24-IT1402A	5/31/24	LDW24-IT1402A-FD	12/12/24	--	--
24G0270 24K0393	LDW24-IT1376A	7/22/24	LDW24-IT1376A-FD	12/12/24	AR1248	54.3%
					AR1254	63.8%

SDG	PARENT SAMPLE (AS PART OF TIER 1)	DATE EXTRACTED	FIELD DUPLICATE ID (AS PART OF TIER 2)	DATE EXTRACTED	COMPOUND	OUTLIER
24G0270 24K0393	LDW24-SC1347E	7/22/24	LDW24-SC1347E-FD	12/12/24	--	--
24G0307 24K0393	LDW24-IT1378A	7/19/24	LDW24-IT1378A-FD	12/12/24	AR1248	71.7%
					AR1254	58.3%
24G0270 24K0648	LDW24-SC1341F	7/22/24	LDW24- SC1341F -FD	12/16/24	AR1248	58.1%
24G0227 24K0648	LDW24-IT1528B	7/22/24	LDW24- IT1528B -FD	12/18/24	--	--
24E0608 24K0562	LDW24-SS1317	6/3/24	LDW24-SS1317-FD	12/13/24	--	--
24G0270 24K0648	LDW24-SC1341F	7/22/24	LDW24- SC1341F -FD	12/16/24	AR1248	58.1%
24G0227 24K0648	LDW24-IT1528B	7/22/24	LDW24- IT1528B -FD	12/18/24	--	--

### Internal Standards

Internal standards (IS) hexabromobiphenyl (HBBP) and 1-bromo-2-nitrobenzene (BNB) were added to all samples and laboratory QC samples. When the IS area is less than 50%, associated positive results and reporting limits were estimated (J/UJ-19). When the IS area is greater than 200%, only associated positive results were estimated (J-19). All samples were analyzed using dual column confirmation. In cases where there was an outlier on only one column, and the associated result was reported from the column with acceptable IS recovery, no qualifiers were assigned. HBBP is associated with Aroclor 1260 results, and BNB is associated with Aroclors 1016, 1221, 1232, 1242, 1248, and 1254 results. With the noted exceptions, all internal standard areas were within 50 – 200% of the associated initial calibration midpoint standard.

SDG	SAMPLE	OUTLIER	QUALIFIER	COMMENT
24E0313	LDW24-SC1511B	HBBP low	None	Reported from other column
	LDW24-SC1511E	HBBP low	None	Reported from other column
	LDW24-SC1511G	HBBP low	None	Reported from other column
	LDW24-SC1511C	HBBP low	J-19	Aroclor 1260
	LDW24-SC1515	HBBP low	None	Reported from other column
	LDW24-SC1511I MS/MSD	HBBP low	None	No action for lab QC IS outliers
24E0341	BME0513-BLK1	HBBP low	None	No action for lab QC IS outliers
	LDW24-SC1525 MS/MSD	HBBP low	None	No action for lab QC IS outliers
	BME0513-SRM1	HBBP low	None	No action for lab QC IS outliers
	LDW24-SC1525	HBBP low	None	Reported from other column
	LDW24-IT1524A	HBBP low	UJ-19	Aroclor 1260
24E0373	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1542K MS/MSD	HBBP low	None	No action for lab QC IS outliers
	LDW24-SC1535K (1x)	HBBP low	J-19	Aroclor 1260
24E0404	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1544I	HBBP low	UJ-19	Aroclor 1260
24E0429	LDW24-SC1536B-FD MS/MSD	HBBP low	None	No action for lab QC IS outliers
24E0457	Several Samples	HBBP low	None	Reported from other column

SDG	SAMPLE	OUTLIER	QUALIFIER	COMMENT
24E0517	LDW24-SC1385E MSD	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
24E0560	LDW24-SC1465A MS/MSD	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
24E0608	LDW24-SC1406B MSD	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1421L	HBBP low	J-19	Aroclor 1260
24E0631	LDW24-SC1579A MS/MSD	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
24E0716	LDW24-SC1333-MS1/MSD1	HBBP low	None	No action for lab QC IS outliers
	BMF0094-SRM1	HBBP low	None	No action for lab QC IS outliers
	LDW24-SC1344G	HBBP low	J-19	Aroclor 1260
	LDW24-SC1344I	HBBP low	J-19	Aroclor 1260
	LDW24-SC1336D	HBBP low	J-19	Aroclor 1260
	LDW24-SC1344M	HBBP low	None	Reported from other column
	LDW24-SC1333	HBBP low	None	Reported from other column
24F0006	LDW24-IT1540C	HBBP low	None	Reported from other column
	Several Samples	HBBP low	None	Reported from other column
24F0008	LDW24-SC1353A	HBBP low	J-19	Aroclor 1260
	BMF0113-SRM1	HBBP low	None	No action for lab QC IS outliers
	LDW24-IT1546C MS/MSD	HBBP low	None	No action for lab QC IS outliers
	LDW23-SS1273	HBBP low	None	Reported from other column
24F0010	LDW23-SS1196	HBBP low	None	Reported from other column
	BMF0113-SRM1	HBBP low	None	No action for lab QC IS outliers
	LDW24-SS1537	HBBP low	J-19	Aroclor 1260
24F0050	Several Samples	HBBP low	None	Reported from other column
	LDW24-SS1362-MSD	HBBP low	None	No action for lab QC IS outliers
24F0109	BMF0382-SRM1	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SS1411-FD MS/MSD	HBBP low	None	No action for lab QC IS outliers
24F0134	Several Samples	HBBP low	None	Reported from other column
	LDW24-SS1411-FD MS/MSD	HBBP low	None	No action for lab QC IS outliers
	BMF0257-SRM1	HBBP low	None	No action for lab QC IS outliers
24F0222	Several Samples	HBBP low	None	Reported from other column
24F0223	LDW24-SC1425I MS	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1433G	HBBP low	UJ-19	Aroclor 1260
	LDW24-SC1425I	HBBP low	UJ-19	Aroclor 1260
24F0260	SMG0069-SCV(1-6)	HBBP high	None	No action for lab QC IS outliers
	BMF0470-SRM1	HBBP low	None	No action for lab QC IS outliers
	BMF0472-BLK1	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
	LDW24-IT1370A	HBBP low	J-19	Aroclor 1260

SDG	SAMPLE	OUTLIER	QUALIFIER	COMMENT
24F0260 (cont)	LDW24-SC1442E	HBBP low	J-19	Aroclor 1260
	LDW24-SC1442G	HBBP low	J-19	Aroclor 1260
	LDW24-SS1526	HBBP low	J-19	Aroclor 1260
24F0261	Several Samples	HBBP low	None	Reported from other column
24F0424	LDW24-SC1490G	HBBP low	UJ-19	Aroclor 1260
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SS1496 MS/MSD	HBBP low	None	No action for lab QC IS outliers
24F0426	LDW24-IT1455A-FD MS/MSD	HBBP low	None	No action for lab QC IS outliers
	BMF0560-SRM1	HBBP low	None	No action for lab QC IS outliers
	LDW24-SC1384B	HBBP low	None	Reported from other column
	LDW24-SC1384E	HBBP low	None	Reported from other column
	LDW24-IT1455A	HBBP low	None	Reported from other column
	LDW24-IT1455A-FD	HBBP low	None	Reported from other column
24F0459	LDW24-IT1557	HBBP low	J-19	Aroclor 1260
	LDW24-IT1504	HBBP low	J-19	Aroclor 1260
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SS1546 MS/MSD	HBBP low	None	No action for lab QC IS outliers
24F0485	BMF0647-SRM1	HBBP low	None	No action for lab QC IS outliers
	LDW24-SC1489L MS/MSD	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1489H	HBBP low	J-19	Aroclor 1260
	LDW24-SS1480	HBBP low	J-19	Aroclor 1260
	LDW24-SS1354	HBBP low	J-19	Aroclor 1260
	LDW24-SC1480	HBBP low	J-19	Aroclor 1260
24F0512	LDW24-SC1479B MS/MSD	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1310E	HBBP low	UJ-19	Aroclor 1260
	LDW24-SC1310G	HBBP low	UJ-19	Aroclor 1260
	LDW24-SC1479B	HBBP low	J-19	Aroclor 1260
	LDW24-SC1479C	HBBP low	J-19	Aroclor 1260
	LDW24-SC1492A	HBBP low	J-19	Aroclor 1260
24G0224	LDW24-IT1413E	HBBP low	None	Reported from other column
24G0390	LDW24-IT1601G	HBBP low	None	Reported from other column
24G0464	LDW24-IT1597B	BNB high	None	Reported from other column
24G0471	LDW24-IT1605G	HBBP low	UJ-19	Aroclor 1260
24G0631	LDW24-IT1404A	HBBP low	None	Reported from other column
	LDW24-IT1553B	HBBP low	None	Reported from other column
	LDW24-IT1553C	HBBP low	UJ-19	Aroclor 1260
24G0634	LDW24-IT1552C	HBBP low	None	Reported from other column
	LDW24-IT1551A	HBBP low	None	Reported from other column
	LDW24-IT1556B	HBBP low	None	Reported from other column
	LDW24-IT1556C	HBBP low	None	Reported from other column
	LDW24-SC1451E	HBBP low	None	Reported from other column
	LDW24-SC1451I	HBBP low	None	Reported from other column
	LDW24-SC1451D	HBBP low	None	Reported from other analysis

SDG	SAMPLE	OUTLIER	QUALIFIER	COMMENT
24G0634 (cont)	LDW24-SC1451G	HBBP low	None	Reported from other analysis
	LDW24-SC1451K	HBBP low	J-19	Aroclor 1260
	LDW24-SC1451M	HBBP low	J-19	Aroclor 1260
24H0071	LDW24-SS1450 MS/MSD	HBBP low	None	No action for lab QC IS outliers
	LDW24-SS1450	HBBP low	None	Reported from other analysis
	LDW24-SS1331	HBBP low	None	Reported from other analysis
24I0647	LDW24-SC1323G	HBBP low	None	Reported from other column
	LDW24-SC1324C	HBBP low	None	Reported from other column
24I0648	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1356K	HBBP low	J-19	Aroclor 1260
	LDW24-SC1356S	HBBP low	J-19	Aroclor 1260
	LDW24-SC1356O	HBBP low	None	Reported from other analysis
24I0651	LDW24-SC1356Q	HBBP low	None	Reported from other analysis
	LDW24-SC1366C MS/MSD	HBBP low	None	No action for lab QC IS outliers
	BMJ0051-SRM	HBBP low	None	No action for lab QC IS outliers
24I0655	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1371C	BNB low	UJ-19	Aroclors 1016, 1221, 1232 and 1242
			None	Aroclors 1248, 1254 reported from other column
24I0664	LDW24-SC1371E	BNB low	UJ-19	Aroclors 1016, 1221, 1232 and 1242
			None	Aroclors 1248, 1254 reported from other column
24I0664	BMJ0053-SRM	HBBP low	None	No action for lab QC IS outliers
	BMJ0053-MS/MSD	HBBP low	None	No action for lab QC IS outliers
	BMJ0052-SRM	HBBP low	None	No action for lab QC IS outliers
	BMJ0052-MS	HBBP low	None	No action for lab QC IS outliers
	BMJ0052-MSD	HBBP low	None	No action for lab QC IS outliers
		BNB low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1433G-FD	HBBP low BNB low	None	These samples were re-extracted. Results from these analyses were flagged do-not-report (DNR)
	LDW24-SC1460F-FD			
	LDW24-SC1489D-FD			
	LDW24-SC1503I			
	LDW24-SC1503K			
	LDW24-SC1507C			
	LDW24-SC1507E			
LDW24-SC1509K	BNB low	UJ-19	Aroclors 1016, 1221, 1232 and 1242	
		None	Aroclors 1248, 1254 reported from other column	
LDW24-SC1515H	BNB low	UJ-19	Aroclors 1016, 1221, 1232 and 1242	
		None	Aroclors 1248, 1254 reported from other column	

SDG	SAMPLE	OUTLIER	QUALIFIER	COMMENT
24I0664 (cont)	LDW24-SC1529J	BNB low	UJ-19	Aroclors 1016, 1221, 1232 and 1242
			None	Aroclors 1248, 1254 reported from other column
24I0669	LDW24-SC1538F	HBBP low	UJ-19	Aroclor 1260
	LDW24-SC1538H	HBBP low	UJ-19	Aroclor 1260
	LDW24-IT1540D	HBBP low	UJ-19	Aroclor 1260
	LDW24-SC1544H	HBBP low	UJ-19	Aroclor 1260
	BMJ0056-MS/MSD	HBBP low	None	No action for lab QC IS outliers
	BMJ0056-SRM	HBBP low	None	No action for lab QC IS outliers
	All other samples	HBBP low	None	Reported from other column
24K0260	LDW24-IT1612A	HBBP low	None	Reported from other analysis
	LDW24-IT1610A	HBBP low	None	Reported from other column
	LDW24-SC1479A	HBBP low	None	Reported from other column
	LDW24-SC1488A	HBBP low	None	Reported from other column
	LDW24-SC1488C	HBBP low	None	Reported from other column
24K0393	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1342M	HBBP low	UJ-19	Aroclor 1260
	LDW24-IT1599F	HBBP low	UJ-19	Aroclor 1260
	BMK0564 BLK1, MS/MSD	HBBP low	None	No action for lab QC IS outliers
24K0562	BML0254-MS/MSD	HBBP low	None	No action for lab QC IS outliers
	Several Samples	HBBP low	None	Reported from other column
	LDW24-SC1549C	HBBP low	UJ-19	Aroclor 1260
24K0644	Several Samples	HBBP low	None	Reported from other column
	LDW24-IT1411G	HBBP low	UJ-19	Aroclor 1260

### Standard Reference Material

Puget Sound Reference Material was analyzed with each batch. With the exception noted below, all concentrations were within the advisory limits of 41 – 180 ug/Kg for AR1260. No qualifiers were assigned based on the laboratory analyzing a SRM outside the reported holding time.

**SDG 24E0341:** For the SRM prepared with batch BME0506, the %R value for Aroclor 1260 was greater than the upper control limit on column 2. The %R value for Aroclor 1260 was acceptable on column 1. Associated field sample results that were reported from column 2 were estimated (J-12H).

**SDG 24E0373:** For the SRM prepared with batch BME0503, the %R value for Aroclor 1260 was greater than the upper control limit on column 2. The %R value for Aroclor 1260 was acceptable on column 1. Associated field sample results that were reported from column 2 were estimated (J-12H).

**SDG 24E0404:** An SRM was not prepared with Batch BME0590. Accuracy was evaluated using the LCS/LCSD recoveries.

**SDG 24E0670:** For the SRM prepared with Batch BMF0093, the %R value for Aroclor 1260 was greater than the upper control limit on column 2. The %R value for Aroclor 1260 on column 1 was acceptable. Associated field sample results were reported from column 1; no qualifiers were assigned.

*SDG 24E0716:* For the SRM prepared with batch BMF0094, the %R value for Aroclor 1260 was greater than the upper control limit on column 2. Aroclor 1260 results for all associated samples were reported from column 2 and were estimated (J-12H).

*SDGs 24G0390, 24G0402:* For the SRM prepared with Batch BMH0005, the %R value for Aroclor 1260 was greater than the upper control limit on both columns. Aroclor 1260 results for the associated samples were estimated (J-12H).

*SDGs 24I0648, 24I0664:* For batch BMK0146, the SRM was prepared using CRM-911 (Aroclor 1254) instead of Puget Sound Reference Material used for other SDGs. The %R values for Aroclor 1254 were acceptable.

### **Reporting Limits**

Several samples were analyzed at dilutions due to the high concentration of some target analytes. Reporting limits were adjusted accordingly. Some reporting limits for non-detected analytes were greater than the QAPP-required reporting limits.

### **Reported Results**

*SDG 24E0313:* All samples were initially extracted in batch BME0512. The SRM results were outside the control limits. All samples were re-extracted within holding time in batch BMF0195. Both sets of data were reported. Only the re-extraction batch was validated; all field sample results from the initial batch (BME0512) were qualified as do-not-report (DNR-11) to indicate which result from multiple results should not be used.

*SDG 24F0485:* For Sample LDW24-SS1354, the result for Aroclor 1242 was over the instrument calibration range and was E-flagged by the laboratory. The Aroclor 1242 result was estimated (J-20).

*SDG 24G0471:* For Sample LDW24-IT1605E, results from a 1x and 5x analyses were reported. The results from the 1x should be used; results from the 5x analysis were qualified as do-not-report (DNR-11).

*SDG 24G0634:* For Samples LDW24-SC1451D and LDW24-SC1451G, results from 1x and 10x analyses were reported. Due to internal standard and surrogate outliers for the 1x analyses, positive results from the 10x analyses should be used; results for Aroclors 1248, 1254, and 1260 were qualified as do-not-report (DNR-11) in the 1x analyses. Results for all other Aroclors were qualified DNR-11 in the 10x analyses.

*SDG 24I0539:* For Sample LDW24-SC1388E, results from 1x and 10x analyses were reported for Aroclor 1260. The result from the 1x analysis was E-flagged by the laboratory to indicate that the concentration exceeded the instrument calibration range; this result was flagged as do-not-report (DNR-20). The Aroclor 1260 result from the 10x analysis should be used.

*SDG 24I0664:* Samples LDW24-SC1433G-FD, LDW24-SC1460F-FD, LDW24-SC1489D-FD, LDW24-SC1503I, LDW24-SC1503K, LDW24-SC1507C and LDW24-SC1507E were re-extracted due to method blank contamination for the initial analysis. Both sets of data were reported by the laboratory. For

the initial extraction, all results were flagged as do-not-report (DNR-11). Results from the re-extraction should be used.

**SDG 24K0644:** Sample LDW24-SC1312C was analyzed at 1x and 5x dilutions. Results were reported from both analyses. Results that should not be used were flagged as do-not-report (DNR-11).

PCB	ANALYSIS	COMMENT
Aroclor 1016	1x	This result should be used
	5x	DNR-11
Aroclor 1221	1x	This result should be used
	5x	DNR-11
Aroclor 1232	1x	This result should be used
	5x	DNR-11
Aroclor 1242	1x	This result should be used
	5x	DNR-11
Aroclor 1248	1x	Not reported
	5x	This result should be used
Aroclor 1254	1x	Not reported
	5x	This result should be used
Aroclor 1260	1x	DNR-11
	5x	This result should be used

Sample LDW24-SC1312E was analyzed at 1x and 2x dilutions. Results were reported from both analyses. Results that should not be used were flagged as do-not-report (DNR-11).

PCB	ANALYSIS	COMMENT
Aroclor 1016	1x	This result should be used
	2x	DNR-11
Aroclor 1221	1x	This result should be used
	2x	DNR-11
Aroclor 1232	1x	This result should be used
	2x	DNR-11
Aroclor 1242	1x	This result should be used
	2x	DNR-11
Aroclor 1248	1x	Not reported
	2x	This result should be used
Aroclor 1254	1x	DNR-11
	2x	This result should be used
Aroclor 1260	1x	DNR-11
	2x	This result should be used

### Compound Identification

All samples were analyzed using dual column confirmation. When RPD values were between 40% and 60%, the results were estimated (J-3). When the RPD values were greater than 60%, the results were qualified as tentatively identified (NJ-3). The laboratory P1-flags these results. No qualifiers were

assigned to laboratory QC sample results based on RPD outliers. With the noted exceptions, the dual column RPD values for field samples were less than 40%.

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24E0313	LDW24-SC1511B	1248	43.4	J-3
	LDW24-SC1511G	1260	41.9	J-3
	LDW24-SC1511I	1254	48.9	J-3
	LDW24-SC1515B	1248	53	J-3
		1254	50.5	J-3
24E0341	LDW24-SC1525	1248	56.1	J-3
		1254	66.0	NJ-3
	LDW24-SC1534J	1260	45.5	J-3
	LDW24-SC1534L	1254	48.1	J-3
		1260	66.7	NJ-3
LDW24-SC1510G	1248	40.9	J-3	
24E0373	LDW24-SC1541C	1248	41.7	J-3
		1254	42.1	J-3
	LDW24-SC1541C-FD	1248	81.2	NJ-3
		1254	52.6	J-3
	LDW24-SC1541D	1248	46.6	J-3
		1254	43.4	J-3
	LDW24-SC1541F	1248	68.3	NJ-3
		1254	40.6	J-3
	LDW24-SC1541H	1254	52.5	J-3
	LDW24-SC1541J	1248	52.8	J-3
		1254	47.7	J-3
	LDW24-SC1535C	1254	40.0	J-3
	LDW24-SC1535E	1248	47.9	J-3
	LDW24-SC1535I	1248	71.8	NJ-3
		1254	71.7	NJ-3
	LDW24-SC1535K	1254	69.0	NJ-3
		1260	49.5	J-3
LDW24-SC1542G	1248	41.5	J-3	
LDW24-SC1533	1260	43.6	J-3	
LDW24-SC1542C	1248	45.9	J-3	
24E0404	LDW24-SC1520B-FD	1248	44.9	J-3
	LDW24-IT1513A	1248	44.6	J-3
	LDW24-IT1513A-FD	1248	40.0	J-3
	LDW24-SC1544C	1248	45.9	J-3
	LDW24-SC1544E	1248	54.8	J-3
		1254	42.9	J-3
	LDW24-SC1544G	1248	60.2	NJ-3
	LDW24-SC1544G-FD	1248	62.4	NJ-3
LDW24-SC1563G	1248	46.1	J-3	

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24E0429	LDW24-IT1550A	1248	58.7	J-3
		1254	142.7	NJ-3
	LDW24-SC1536B	1260	47.6	J-3
	LDW24-IT1562C	1254	45.7	J-3
24E0457	LDW24-SC1501C	1248	41.9	J-3
		1254	53.9	J-3
	LDW24-SC1439D	1248	48.5	J-3
	LDW24-SC1439E	1248	49.9	J-3
	LDW24-SC1439G	1248	45.6	J-3
	LDW24-SC1439G-FD	1248	53.7	J-3
	LDW24-SC1439I	1248	57.8	J-3
		1254	50.2	J-3
	LDW24-SC1439K	1248	48.6	J-3
LDW24-SC1439M	1248	42.0	J-3	
24E0517	LDW24-IT1469A	1254	42.6	J-3
	LDW24-IT1470E	1254	44.0	J-3
		1260	40.5	J-3
	LDW24-SC1386B	1248	45.0	J-3
	LDW24-SC1386C	1248	42.7	J-3
	LDW24-SC1386E	1248	49.5	J-3
	LDW24-SC1386E-FD	1248	40.6	J-3
24E0560	LDW24-IT1418B	1248	67.9	NJ-3
	LDW24-IT1418C	1248	71.6	NJ-3
	LDW24-IT1418E	1248	70.8	NJ-3
	LDW24-IT1418G	1260	60.0	NJ-3
	LDW24-IT1426B	1248	62.0	NJ-3
		1254	40.8	J-3
	LDW24-IT1426B-FD	1248	62.9	NJ-3
		1254	45.7	J-3
	LDW24-IT1426C	1248	69.3	NJ-3
LDW24-IT1426E	1248	63.7	NJ-3	
LDW24-SC1465A	1254	41.7	J-3	
24E0605	LDW24-SC1309A	1260	42.9	J-3
	LDW24-IT1829	1248	49.9	J-3
	LDW24-SS1828	1248	44.1	J-3
		1260	68.1	NJ-3
	LDW24-SS1566	1248	59.0	J-3
24E0608	LDW24-SC1559A	1248	48.8	J-3
	LDW24-SC1559B	1248	50.3	J-3
	LDW24-SC1559C	1248	57.4	J-3
		1254	45.8	J-3
	LDW24-SC1559E	1248	54.6	J-3
		1254	45.4	J-3
	LDW24-SC1559I	1248	90.5	NJ-3
		1254	67.3	NJ-3

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24E0608 (cont)	LDW24-SC1421C	1248	96.0	NJ-3
		1254	72.8	NJ-3
	LDW24-SC1421F	1248	42.1	J-3
		1254	47.1	J-3
	LDW24-SC1406B	1248	47.3	J-3
		1254	45.5	J-3
	LDW24-SC1406C	1254	42.7	J-3
		1260	40.0	J-3
LDW24-SS1317	1248	94.2	NJ-3	
LDW24-SS1315	1248	49.2	J-3	
LDW24-SS1833	1248	81.7	NJ-3	
24E0631	LDW24-IT1566A	1248	51.4	J-3
	LDW24-SC1335D	1254	40.3	J-3
	LDW24-SC1335G	1254	49	J-3
24E0670	LDW24-SC1582B	1260	50.8	J-3
	LDW24-SC1582G	1260	43.0	J-3
	LDW24-SC1356A	1254	40.5	J-3
24E0716	LDW24-SC1344D	1248	47.1	J-3
	LDW24-SC1344E	1248	50.5	J-3
	LDW24-SC1344G	1248	46.0	J-3
	LDW24-SC1344I	1248	71.2	NJ-3
	LDW24-SC1344M	1248	46.6	J-3
		1254	58.2	J-3
	LDW24-SC1344D-FD	1248	47.6	J-3
	LDW24-SC1336D	1248	40.5	J-3
LDW24-SC1333	1254	43.4	J-3	
24F0006	LDW24-IT1540B	1248	40.6	J-3
		1254	43.3	J-3
24F0008	LDW24-SC1416C	1254	40.6	J-3
	LDW24-IT1546A	1248	46.7	J-3
		1254	48.1	J-3
	LDW24-IT1546C	1248	58.9	J-3
		1254	47.2	J-3
	LDW24-IT1546E	1248	54.6	J-3
	LDW24-IT1546G	1248	46.2	J-3
LDW24-IT1547A	1248	40.5	J-3	
24F0010	LDW23-SS1273	1248	48.7	J-3
	LDW23-SS1196	1248	41.3	J-3
		1254	56.4	J-3
24F0050	LDW24-SS1537	1254	58.6	J-3
	LDW24-SS1523	1254	46.2	J-3
24F0109	LDW24-IT1367A	1248	46.3	J-3
		1254	60.9	NJ-3

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24F0109 (cont)	LDW24-SS1402	1254	47.3	J-3
	LDW24-SS1359	1248	47.5	J-3
		1254	60.6	NJ-3
	LDW24-SS1362	1254	47.5	J-3
24F0134	LDW24-SC1382E	1248	52.5	J-3
	LDW24-SC1387A	1248	68.9	NJ-3
	LDW24-IT1355A	1254	53.1	J-3
	LDW24-IT1352A	1248	43.5	J-3
	LDW24-SC1573	1248	56.6	J-3
	LDW24-IT1351A	1254	47.3	J-3
	LDW24-SC1586B	1248	59.7	J-3
		1254	54.3	J-3
	LDW24-SC1586C	1248	54.3	J-3
	LDW24-SS1411	1248	44.1	J-3
24F0222	LDW24-SC1460C	1248	42.3	J-3
	LDW24-SC1460J	1248	41.4	J-3
	LDW24-SC1460L	1248	41.5	J-3
	LDW24-SC1440A	1254	44.9	J-3
24F0223	LDW24-IT1434A	1254	53.9	J-3
	LDW24-IT1434B	1254	42.5	J-3
	LDW24-SC1433C	1254	42.9	J-3
		1248	42.6	J-3
	LDW24-SC1433E	1254	48.4	J-3
		1260	40.0	J-3
	LDW24-SC1433I	1260	40.0	J-3
	LDW24-SC1425B	1248	44.5	J-3
	LDW24-SC1425C	1248	44.4	J-3
	LDW24-SC1425G	1248	59.4	J-3
1254		43.1	J-3	
24F0260	LDW24-IT1363A	1248	42.8	J-3
	LDW24-SC1466B	1248	41.5	J-3
	LDW24-SC1441C	1248	43.2	J-3
	LDW24-SC1441E	1248	42.6	J-3
	LDW24-SC1441E-FD	1248	41.3	J-3
	LDW24-IT1369A	1242	51.0	J-3
		1254	59.1	J-3
	LDW24-SC1442B	1248	52.4	J-3
	LDW24-SC1442C	1248	54.8	J-3
	LDW24-SC1442E	1248	59.6	J-3
	LDW24-SC1442G	1248	58.8	J-3
	LDW24-SC1366A	1248	44.2	J-3
		1254	44.8	J-3
	LDW24-SS1526	1248	55.6	J-3
1254		55.4	J-3	
24F0261	LDW24-SC1365A	1248	42.8	J-3
		1254	44.8	J-3

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24F0332	LDW24-SC1452G	1248	44.1	J-3
24F0424	LDW24-SS1469	1254	41.8	J-3
	LDW24-SS1497	1248	40.2	J-3
	LDW24-SS1498	1248	41.1	J-3
		1254	40.9	J-3
	LDW24-SC1490B	1248	46.5	J-3
	LDW24-SC1490C	1248	40.7	J-3
	LDW24-SC1490E	1260	45.0	J-3
LDW24-SS1496	1248	41.0	J-3	
24F0426	LDW24-SC1384E	1248	47.6	J-3
24F0459	LDW24-SC1477	1248	46.5	J-3
	LDW24-IT1467	1248	47.0	J-3
		1254	42.9	J-3
	LDW24-IT1504	1248	52.6	J-3
	LDW24-SS1399	1248	58.0	J-3
	LDW24-SS1371	1248	51.7	J-3
	LDW24-SS1365	1254	43.9	J-3
	LDW24-SS1356	1254	45.2	J-3
	LDW24-SS1357	1254	46.0	J-3
	LDW24-SS1357-FD	1254	41.7	J-3
	LDW24-SS1551	1248	41.5	J-3
	LDW24-SS1546	1248	44.1	J-3
1254		45.8	J-3	
24F0485	LDW24-IT1585	1248	54.0	J-3
		1254	56.8	J-3
	LDW24-SS1476	1248	47.6	J-3
	LDW24-SC1476A	1248	53.0	J-3
	LDW24-SC1489C	1248	48.7	J-3
	LDW24-SC1489F	1248	51.7	J-3
	LDW24-SS1483	1248	48.6	J-3
	LDW24-SC1483A	1248	53.7	J-3
	LDW24-SS1480	1248	53.5	J-3
	LDW24-SS1401	1248	63.7	NJ-3
		1254	41.1	J-3
LDW24-SS1354	1242	42.4	J-3	
LDW24-SC1480	1248	54.1	J-3	
24F0512	LDW24-SC1310B	1248	49.4	J-3
	LDW24-SC1479B	1248	50.4	J-3
	LDW24-SC1479C	1248	53.3	J-3
	LDW24-SC1479E	1248	44.8	J-3
	LDW24-SC1479G	1248	45.5	J-3
	LDW24-SC1479I	1248	51.3	J-3
1254		47.4	J-3	
24F0557	LDW24-SS1456	1260	67.7	NJ-3
	LDW24-SS1454	1248	83.6	NJ-3

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24F0598	LDW24-IT1457C	1254	52.0	J-3
24G0224	LDW24-IT1413B	1254	46.0	J-3
	LDW24-IT1413C	1254	42.8	J-3
	LDW24-IT1413E	1254	41.2	J-3
24G0227	LDW24-IT1528M	1248	41.8	J-3
24G0270	LDW24-SC1372M	1248	41.6	J-3
24G0402	LDW24-IT1599C	1248	49.2	J-3
24G0464	LDW24-IT1597B	1248	66.0	NJ-3
		1254	68.0	NJ-3
	LDW24-IT1602B	1260	43.3	J-3
24G0471	LDW24-IT1377A	1254	42.0	J-3
	LDW24-IT1607B	1260	41.8	J-3
	LDW24-IT1607E	1248	44.1	J-3
	LDW24-IT1603B	1260	45.7	J-3
24G0556	LDW24-IT1606E	1248	45.9	J-3
		1248	45.8	J-3
		1254	41.4	J-3
24G0634	LDW24-SS1445	1248	45.8	J-3
	LDW24-IT1552C	1254	51.5	J-3
	LDW24-IT1551A	1254	44.5	J-3
	LDW24-IT1556C	1248	61.2	NJ-3
		1254	65.2	NJ-3
	LDW24-IT1556E	1254	48.7	J-3
24H0071	LDW24-SC1451I	1254	43.3	J-3
		1260	46.7	J-3
		1248	47.7	J-3
24I0539	LDW24-SS1450	1254	63.6	NJ-3
		1260	51.3	J-3
		1254	48.6	J-3
24I0647	LDW24-SS1331	1254	48.6	J-3
	LDW24-SC1388C	1248	41.3	J-3
		1248	52.9	J-3
		1248	78.0	NJ-3
	LDW24-SC1323G	1254	66.3	NJ-3
		1248	64.1	NJ-3
	LDW24-SC1324C	1254	76.9	NJ-3
		1248	97.0	NJ-3
	LDW24-SC1324E	1254	60.2	NJ-3
		1248	58.5	J-3
LDW24-SC1326H	1248	43.8	J-3	
LDW24-SC1337M	1248	45.7	J-3	
LDW24-SC1337Q	1248	57.0	J-3	
LDW24-SC1350E	1248	40.5	J-3	
24I0648	LDW24-SC1353S	1248	40.5	J-3
	LDW24-SC1354E	1254	56.1	J-3
	LDW24-SC1354G	1254	53.7	J-3
	LDW24-SC1354I	1254	58.2	J-3
	LDW24-IT1355B	1248	51.8	J-3

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24I0648 (cont)		1254	48.0	J-3
	LDW24-IT1355C	1248	54.4	J-3
	LDW24-IT1355D	1248	44.3	J-3
		1254	40.4	J-3
	LDW24-SC1356C	1248	70.4	NJ-3
		1254	81.1	NJ-3
	LDW24-SC1356E	1248	60.9	NJ-3
		1254	55.7	J-3
	LDW24-SC1356G	1248	58.9	J-3
		1254	49.3	J-3
	LDW24-SC1356I	1248	58.5	J-3
		1254	50.9	J-3
	LDW24-SC1356K	1248	72.1	NJ-3
		1254	65.1	NJ-3
LDW24-SC1356M	1248	58.7	J-3	
	1254	49.6	J-3	
LDW24-SC1356S	1254	49.7	J-3	
24I0651	LDW24-SC1357G	1248	59.0	J-3
	LDW24-SC1365E	1248	54.6	J-3
		1254	52.1	J-3
	LDW24-SC1365G	1248	63.5	NJ-3
		1254	62.0	NJ-3
	LDW24-SC1366E	1248	48.2	J-3
	LDW24-IT1367B	1248	65.4	NJ-3
		1254	65.0	NJ-3
	LDW24-IT1367C	1248	62.5	NJ-3
		1254	60.8	NJ-3
	LDW24-IT1367D	1248	60.6	NJ-3
		1254	49.1	J-3
	LDW24-IT1367E	1248	41.7	J-3
	LDW24-IT1369B	1248	56.3	J-3
1254		63.2	NJ-3	
LDW24-IT1369C	1248	70.9	NJ-3	
	1254	70.0	NJ-3	
24I0655	LDW24-SC1371G	1248	44.6	J-3
		1254	45.4	J-3
	LDW24-SC1371K	1248	41.7	J-3
	LDW24-SC1371M	1248	73.6	NJ-3
	LDW24-SC1371O	1248	41.0	J-3
		1254	41.8	J-3
	LDW24-SC1371Q	1254	57.2	J-3
LDW24-IT1374A-FD	1248	46.4	J-3	

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24I0655 (cont)	LDW24-IT1374B	1254	40.5	J-3
	LDW24-SC1405I	1254	42.9	J-3
	LDW24-SC1405K	1254	53.6	J-3
	LDW24-SC1405M	1248	50.3	J-3
		1254	47.5	J-3
	LDW24-IT1413B-FD	1248	65.2	NJ-3
		1254	75.9	NJ-3
	LDW24-SC1415E	1248	45.5	J-3
	LDW24-SC1415G	1248	53.2	J-3
		1254	55.2	J-3
	LDW24-SC1415I	1248	67.6	NJ-3
		1254	61.3	NJ-3
	LDW24-SC1420M	1248	58.0	J-3
		1254	47.9	J-3
LDW24-SC1425G-FD	1248	64.4	NJ-3	
	1254	65.4	J-3	
24I0664	LDW24-SC1433G-FD	1248	42.4	DNR-11
	LDW24-SC1503K	1254	63.6	DNR-11
	LDW24-SC1507E	1248	66.7	DNR-11
	LDW24-SC1515J	1248	69.7	NJ-3
		1254	58.5	J-3
	LDW24-SC1534K	1248	49.8	J-3
		1254	46.9	J-3
		1260	50.8	J-3
LDW24-SC1535J	1248	59.4	J-3	
24I0669	LDW24-IT1543B	1248	52.2	J-3
		1254	61.7	NJ-3
	LDW24-IT1543C	1248	69.7	NJ-3
		1254	54.0	J-3
	LDW24-IT1543D	1248	50.5	J-3
		1254	82.1	NJ-3
	LDW24-SC1544F	1248	54.5	J-3
		1254	70.5	NJ-3
	LDW24-SC1563F	1248	50.7	J-3
		1254	51.6	J-3
	LDW24-SC1563H	1248	59.6	J-3
		1254	60.8	NJ-3
	LDW24-SC1586D	1248	68.5	NJ-3
1254		76.9	NJ-3	

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24K0260	LDW24-IT1553A	1260	55.6	J-3
	LDW24-IT1612A	1254	59.6	J-3
	LDW24-IT1599A	1254	54.2	J-3
	LDW24-SC1479A	1254	47.6	J-3
	LDW24-SC1488A	1254	43.5	J-3
	LDW24-SC1488C	1254	42.8	J-3
24K0393	LDW24-SC1342K	1254	84.4	NJ-3
	LDW24-SC1559A-FD	1254	50.1	J-3
	LDW24-IT1607F	1254	70.5	NJ-3
	LDW24-IT1402A-FD	1254	60.8	NJ-3
	LDW24-IT1555B	1254	77.7	NJ-3
	LDW24-IT1556D	1254	53.3	J-3
	LDW24-IT1551B	1254	52.9	J-3
		1260	41.0	J-3
	LDW24-IT1551D	1248	49.0	J-3
	LDW24-SC1345L	1254	54.8	J-3
	LDW24-IT1601F	1254	67.7	NJ-3
	LDW24-SC1345P	1254	54.7	J-3
	LDW24-IT1599D	1254	76.6	NJ-3
	LDW24-SC1347E-FD	1254	43.5	J-3
LDW24-IT1378A-FD	1254	48.9	J-3	
24K0562	LDW24-IT1605D	1248	81.2	NJ-3
	LDW24-IT1606D	1254	86.8	NJ-3
	LDW24-IT1418F	1248	41.1	J-3
	LDW24-IT1560D	1248	94.9	NJ-3
		1260	49.6	J-3
	LDW24-SC1549C	1254	64.4	NJ-3
	LDW24-SC1415B	1254	41.6	J-3
	LDW24-SC1415C	1254	51.5	J-3
	LDW24-SC1334D	1254	42.3	J-3
	LDW24-SS1317-FD	1248	50.8	J-3
	LDW24-IT1560B	1248	61.4	NJ-3
LDW24-IT1560C	1260	43.0	J-3	
24K0644	LDW24-IT1404D	1254	50.2	J-3
	LDW24-IT1404E	1260	69.9	NJ-3
	LDW24-SC1482F	1254	69.6	NJ-3
	LDW24-IT1411C	1260	52.2	J-3
	LDW24-SC1312D	1248	49.0	J-3
		1254	54.0	J-3
	LDW24-SC1312E	1254	44.3	J-3

SDG	SAMPLE	AROCLOR	RPD	QUALIFIER
24K0644 (cont)	LDW24-SC1312F	1248	41.3	DNR-11
		1254	46.5	J-3
	LDW24-SC1493C	1248	42.8	J-3
		1254	82.1	NJ-3
	LDW24-IT1595D	1248	41.9	J-3
		1254	44.2	J-3
	LDW24-IT1595F	1248	45.3	J-3
	LDW24-IT1611F	1248	51.3	J-3
24K0648	LDW24-SC1488D	1254	41.2	J-3

The laboratory P1-flags results when the RPD value between the two analytical columns is greater than 40%. For several samples, results were incorrectly P1-flagged or incorrectly not P1-flagged in the PDF and in the EDD. Data validation qualifiers were applied as appropriate based on RPD values.

SDG	SAMPLE	AROCLOR	RPD	COMMENT
24E0313	LDW24-SC1511B	1254	39.7	RPD OK - Incorrectly P1-flagged
	LDW24-SC1511C	1248	39.1	RPD OK - Incorrectly P1-flagged
	LDW24-SC1511E	1248	34.6	RPD OK - Incorrectly P1-flagged
		1260	33.8	RPD OK - Incorrectly P1-flagged
	LDW24-SC1511G	1254	38.8	RPD OK - Incorrectly P1-flagged
	LDW24-SC1511I	1254	48.9	Outlier – Incorrectly Not P1-flagged
24E0341	LDW24-SC1390E	1248	39.1	RPD OK - Incorrectly P1-flagged
	LDW24-SC1534H	1260	37.4	RPD OK - Incorrectly P1-flagged
	LDW24-SC1534D	1248	37.1	RPD OK - Incorrectly P1-flagged
	LDW24-SC1534C	1260	34.4	RPD OK - Incorrectly P1-flagged
	LDW24-SC1510D	1248	36.5	RPD OK - Incorrectly P1-flagged
		1254	33.8	RPD OK - Incorrectly P1-flagged
			1260	33.5
LDW24-SC1510I	1248	33.3	RPD OK - Incorrectly P1-flagged	
24E0373	LDW24-SC1533	1248	39.0	RPD OK - Incorrectly P1-flagged
	LDW24-SC1535B	1254	38.3	RPD OK - Incorrectly P1-flagged
24E0404	LDW24-SC1520B	1248	20.4	RPD OK - Incorrectly P1-flagged
	LDW24-SC1544C	1254	33.4	RPD OK - Incorrectly P1-flagged
	LDW24-SC1544G	1248	60.2	Outlier – Incorrectly Not P1-flagged
24E0429	LDW24-IT1543A	1260	36.6	RPD OK - Incorrectly P1-flagged
	LDW24-IT1562C	1254	45.7	Outlier – Incorrectly Not P1-flagged
	LDW24-SC1536B-FD	1260	34.5	RPD OK - Incorrectly P1-flagged
24E0457	LDW24-SC1439D	1254	37.9	RPD OK - Incorrectly P1-flagged
	LDW24-SC1439E	1254	35.3	RPD OK - Incorrectly P1-flagged
	LDW24-SC1439M	1254	36.4	RPD OK - Incorrectly P1-flagged
24E0517	LDW24-IT1470C	1254	39.2	RPD OK - Incorrectly P1-flagged
	LDW24-IT1470E	1248	39.5	RPD OK - Incorrectly P1-flagged
	LDW24-IT1470G	1248	38.7	RPD OK - Incorrectly P1-flagged
	LDW24-SC1386B	1254	35.8	RPD OK - Incorrectly P1-flagged

SDG	SAMPLE	AROCLOR	RPD	COMMENT
24E0517 (cont)	LDW24-SC1386E	1254	35.0	RPD OK - Incorrectly P1-flagged
	LDW24-SC1386I	1248	33.8	RPD OK - Incorrectly P1-flagged
	LDW24-SC1385B	1248	38.3	RPD OK - Incorrectly P1-flagged
	LDW24-SC1385C	1248	34.2	RPD OK - Incorrectly P1-flagged
24E0560	LDW24-IT1428B	1248	34.0	RPD OK - Incorrectly P1-flagged
	LDW24-IT1426C	1254	39.5	RPD OK - Incorrectly P1-flagged
	LDW24-SC1465A	1248	39.1	RPD OK - Incorrectly P1-flagged
24E0605	LDW24-SS1564	1260	39.2	RPD OK - Incorrectly P1-flagged
	LDW24-SS1829	1260	33.8	RPD OK - Incorrectly P1-flagged
24E0608	LDW24-SC1559B	1254	35.6	RPD OK - Incorrectly P1-flagged
	LDW24-SC1559G	1248	38.7	RPD OK - Incorrectly P1-flagged
	LDW24-SC1421L	1254	36.5	RPD OK - Incorrectly P1-flagged
	LDW24-SC1406E	1254	36.2	RPD OK - Incorrectly P1-flagged
	LDW24-SS1314	1260	36.7	RPD OK - Incorrectly P1-flagged
	LDW24-SS1332	1260	34.3	RPD OK - Incorrectly P1-flagged
24E0670	LDW24-SC1356A	1260	37.8	RPD OK - Incorrectly P1-flagged
24E0716	LDW24-SC1344D	1254	35.2	RPD OK - Incorrectly P1-flagged
	LDW24-SC1344E	1254	36.4	RPD OK - Incorrectly P1-flagged
	LDW24-SC1339D	1254	35.4	RPD OK - Incorrectly P1-flagged
	LDW24-SC1339G	1260	34.2	RPD OK - Incorrectly P1-flagged
	LDW24-SC1336E	1254	35.6	RPD OK - Incorrectly P1-flagged
	LDW24-SC1336G	1254	35.0	RPD OK - Incorrectly P1-flagged
	LDW24-SC1333	1248	35.9	RPD OK - Incorrectly P1-flagged
24F0006	LDW24-IT1540C	1248	35.2	RPD OK - Incorrectly P1-flagged
		1254	39.4	RPD OK - Incorrectly P1-flagged
24F0008	LDW24-SC1416C	1248	36.8	RPD OK - Incorrectly P1-flagged
	LDW24-SC1416C-FD	1248	38.8	RPD OK - Incorrectly P1-flagged
		1254	35.2	RPD OK - Incorrectly P1-flagged
	LDW24-SC1416F	1248	34.2	RPD OK - Incorrectly P1-flagged
	LDW24-SC1416J	1248	37.3	RPD OK - Incorrectly P1-flagged
	LDW24-IT1546B	1254	34.5	RPD OK - Incorrectly P1-flagged
	LDW24-IT1546B-FD	1254	39.7	RPD OK - Incorrectly P1-flagged
	LDW24-IT1546E	1254	36.1	RPD OK - Incorrectly P1-flagged
1260		35.2	RPD OK - Incorrectly P1-flagged	
LDW24-IT1547A	1254	37.6	RPD OK - Incorrectly P1-flagged	
24F0050	LDW24-SS1523-FD	1254	37.2	RPD OK - Incorrectly P1-flagged
24F0134	LDW24-SC1382C	1248	37.2	RPD OK - Incorrectly P1-flagged
	LDW24-IT1355A	1248	36.3	RPD OK - Incorrectly P1-flagged
	LDW24-IT1352A	1254	38.2	RPD OK - Incorrectly P1-flagged
	LDW24-IT1351A	1248	34.3	RPD OK - Incorrectly P1-flagged
	LDW24-SC1586C	1260	33.0	RPD OK - Incorrectly P1-flagged
	LDW24-SC1586E	1254	37.4	RPD OK - Incorrectly P1-flagged
	LDW24-SS1364	1254	35.9	RPD OK - Incorrectly P1-flagged
	LDW24-SS1376	1254	34.6	RPD OK - Incorrectly P1-flagged

SDG	SAMPLE	AROCLOR	RPD	COMMENT
24F0222	LDW24-SC1460C	1254	36.0	RPD OK - Incorrectly P1-flagged
	LDW24-SC1460D	1248	34.6	RPD OK - Incorrectly P1-flagged
	LDW24-SC1460H	1248	39.2	RPD OK - Incorrectly P1-flagged
1254		33.7	RPD OK - Incorrectly P1-flagged	
24F0223	LDW24-IT1462	1260	36.7	RPD OK - Incorrectly P1-flagged
	LDW24-SC1433C	1248	39.2	RPD OK - Incorrectly P1-flagged
		1260	34.2	RPD OK - Incorrectly P1-flagged
	LDW24-SC1425E	1248	35.4	RPD OK - Incorrectly P1-flagged
1254		36.1	RPD OK - Incorrectly P1-flagged	
24F0260	LDW24-IT1358A	1248	37.4	RPD OK - Incorrectly P1-flagged
		1254	39.0	RPD OK - Incorrectly P1-flagged
	LDW24-SC1442B	1254	33.9	RPD OK - Incorrectly P1-flagged
	LDW24-SC1442E	1254	37.5	RPD OK - Incorrectly P1-flagged
LDW24-SC1442G	1254	39.8	RPD OK - Incorrectly P1-flagged	
24F0424	LDW24-SS1458	1260	40.0	RPD OK - Incorrectly P1-flagged
	LDW24-SS1462	1248	36.3	RPD OK - Incorrectly P1-flagged
		1260	35.5	RPD OK - Incorrectly P1-flagged
	LDW24-SS1497	1254	34.9	RPD OK - Incorrectly P1-flagged
	LDW24-SC1482B	1248	36.0	RPD OK - Incorrectly P1-flagged
	LDW24-SC1490E	1254	40.0	RPD OK - Incorrectly P1-flagged
LDW24-SS1496	1254	35.5	RPD OK - Incorrectly P1-flagged	
24F0426	LDW24-SC1384B	1248	34.2	RPD OK - Incorrectly P1-flagged
	LDW24-IT1455A	1248	35.4	RPD OK - Incorrectly P1-flagged
		1254	37.7	RPD OK - Incorrectly P1-flagged
24F0459	LDW24-IT1557	1254	38.8	RPD OK - Incorrectly P1-flagged
	LDW24-SS1399	1254	39.5	RPD OK - Incorrectly P1-flagged
	LDW24-SS1353	1254	37.5	RPD OK - Incorrectly P1-flagged
24F0485	LDW24-SS1533	1248	37.5	RPD OK - Incorrectly P1-flagged
		1254	33.6	RPD OK - Incorrectly P1-flagged
	LDW24-SS1434	1248	37.4	RPD OK - Incorrectly P1-flagged
24F0512	LDW24-SC1479G	1016	--	Reported value ND
		1254	38.2	RPD OK - Incorrectly P1-flagged
	LDW24-SS1478	1248	38.3	RPD OK - Incorrectly P1-flagged
LDW24-SC1492A	1254	34.8	RPD OK - Incorrectly P1-flagged	
24F0557	LDW24-SS1449	1248	38.1	RPD OK - Incorrectly P1-flagged
	LDW24-SS1456	1260	67.7	Outlier – Incorrectly Not P1-flagged
24G0166	LDW24-SS1366	1254	37.8	RPD OK - Incorrectly P1-flagged
24G0227	LDW24-SS1455-FD	1248	39.5	RPD OK - Incorrectly P1-flagged
24G0224	LDW24-SS1565	1248	40.0	RPD OK - Incorrectly P1-flagged
	LDW24-SS1565-FD	1248	33.7	RPD OK - Incorrectly P1-flagged
24G0270	LDW24-SC1372B	1254	38.7	RPD OK - Incorrectly P1-flagged
	LDW24-IT1373A	1254	38.7	RPD OK - Incorrectly P1-flagged
24G0340	LDW24-IT1594B	1248	38.8	RPD OK - Incorrectly P1-flagged

SDG	SAMPLE	AROCLOR	RPD	COMMENT
24G0402	LDW24-IT1599E	1242	35.4	RPD OK - Incorrectly P1-flagged
	LDW24-IT1599G	1248	39.8	RPD OK - Incorrectly P1-flagged
		1254	36.4	RPD OK - Incorrectly P1-flagged
24G0464	LDW24-IT1377A	1248	39.6	RPD OK - Incorrectly P1-flagged
24G0471	LDW24-IT1607C	1260	33.4	RPD OK - Incorrectly P1-flagged
	LDW24-IT1607G	1248	35.9	RPD OK - Incorrectly P1-flagged
	LDW24-IT1606B	1248	35.9	RPD OK - Incorrectly P1-flagged
		1260	38.0	RPD OK - Incorrectly P1-flagged
24G0631	LDW24-IT1404A	1248	33.5	RPD OK - Incorrectly P1-flagged
		1260	36.4	RPD OK - Incorrectly P1-flagged
24G0634	LDW24-IT1552B	1254	38.3	RPD OK - Incorrectly P1-flagged
		1260	34.4	RPD OK - Incorrectly P1-flagged
	LDW24-IT1552C	1260	36.2	RPD OK - Incorrectly P1-flagged
	LDW24-IT1551A	1248	39.3	RPD OK - Incorrectly P1-flagged
	LDW24-IT1556B	1254	37.8	RPD OK - Incorrectly P1-flagged
	LDW24-SC1451E	1248	39.1	RPD OK - Incorrectly P1-flagged
		1254	36.1	RPD OK - Incorrectly P1-flagged
	LDW24-SC1451I	1248	39.8	RPD OK - Incorrectly P1-flagged
LDW24-SC1451K	1248	38.1	RPD OK - Incorrectly P1-flagged	
24H0071	LDW24-SS1331	1248	37.4	RPD OK - Incorrectly P1-flagged
24I0539	LDW24-SC1343H	1248	33.9	RPD OK - Incorrectly P1-flagged
24I0647	LDW24-SC1323I	1248	37.8	RPD OK - Incorrectly P1-flagged
	LDW24-SC1324E	1248	97.0	Outlier – Incorrectly Not P1-flagged
24I0648	LDW24-SC1353G	1248	37.6	RPD OK - Incorrectly P1-flagged
	LDW24-SC1356O	1248	35.5	RPD OK - Incorrectly P1-flagged
24I0651	LDW24-IT1358E	1248	38.9	RPD OK - Incorrectly P1-flagged
24I0655	LDW24-SC1371I	1248	36.5	RPD OK - Incorrectly P1-flagged
		1254	37.5	RPD OK - Incorrectly P1-flagged
	LDW24-IT1373B	1260	34.9	RPD OK - Incorrectly P1-flagged
	LDW24-IT1374A-FD	1254	34.9	RPD OK - Incorrectly P1-flagged
	LDW24-IT1374B	1248	33.7	RPD OK - Incorrectly P1-flagged
	LDW24-IT1378B	1254	34.9	RPD OK - Incorrectly P1-flagged
	LDW24-SC1382F	1248	37.0	RPD OK - Incorrectly P1-flagged
		1254	35.6	RPD OK - Incorrectly P1-flagged
	LDW24-SC1405I	1248	35.4	RPD OK - Incorrectly P1-flagged
	LDW24-SC1405K	1248	38.1	RPD OK - Incorrectly P1-flagged
	LDW24-SC1408J	1248	39.5	RPD OK - Incorrectly P1-flagged
	LDW24-SC1415K	1248	37.8	RPD OK - Incorrectly P1-flagged
1254		37.8	RPD OK - Incorrectly P1-flagged	
LDW24-SC1420I	1248	36.7	RPD OK - Incorrectly P1-flagged	
24I0664	LDW24-SC1433G-FD	1254	37.6	RPD OK - Incorrectly P1-flagged
	LDW24-SC1453G	1248	35.1	RPD OK - Incorrectly P1-flagged
	LDW24-SC1503K	1254	63.6	Outlier – Incorrectly Not P1-flagged
	LDW24-SC1507C	1248	38.4	RPD OK - Incorrectly P1-flagged
	LDW24-SC1509K	1248	36.5	RPD OK - Incorrectly P1-flagged

SDG	SAMPLE	AROCLOR	RPD	COMMENT
24I0664 (cont)	LDW24-SC1515E	1248	34.1	RPD OK - Incorrectly P1-flagged
		1254	37.6	RPD OK - Incorrectly P1-flagged
	LDW24-SC1515H	1248	35.2	RPD OK - Incorrectly P1-flagged
		1254	38.7	RPD OK - Incorrectly P1-flagged
	LDW24-SC1515J	1248	69.7	Outlier – Incorrectly Not P1-flagged
		1254	58.5	Outlier – Incorrectly Not P1-flagged
	LDW24-SC1529F	1248	38.6	RPD OK - Incorrectly P1-flagged
LDW24-SC1529H	1248	37.3	RPD OK - Incorrectly P1-flagged	
24K0260	LDW24-IT1560A	1260	36.1	RPD OK - Incorrectly P1-flagged
	LDW24-IT1610A	1248	39.1	RPD OK - Incorrectly P1-flagged
24K0393	LDW24-SC1242K	1254	84.4	Outlier – Incorrectly Not P1-flagged
	LDW24-IT1607F	1254	70.5	Outlier – Incorrectly Not P1-flagged
	LDW24-IT1551C	1254	38.1	RPD OK - Incorrectly P1-flagged
	LDW24-IT1551D	1260	35	RPD OK - Incorrectly P1-flagged
	LDW24-IT1378A-FD	1248	39.6	RPD OK - Incorrectly P1-flagged
24K0562	LDW24-SC1501D	1254	37.6	RPD OK - Incorrectly P1-flagged
	LDW24-IT1605H	1248	35.0	RPD OK - Incorrectly P1-flagged
	LDW24-IT1606D	1254	86.8	Outlier – Incorrectly Not P1-flagged
	LDW24-IT1418F	1248	41.1	Outlier – Incorrectly Not P1-flagged
	LDW24-IT1560B	1254	38.1	RPD OK - Incorrectly P1-flagged
	LDW24-SC1326D	1254	38.5	RPD OK - Incorrectly P1-flagged
24K0644	LDW24-IT1404C	1254	37.4	RPD OK - Incorrectly P1-flagged
	LDW24-IT1404E	1260	69.9	Outlier – Incorrectly Not P1-flagged
	LDW24-SC1531D	1254	39.7	RPD OK - Incorrectly P1-flagged
	LDW24-SC1482C	1254	36.8	RPD OK - Incorrectly P1-flagged
	LDW24-IT1411C	1254	34.3	RPD OK - Incorrectly P1-flagged
	LDW24-SC1312C	1260	36.3	RPD OK - Incorrectly P1-flagged
	LDW24-SC1312E	1254	36.0	RPD OK - Incorrectly P1-flagged
	LDW24-IT1595F	1254	36.8	RPD OK - Incorrectly P1-flagged

### Calculation Verification

**SDG 24E0608:** Calculation verifications were performed for this SDG.

One transcription error was found. For the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) for batch BME0767, there was a transcription error on the summary form. The LCS %R value for Aroclor 1016 listed on the summary form is from column 2. The LCSD %R value and the RPD value listed on the summary form is from column 1. All results should be reported from the same column. The raw data was reviewed, and all criteria were met on column 1 and column 2. No action was taken for the transcription error.

**SDG 24F0459:** Calculation verifications were performed for this SDG. No calculation errors were found.

**SDG 24G0166:** Calculation verifications were performed for this SDG. No calculation errors were found.

## **OVERALL ASSESSMENT**

As was determined by this evaluation, the laboratory followed the specified analytical method. With the noted exceptions, accuracy was acceptable as demonstrated by the surrogate, LCS/LCSD, MS/MSD, and SRM %R values. With the exceptions noted above, precision was acceptable as demonstrated by the MS/MSD, LCS/LCSD, and field duplicate relative percent difference values.

Data were qualified as not detected based on method blank contamination. Other data were estimated based on holding time exceedances, calibration range exceedances, and initial and continuing calibration %D outliers. Data were also estimated based on LCS/LCSD, MS/MSD, SRM, surrogate, and internal standard accuracy outliers, as well as MS/MSD and dual column precision outliers.

Data were qualified as do-not-report (DNR) to indicate which results from multiple analyses should not be used.

All other data, as qualified, are acceptable for use.

**DATA VALIDATION REPORT**  
**AOC5 Phase II – LDW MR**  
**Total Metals by SW6020B**  
**Total Mercury by SW7471B**

This report documents the review of analytical data from the analyses of sediment samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Analytical Resources, LLC. (ARL), Tukwila, Washington. Refer to the **Sample Index** for a complete list of samples.

SDG	NUMBER OF SAMPLES AND MATRIX			VALIDATION LEVEL
	Metals/Hg	As Only	Hg Only	
24E0404	2 Sediment	--	--	EPA Stage 2B
24E0429	4 Sediment	3 Sediment	--	EPA Stage 2B
24E0457	--	--	7 Sediment	EPA Stage 2B
24E0560	--	--	5 Sediment	EPA Stage 2B
24E0608	1 Sediment	--	6 Sediment	EPA Stage 2B
24E0716	--	--	7 Sediment	EPA Stage 2B
24F0006	--	2 Sediment	--	EPA Stage 3
24F0008	5 Sediment	2 Sediment	--	EPA Stage 2B
24F0010	6 Sediment	--	--	EPA Stage 2B
24F0050	6 Sediment	--	--	EPA Stage 3
24F0109	2 Sediment	--	--	EPA Stage 2B
24F0134	1 Sediment	--	3 Sediment	EPA Stage 2B
24F0260	1 Sediment	--		EPA Stage 2B
24F0261	1 Sediment	--		EPA Stage 2B
24F0288	2 Sediment	1 Sediment	4 Sediment	EPA Stage 2B
24F0332	1 Sediment	--	4 Sediment	EPA Stage 2B
24F0366	--	--	8 Sediment	EPA Stage 2B
24F0424	4 Sediment	--	--	EPA Stage 2B
24F0426	--	--	4 Sediment	EPA Stage 2B
24F0459	2 Sediment	2 Sediment	--	EPA Stage 2B
24F0485	2 Sediment	--	--	EPA Stage 2B
24F0598	2 Sediment	--	--	EPA Stage 2B
24G0166	3 Sediment	--	--	EPA Stage 2B
24G0224	4 Sediment	--	--	EPA Stage 2B
24G0227	1 Sediment	2 Sediment	4 Sediment	EPA Stage 2B
24G0270	1 Sediment	--	5 Sediment	EPA Stage 2B
24G0307	1 Sediment	--	5 Sediment	EPA Stage 2B
24G0340	--	--	8 Sediment	EPA Stage 2B
24G0390	--	--	7 Sediment	EPA Stage 2B
24G0402	--	--	8 Sediment	EPA Stage 2B
24G0464	--	--	3 Sediment	EPA Stage 3
24G0471	--	--	13 Sediment	EPA Stage 2B
24G0634	5 Sediment	5 Sediment	--	EPA Stage 2B
24G0631	3 Sediment	--	--	EPA Stage 2B

SDG	NUMBER OF SAMPLES AND MATRIX			VALIDATION LEVEL
	Metals/Hg	As Only	Hg Only	
24I0539	--	--	16 Sediment	EPA Stage 2B
24K0260	--	2 Sediment	7 Sediment	EPA Stage 2B
24K0393	--	7 Sediment	14 Sediment	EPA Stage 2B
24K0644	--	--	2 Sediment	EPA Stage 2B

## DATA PACKAGE COMPLETENESS

With the noted exceptions, the laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes, and all anomalies were discussed in the case narrative.

**SDG 24G0471, 24F0134:** The laboratory report was missing the sample summary forms. The laboratory was contacted and submitted a revised laboratory report PDF.

**SDG 24F0366:** For Sample LDW24-SC1431J, the aliquot size on the summary form did not match the value listed on the extraction log page. The laboratory was contacted and submitted a revised PDF and EDD.

## EDD TO HARDCOPY VERIFICATION

All sample IDs reported in the electronic data deliverable (EDD) were verified (100% verification) by comparing the EDD to the hardcopy laboratory data package. Ten percent (10%) of the sample results and laboratory QC results were also verified.

## TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

2	Sample Receipt, Preservation, and Holding Times	2	Laboratory Duplicates
✓	ICP-MS Tune	1	Reference Materials
✓	Initial Calibration	✓	ICP-MS Internal standards
✓	Calibration Verification	✓	Interference Check Samples
✓	CRDL Standards	1	Field Duplicates
2	Laboratory Blanks	1	Reporting Limits
1	Field Blanks	✓	Reported Results
✓	Laboratory Control Samples (LCS)	1	Calculation Verification (Full Validation only)
2	Matrix Spike/Matrix Spike Duplicates (MS/MSD)		

✓ *Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.*

1 *Quality control outliers are discussed below, but no data were qualified.*

2 *Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.*

## Sample Receipt, Preservation, and Holding Times

### Cooler Temperatures:

As stated in validation guidance documents, sample shipping coolers should arrive at the laboratory within the advisory temperature range of  $\leq 6^{\circ}\text{C}$ . Several cooler temperatures were greater than the  $6^{\circ}\text{C}$  control limit. For the following circumstances, no action was taken for the temperature outliers:

- **Metals & Mercury:** The sample cooler was received at the laboratory the same day as collection and did not have time to chill to  $< 6^{\circ}\text{C}$ . This outlier did not impact data quality; no results were qualified.
- **Metals:** The sample cooler was received at the laboratory within one day of collection and the cooler temperature was  $> 6^{\circ}\text{C}$ . This outlier did not impact data quality; no results were qualified.
- **Mercury:** The sample cooler was received at the laboratory within one day of collection, and the cooler temperature was  $< 12^{\circ}\text{C}$ . This outlier did not impact data quality; no results were qualified.

The SDGs with cooler temperature outliers in these categories are as follows:

24E0404	24F0332	24G0166	24G0340	24G0634	24K0393
24F0008	24F0459	24G0227	24G0402	24I0539	24K0644
24F0109	24F0485	24G0307	24G0631	24K0260	

**SDG 24F0134:** The laboratory received three sample coolers at temperatures greater than the upper control limit ( $11.1\text{-}13.5^{\circ}\text{C}$ ). Samples LDW24-SC1382B, LDW24-SC1382C, LDW24-1382E, and LDW24-SC1387A were received at the laboratory a day after collection. Since one of the cooler temperatures was  $> 12^{\circ}\text{C}$ , mercury results were estimated (J-1).

**SDG 24I0539:** The laboratory received one sample cooler at a temperature greater than the upper control limit ( $13.5^{\circ}\text{C}$ ). Samples LDW24-SC1387B and LDW24-SC1387C were received at the laboratory the day after collection. Since the cooler temperature was  $> 12^{\circ}\text{C}$ , the mercury results were estimated (J-1).

### Chain of Custody (COC):

For several SDGs, for one or more Chains of Custody (COC), the "Released By" section was not signed by the courier.

### Sample Condition:

**SDG 24G0402:** For LDW24-IT1599E, the lid of the sample container was cracked upon receipt at the laboratory. The lid was replaced. Data was judged as not impacted.

### Holding Times Exceedances:

**SDG 24F0010:** All samples were pulled from frozen archive and were prepared past the 365-day holding time for mercury, between 509-524 days; all mercury results were estimated (J-1).

## Laboratory Blanks

Laboratory blanks were analyzed at the appropriate frequency. To assess the impact of any blank contaminant on the reported sample results, an action level is established at five times (5x) the concentration reported in the blank. If a contaminant is reported in an associated field sample and the concentration is less than the action level, the result is qualified as not detected (U-7). No action is taken if the sample result is greater than the action level, or for non-detected results. For laboratory blanks that are less than the negative MDL, positive results less than the action level of five times the absolute value of the blank concentration are estimated (J-7) and non-detects are estimated (UJ-7) to indicate a potential low bias.

*SDGs 24E0404, 24E0429, 24F0010, 24F0426:* Several instrument blanks associated with the 6/11/24 analyses of field samples had responses for mercury that were less than the negative MDL. After evaluating the samples against the action levels, no qualification of data was necessary.

*SDG 24F0598:* The instrument blank associated with the 7/12/24 analyses of the field samples had a positive result for cadmium. The positive result for cadmium in Sample LDW24-IT1522B was less than the 5x action level and was qualified as not detected (U-7).

*SDG 24G0227:* For batch BMG0332, the method blank had a positive result for zinc. After evaluating the samples against the action level, no qualification of data was necessary.

*SDG 24G0471:* For batch BMG0673, the method blank had a positive result for mercury. The result for Sample LDW24-IT1607G was less than the 5x action level and was qualified as not detected (U-7).

*SDG 24G0631:* For batch BMH0390, the method blank had a positive result for mercury. The mercury result for Sample LDW24-IT1553C was less than the 5x action level and was qualified as not detected (U-7).

For batch BMH0637, the method blank had a positive result for mercury. All mercury results in the associated samples were greater than the action level; no qualification of data was necessary.

For the 8/27/24 and 9/3/24 analyses, mercury was detected in several instrument blanks. After evaluating the samples against the action levels, no qualification of data was necessary.

*SDG 24K0260:* Two instrument blanks associated with the 11/27/24 analyses of field samples had responses for mercury that were less than the negative MDL. After evaluating the samples against the action levels, no qualification of data was necessary.

*SDG 24K0393:* Several instrument blanks associated with the 11/27/24 analyses of field samples had responses for mercury that were less than the negative MDL. After evaluating the samples against the action levels, no qualification of data was necessary.

## Field Blanks

No field blanks were submitted.

## Matrix Spike/Matrix Spike Duplicates

Matrix spike/matrix spike duplicate (MS/MSD) samples were analyzed at the appropriate frequency. No action is taken unless both the MS and MSD percent recovery (%R) values are outside the control limits. MS/MSD %R values are not evaluated when the parent concentration is greater than 4x the spike concentration. Precision is evaluated using the relative percent difference (RPD) values calculated between the MS and MSD results. Any RPD values outside the control limits indicate uncertainty in the measured results for the sample. Qualifiers were issued to all samples in the batch.

When the MS/MSD %R values indicate a potential low bias, associated results are estimated (J/UJ-8L). Only the associated positive results are estimated (J-8H) if the %R values indicate a potential high bias. Associated positive results are estimated (J-9A) if the RPD values indicate uncertainty.

**SDG 24E0404, 24E0457:** For batch BME0659, there were no mercury MS/MSD results as the analysis for the sample used for batch QC was canceled after the extraction was completed. No action was taken as the LCS recovery was acceptable and the precision for a field duplicate set in the batch was also acceptable.

**SDGs 24E0404, 24E0608:** For batch BMF0030, the mercury MS/MSD %R values were greater than the upper control limit. The mercury results for the associated samples were estimated (J-8H).

**SDGs 24E0404, 24E0429:** For batch BME0657, Sample LDW24-IT1545A was used for the MS/MSD analyses. The MS recovery value for copper was greater than the upper control limit. The MSD recovery was acceptable; no action was taken based on the single outlier.

**SDG 24E0608:** For batch BMF0004, Sample LDW24-IT1402A was used for the MS/MSD analyses. The following outliers were noted:

ANALYTE	BATCH	MS %R	MSD %R	RPD	QUALIFIER
Lead	BMF004	62.9	64.2	--	J-8L
Copper	BMF004	--	130	--	No Action
Zinc	BMF004	--	--	23.1	J-9A
Mercury	BMF0030	132	130	--	J-8H

**SDG 24E0716:** For batch BMF0030, a batch QC sample was analyzed as the MS/MSD sample. The MS/MSD %R values for mercury were greater than the upper control limit; positive results for mercury in the associated field samples were estimated (J-8H).

**SDG 24F0050:** For batch BMF0347, there were no MS/MSD results reported as the parent sample used for batch QC was not from this project. No action was taken as the LCS recovery was acceptable and the precision for a field duplicate set in the batch was also acceptable.

**SDG 24F0006, 24F0010, 24F0261, 24F0288:** For batch BMF0398, Sample LDW24-IT1540B from SDG 24F0006 was analyzed as the MS/MSD analyses; the only target compound for the parent sample was arsenic, so the MS/MSD summary form only had arsenic results reported. The laboratory evaluated the MS/MSD results for the full target compound list and summarized the results in the

case narrative. The RPD value for zinc was greater than the control limit; the associated results were estimated (J-9A).

**SDGs 24F0008, 24F0050, 24F0109, 24F0134:** For batch BMF0347, Sample LDW24-IT1546A from SDG 24F0008 was used for the MS/MSD analyses. The MS %R value for silver was less than the lower control limit, and the lead %R value was greater than the upper control limit; the MSD %R values for these analytes were in control. No data were qualified based on the single %R outliers. The RPD values for silver and lead were greater than the control limit; positive results for silver and lead in the associated samples were estimated (J-9A).

**SDGs 24F0366, 24F0424, 24F0426, 24F0459, 24F0485, 24G0402:** For batch BMF0672, Sample LDW24-SC1431H from SDG 24F0366 was analyzed as the MS/MSD sample for mercury. The MS %R value was greater than the upper control limit, but the MSD %R value was in control; no data were qualified for single %R value outlier.

**SDGs 24F0424, 24F0459, 24F0485:** For batch BMF0606, Sample LDW24-SS1469 from SDG 24F0424 was analyzed as the MS/MSD sample. The MS %R value for lead was less than the lower control limit, but the MSD %R value was in control; no data were qualified for single %R outlier. The MSD %R value for chromium was greater than the upper control limit, but the MS %R value was in control; no data were qualified for single %R outlier.

**SDG 24F0598:** For batch BMG0196, Sample LDW24-IT1522B was analyzed as the MS/MSD sample. The MS %R value for mercury was greater than the upper control limit, but the MSD %R value was in control; no data were qualified for single %R outliers.

**SDG 24G0166:** For batch BMG0277, Sample LDW24-IT1591 was analyzed as the MS/MSD sample. The MS %R value for silver was less than the lower control limit, but the MSD %R value was in control; no data were qualified for single %R outlier.

**SDGs 24F0166, 24G0224, 24G0227, 24G0270:** For batch BMG0335, Sample LDW24-SS1379 from SDG 24G0224 was analyzed as the MS/MSD sample. The MS %R value for mercury was greater than the upper control limit, but the MSD %R value was in control; no data were qualified for single %R outlier.

**SDG 24G0224:** For batch BMG0526, Sample LDW24-SS1591 was analyzed as the MS/MSD sample. The MSD %R value for mercury was greater than the upper control limit, but the MS %R value was in control; no data were qualified for single %R outlier. The RPD value for mercury was greater than the control limit; the mercury results in the associated sample and laboratory duplicate were estimated (J-9A).

**SDG 24G0307:** For batch BMG0578, Sample LDW24-IT1590A was analyzed as the MS/MSD sample. The MS/MSD %R values for chromium were less than the lower control limit; the chromium results in the associated field sample and laboratory duplicate were estimated (J/UJ-8L). The MS %R values for lead, arsenic, copper, and zinc were less than the lower control limit, but were in control in the associated MSD sample; no data were qualified for single %R value outliers.

**SDG 24G0390:** For batch BMG0672, Sample LDW24-IT1601B was analyzed as the MS/MSD sample. The mercury MS/MSD %R values were greater than the upper control limit. Positive results for mercury for the associated samples and lab duplicate were estimated (J-8H).

**SDG 24G0471:** For batch, BMG0673, Sample LDW24-IT1605G was analyzed as the MS/MSD sample. The MS/MSD %R values for mercury were greater than the upper control limit; positive results for mercury in the associated samples were estimated (J-8H).

**SDGs 24G0631, 24G0634:** MS/MSDs were performed using Samples LDW24-IT1555A and LDW24-IT1553B from SDG 24G0631. The following outliers were noted:

BATCH	PARENT SAMPLE	ANALYTE	MS %R	MSD %R	RPD	QUALIFIER
BMH0386	LDW24-IT1555A	Lead	133	--	--	No Action
		Copper	--	147	--	No Action
BMH0636	LDW24-IT1553B	Lead	53.4	63.3	--	J-8L
		Arsenic	62.6	68.8	--	J-8L
		Copper	55.6	59.4	--	J-8L
		Zinc	27.3	44.1	--	J-8L

**SDG 24K0260:** For batch BMK0357, Sample LDW24-IT1556A was analyzed as the MS/MSD sample for metals. The MS %R value for arsenic was greater than the upper control limit, but the MSD %R value was in control; no data were qualified for the single %R outlier. The RPD value for arsenic was greater than the control limit; the arsenic results in the associated sample and laboratory duplicate were estimated (J-9A).

**SDG 24K0260, 24K0393:** For batch BMK0688, Sample LDW24-SC1342K from SDG 24K0393 was analyzed as the MS/MSD sample for mercury. The MS %R value for mercury was greater than the upper control limit, but the MSD %R value was in control; no data were qualified for the single %R value outlier.

### Laboratory Duplicates

**SDGs 24E0404, 24E0429:** For batch BME0657, Sample LDW24-IT1545A from SDG 24E0429 was used for the laboratory duplicate analyses. The RPD values for copper and zinc were greater than the control limit; associated results were estimated (J-9A).

**SDGs 24E0404, 24E0457:** For batch BME0659, there was no laboratory duplicate result for mercury as the analysis for the sample used for batch QC was canceled after the extraction was completed. No action was taken as the LCS recovery was acceptable and the precision for a field duplicate set in the batch was also acceptable.

**SDG 24E0608:** Sample LDW24-IT1402A was used for the laboratory duplicate analyses. The RPD values for lead and arsenic were greater than the control limit; associated results were estimated (J-9A).

**SDG 24F0288, 24F0332:** For batch BMF0401, Sample LDW24-SC1388A from SDG 24F0288 was used for the laboratory duplicate analyses. The RPD value for mercury was greater than the control limit; associated results were estimated (J-9A).

**SDGs 24F0424, 24F0459:** For batch BMF0606, Sample LDW24-SS1469 from SDG 24F0424 was analyzed as the laboratory duplicate sample. The RPD values for zinc and lead were greater than the control limit; zinc and lead results for all field samples in the batch as well as the results for the laboratory duplicate were estimated (J-9A).

**SDG 24G0471:** For batch BMG0673, Sample LDW24-IT1605G was analyzed as the laboratory duplicate sample. The difference value for mercury was greater than the control limit; all mercury results in the associated samples were estimated (J/UJ-9A).

**SDGs 24G0631, 24G0634:** For batch BMH0636, Sample LDW24-IT1553B from SDG 24G0631 was analyzed as the laboratory duplicate sample. The RPD values for arsenic and zinc were greater than the control limit; all arsenic and zinc results in the associated samples were estimated (J-9A).

**SDG 24K0260:** For batch BMK0363, Sample LDW24-IT1603A was analyzed as the laboratory duplicate sample. The RPD value for mercury was greater than the control limit; all mercury results in the associated samples and laboratory duplicate were estimated (J-9A).

## Reference Materials

No standard reference material was analyzed.

## Field Duplicates

For sediment samples, the QAPP RPD control limit is 50% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the absolute difference between the sample and replicate must be less than 2x the RL. No data were qualified based on field duplicate precision outliers. Users of the data should consider the impact of field precision on the reported results. The following field duplicates were submitted.

SDG	PARENT SAMPLE	FIELD DUPLICATE	TEST	OUTLIER
24E0404	LDW24-IT1513A	LDW24-IT1513A-FD	Metals/Hg	--
24E0457	LDW24-SC1439G	LDW24-SC1439G-FD	Hg Only	--
24E0560	LDW24-IT1428C	LDW24-IT1428C-FD	Hg Only	--
24E0716	LDW24-SC1344D	LDW24-SC1344D-FD	Hg Only	--
24F0008	LDW24-IT1546B	LDW24-IT1546B-FD	Metals/Hg	--
24F0050	LDW24-SS1523	LDW24-SS1523-FD	Metals/Hg	--
24F0109	LDW24-SS1402	LDW24-SS1402-FD	Metals/Hg	--
24F0288	LDW24-SC1383C	LDW24-SC1383C-FD	Hg Only	--
24F0332	LDW24-SC1431C	LDW24-SC1431C-FD	Hg Only	--
24F0366	LDW24-SC1343E	LDW24-SC1343E-FD	Hg Only	--
24G0227	LDW24-IT1527A	LDW24-IT1527A-FD	Metals/Hg	--
24G0270	LDW24-SC1468A	LDW24-SC1468A-FD	Metals/Hg	--

For the following field duplicate sets, the parent sample was analyzed during Tier 1 and the field duplicates were analyzed during Tier 2.

SDG	PARENT SAMPLE (AS PART OF TIER 1)	DATE ANALYZED	FIELD DUPLICATE ID (AS PART OF TIER 2)	DATE ANALYZED	OUTLIER
24F0426 24I0539	LDW24-SC1384E	6/27/24 (Hg)	LDW24-SC1384E-FD	10/7/24 (Hg)	--
24E0608 24K0393	LDW24-SC1559A	6/11/24 (Hg)	LDW24-SC1559A-FD	11/27/24 (Hg)	--
24E0608 24K0393	LDW24-IT1402A	6/4/24 (As)	LDW24-IT1402A-FD	12/5/24 (As)	--
24G0270 24K0393	LDW24-SC1347E	7/22/24 (Hg)	LDW24-SC1347E-FD	11/27/24 (Hg)	--

### Reporting Limits

The reporting limits for one or more sample results were elevated due to moisture content.

### Calculation Verification

*SDG 24F0006, 24F0050, 24G0464:* Several results were verified by recalculation from the raw data. No calculation or transcription errors were noted.

### OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical methods. With the exceptions noted above, accuracy was acceptable as demonstrated by the LCS and MS/MSD %R values, and precision was acceptable as demonstrated by the laboratory duplicate, MS/MSD, and field duplicate RPD values.

Data were qualified as not detected due to method blank and instrument blank contamination. Results were estimated based on holding time outliers, MS/MSD accuracy outliers, and MS/MSD and laboratory duplicate precision outliers.

All data, as qualified, are acceptable for use.

**DATA VALIDATION REPORT**  
**AOC5 Phase II – LDW MR**  
**Total Organic Carbon (TOC) by 9060A,**  
**Sulfide by SM4500-S2-D-11, Ammonia by SM4500-NH3-H-11,**  
**and Total Solids (TS) by SM 2540 G-11**

This report documents the review of analytical data from the analysis of sediment samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Analytical Resources, LLC. (ARL), Tukwila, Washington. Refer to the **Sample Index** for a list of samples reviewed and analyses performed.

SDG	NUMBER OF SAMPLES	PARAMETERS	VALIDATION LEVEL
24E0313	6 Sediment	TOC, TS	EPA Stage 2B
24E0341	19 Sediment	TOC, TS	EPA Stage 2B
24E0373	21 Sediment	TOC, TS	EPA Stage 2B
24E0404	16 Sediment	TOC, TS	EPA Stage 2B
24E0429	18 Sediment	TOC, TS	EPA Stage 2B
24E0457	8 Sediment	TOC, TS	EPA Stage 2B
24E0517	14 Sediment	TOC, TS	EPA Stage 2B
24E0560	15 Sediment	TOC, TS	EPA Stage 2B
24E0605	15 Sediment	TOC, TS	EPA Stage 2B
24E0608	34 Sediment	TOC, TS	EPA Stage 3
24E0631	10 Sediment	TOC, TS	EPA Stage 2B
24E0670	6 Sediment	TOC, TS	EPA Stage 2B
24E0716	15 Sediment	TOC, TS	EPA Stage 2B
24F0006	2 Sediment	TOC, TS	EPA Stage 2B
24F0008	15 Sediment	TOC, TS	EPA Stage 2B
24F0010	2 Sediment	TOC, TS	EPA Stage 2B
24F0050	9 Sediment	TOC, TS	EPA Stage 2B
24F0109	15 Sediment	TOC, TS	EPA Stage 2B
24F0134	21 Sediment	TOC, TS	EPA Stage 2B
24F0222	7 Sediment	TOC, TS	EPA Stage 2B
24F0223	13 Sediment	TOC, TS	EPA Stage 2B
24F0260	21 Sediment	TOC, TS	EPA Stage 2B
24F0261	6 Sediment	TOC, TS	EPA Stage 2B
24F0288	13 Sediment	TOC, TS	EPA Stage 2B
24F0332	18 Sediment	TOC, TS	EPA Stage 2B
24F0366	10 Sediment	TOC, TS	EPA Stage 2B
24F0424	22 Sediment	TOC, TS, Sulfide, Ammonia	EPA Stage 2B
24F0426	12 Sediment	TOC, TS	EPA Stage 2B

SDG	NUMBER OF SAMPLES	PARAMETERS	VALIDATION LEVEL
24F0459	32 Sediment	TOC, TS, Ammonia	EPA Stage 3
		Sulfide	EPA Stage 2B
24F0485	24 Sediment	TOC, TS, Sulfide, Ammonia	EPA Stage 2B
24F0512	13 Sediment	TOC, TS	EPA Stage 2B
24F0537	4 Sediment	TOC, TS, Sulfide, Ammonia	EPA Stage 2B
24F0557	16 Sediment	TOC, TS	EPA Stage 2B
24F0598	15 Sediment	TOC, TS	EPA Stage 2B
24G0166	22 Sediment	TOC, TS, Sulfide, Ammonia	EPA Stage 3
24G0224	14 Sediment	TOC, TS, Sulfide, Ammonia	EPA Stage 2B
24G0227	34 Sediment	TOC, TS, Sulfide, Ammonia	EPA Stage 2B
24G0270	20 Sediment	TOC, TS	EPA Stage 2B
24G0307	8 Sediment	TOC, TS	EPA Stage 2B
24G0340	8 Sediment	TOC, TS	EPA Stage 2B
24G0390	7 Sediment	TOC, TS	EPA Stage 2B
24G0402	8 Sediment	TOC, TS	EPA Stage 2B
24G0464	4 Sediment	TOC, TS	EPA Stage 2B
24G0471	13 Sediment	TOC, TS	EPA Stage 2B
24G0556	2 Sediment	TOC, TS, Sulfide, Ammonia	EPA Stage 2B
24G0631	4 Sediment	TOC, TS	EPA Stage 2B
24G0634	16 Sediment	TOC, TS	EPA Stage 2B
24H0071	2 Sediment	TOC, TS	EPA Stage 2B
24H0461	2 Sediment	TOC, TS	EPA Stage 2B
24I0537	7 Sediment	TOC, TS	EPA Stage 2B
24I0539	16 Sediment	TOC, TS	EPA Stage 2B
24I0647	39 Sediment	TOC, TS	EPA Stage 2B
24I0648	40 Sediment	TOC, TS	EPA Stage 2B
24I0651	33 Sediment	TOC, TS	EPA Stage 2B
24I0655	34 Sediment	TOC, TS	EPA Stage 2B
24I0664	39 Sediment	TOC, TS	EPA Stage 2B
24I0669	12 Sediment	TOC, TS	EPA Stage 2B
24K0260	34 Sediment	TOC, TS	EPA Stage 2B
24K0393	23 Sediment	TOC, TS	EPA Stage 2B
24K0562	40 Sediment	TOC, TS	EPA Stage 2B
24K0644	40 Sediment	TOC, TS	EPA Stage 2B
24K0648	22 Sediment	TOC, TS	EPA Stage 2B
24L0182	1 Sediment	TOC, TS	EPA Stage 2B

## DATA PACKAGE COMPLETENESS

With the noted exceptions, the laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes, and all anomalies were discussed in the case narrative.

*Total Organic Carbon (TOC):* For several SDGs, the information for initial calibration HD000075 that was submitted in the PDF was not correct. The laboratory submitted a separate PDF containing the correct ICAL information. The information in this separate PDF was evaluated during the validation process.

*Sulfide:*

*SDG 24F0424:* The matrix spike summary forms were missing the parent sample IDs and concentrations. The lab submitted a revised PDF.

The results were reported on a wet-weight basis and the percent solids values were not reported. The laboratory provided a separate PDF and EDD that included the percent solids values and the sulfide results reported on a dry-weight basis.

### **EDD TO HARDCOPY VERIFICATION**

All sample IDs reported in the electronic data deliverable (EDD) were verified (100%) by comparing the EDD to the hardcopy laboratory data package. Sample results and laboratory quality control sample results were also verified (10%).

*Sulfide:*

The method listed in the EDD (SM4500-CN-I) is a cyanide method. The method listed in the PDF (SM4500-S2-D) is the correct method.

*SDGs 24F0459, 24F0485, 24F0537, 24G0166, 24G0224, 24G0227, and 24G0556:* The method detection limit (MDL) and reporting limit (RL) listed on the PDF did not match the EDD. These results were corrected in the EDD.

*Total Solids (TS):*

For Total Solids (TS) analyses, some samples have two results; one analyzed by SM 2540 G-11, and one analyzed by ASTM D2216. Only the SM2540 G-11 data were validated.

Semivolatiles (including PAH and phthalates) were analyzed by ALS. Total solids results (by 160.3M) associated with these analyses were reported. These total solids results were not validated.

*SDG 24F0512, 24F0537:* The chains-of-custody (COC) indicates that that sample matrix is sediment. In the EDD, the "sample\_matrix\_code" field is populated with "SO" indicating soil samples. No action was taken.

## TECHNICAL DATA VALIDATION

The QC requirements for review are listed below.

2	Sample Receipt, Preservation, and Holding Times	2	Matrix Spike/Matrix Spike Duplicates (MS/MSD)
✓	Initial Calibration	2	Laboratory Duplicates/Triplicates
✓	Continuing Calibration	1	Field Duplicates
1	Laboratory Blanks	✓	Reporting Limits
1	Field Blanks	✓	Reported Results
2	Reference Materials	1	Calculation Verification (Stage 3 only)
✓	Laboratory Control Samples		

✓ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

<sup>1</sup> Quality control results are discussed below, but no data were qualified.

<sup>2</sup> Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

### Sample Receipt, Preservation, Holding Times

#### Cooler Temperature:

As stated in validation guidance documents, sample shipping coolers should arrive at the laboratory within the advisory temperature range of  $\leq 6^{\circ}\text{C}$ . Several cooler temperatures were greater than the  $6^{\circ}\text{C}$  control limit. For the following circumstances, no action was taken for the temperature outliers:

- The sample cooler was received at the laboratory the same day as collection and did not have time to chill to  $< 6^{\circ}\text{C}$ . This outlier did not impact data quality; no results were qualified.
- The sample cooler was received at the laboratory within one day of collection, and the cooler temperature was  $< 12^{\circ}\text{C}$ . This outlier did not impact data quality; no results were qualified.

The SDGs with cooler temperature outliers in these categories are as follows:

24E0313	24F0109	24F0485	24G0227	24G0631	24I0647	24K0260
24E0373	24F0134	24F0512	24G0307	24G0634	24I0648	24K0393
24E0404	24F0223	24F0537	24G0340	24H0461	24I0651	24K0562
24E0605	24F0332	24F0557	24G0402	24I0537	24I0655	24K0644
24E0716	24F0459	24G0166	24G0556	24I0539	24I0669	24K0648
24F0008						24L0182

**SDG 24F0134:** Samples LDW24-SC1382B, LDW24-SC1382C, LDW24-1382E, and LDW24-SC1387A were received at the laboratory a day after collection and at temperatures greater than the upper control limit ( $11.1\text{-}13.5^{\circ}\text{C}$ ). Since one of the cooler temperatures was  $> 12^{\circ}\text{C}$ , TOC and TS results were estimated (J-1).

**SDG 24G0224:** The laboratory received two sample coolers at temperatures greater than the upper control limit ( $7.3$  and  $12.9^{\circ}\text{C}$ ). Samples LDW24-IT1413B, LDW24-IT1413C, LDW24-IT1413E, and LDW24-IT1413G were received at the laboratory a day after collection. Since one of the cooler temperatures was  $> 12^{\circ}\text{C}$ , TOC and TS results were estimated (J-1).

**SDG 24I0539:** The laboratory received one sample cooler at a temperature greater than the upper control limit (13.5°C). Samples LDW24-SC1387B and LDW24-SC1387C were received at the laboratory the day after collection. Since the cooler temperature was > 12°C, the TOC and TS results were estimated (J-1).

**SDG 24I0664:** The laboratory received sample coolers at temperatures greater than the upper control limit (13.8 – 16.2°C). Sample LDW24-SC1460F-FD was received at the laboratory the day after collection. Since the cooler temperature was > 12°C, the TOC and TS results were estimated (J-1).

**SDG 24I0665:** For the following samples, the cooler temperatures, upon receipt at the laboratory, were greater than 12°C; samples were received the day after collection. Results for TOC and TS were estimated (J-1).

LDW24-SC1382F	LDW24-SC1408H	LDW24-SC1408L
LDW24-SC1408F	LDW24-SC1408J	LDW24-IT1413B-FD

**SDG 24K0562:** The laboratory received sample coolers at temperatures greater than the upper control limit (13.5 – 16.2°C). Sample LDW24-SC1408B, LDW24-SC1408D, LDW24-SC1460E, and LDW24-SC1460G were received at the laboratory the day after collection. Since the cooler temperatures were > 12°C, the TOC and TS results were estimated (J-1).

**Chain of Custody (COC):**

For several SDGs, for one or more Chains of Custody (COC), the “Released By” section was not signed by the courier.

**SDG 24I0651:** For the COC for Samples LDW24-IT1362B and LDW24-IT1362C, the collection date was not filled in. This is one of four COCs; all other samples were collected on 6/6/24 or 6/7/24, and samples were received at the laboratory on 6/7/24. The Tier 2 Batch 1 Table, included in the PDF, indicated that the samples were collected on 6/7/24. No action was taken.

**Sample Condition:**

**SDG 24G0402:** For LDW24-IT1599E, the lid of the sample container was cracked upon receipt at the laboratory. The lid was replaced. Data was judged as not impacted.

**Holding Time Exceedance:**

**SDG 24F0459, 24F0485, 24G0556:** For the sulfide analyses, samples were subcontracted to another laboratory due to equipment issues. The samples were analyzed past the 7-day holding time. Sulfide results were estimated (J/UJ-1).

**SDG 24G0556:** For the ammonia analysis, the samples were analyzed past the 7-day holding time. Ammonia results were estimated (J-1).

*SDG 24F0010, 24K0260, 24K0393, 24K0644, 24K0648, 24K0562, 24L0182:* Samples were pulled from frozen archive. Several samples were analyzed for TOC and/or TS past the 180-day holding time for frozen samples; these results were estimated (J-1).

### Laboratory Blanks

#### *TOC:*

For the initial instrument calibration blank (ICB) analyzed directly after initial calibration HD000075, TOC was reported at 0.02%. This instrument blank did not bracket any samples; no qualifiers were assigned.

For the continuing instrument calibration blanks (CCB) that bracketed the samples, positive results in the CCBs that were greater than the method detection limit were evaluated. All sample results were greater than 5x the concentration present in the bracketing CCBs; no qualifiers were assigned.

#### *Total Solids:*

The following method blanks had low-level positive results for total solids. Total solids results in all associated field samples and laboratory duplicates were greater than 5x the results in the method blanks; no qualifiers were assigned.

SDG	METHOD BLANK
24G0471	BMH0033-BLK1
24G0556	
24G0270	BMG0754-BLK1
	BMG0773-BLK1
24I0651	BMJ0095-BLK1

### Field Blanks

Field blanks were not submitted.

### Reference Material

The standard reference material (SRM) NIST 1944 New York/New Jersey Sediment or 1941B Organics in Marine Sediment were analyzed for TOC with each batch. With the noted exceptions, recoveries were within the QAPP specified control limits of 80%-120%.

*SDG 24E0517, 24E0560:* For Batch BME0711, two SRM samples were prepared with the field samples. However, only SRM1 was analyzed with the samples; SRM2 was analyzed weeks after. Therefore, only SRM1 was used to evaluate the samples in this SDG. The %R value for SRM1 was less than the lower control limit of 80% at 79.1%. TOC results for all associated samples were estimated (J-12L).

*SDG 24F0050:* For Batch BMF0609, the %R value for the SRM was less than the lower control limit of 80% at 79.1%. TOC results for all associated samples were estimated (J-12L).

*SDG 24F0134:* For Batch BMF0610, the true value for the SRM on the summary form was incorrect. The %R value, when calculated using the correct true value, is within the control limits. No action was taken.

*SDGs 24F0260, 24F0261, 24F0288:* For Batch BMF0687, the %R value for the SRM was less than the lower control limit of 80% at 77.5%. TOC results for samples in this batch were estimated (J-12L).

*SDGs 24G0340, 24G0556, 24H0071:* For Batch BMH0313, the %R value for the SRM was greater than the upper control limit, at 126%. TOC results for samples and laboratory replicates in this batch were estimated (J-12H).

### **Matrix Spike/Matrix Spike Duplicates**

Matrix spikes and/or matrix spike/matrix spike duplicates (MS/MSD) were analyzed at the proper frequency of one per 20 samples or one per batch. When the MS %R values indicate a potential low bias, associated results are estimated (J/UJ-8L). Only the associated positive results are estimated (J-8H) if the %R values indicate a potential high bias. The %R values are not evaluated when the parent concentration is greater than 4x the spike concentration. No action is taken if only one MS or MSD recovery is outside of the control limits. Qualifiers were applied to all samples in an analytical batch, unless there was more than one set of QC samples for the batch.

#### *Sulfide:*

*SDG 24F0424:* For batch BBF0270, two sulfide matrix spikes were performed. For the MS performed using Sample LDW24-SS1349, the %R value was 3%. For the MS performed on a sample from another project, the %R value was 32%. The %R values for both were less than the lower control limit; sulfide results for all samples in the batch were estimated (J-8L).

#### *TOC:*

*SDG 24I0647, 24I0648:* For batch BBJ0220, a TOC MS/MSD was performed using Sample LDW24-IT1351D from SDG 24I0648. The MSD %R value was greater than the upper control limit, but the MS %R value was acceptable. No qualifiers were applied for the single outlier. The RPD value was greater than the control limit of 20%. Since the RPD values for the laboratory duplicates for this batch were acceptable, only the parent sample TOC result was estimated (J-9A).

### **Laboratory Duplicates/Triplicates**

#### *Total Solids:*

With the noted exception, one sample from each laboratory batch was prepared and analyzed in triplicate. Relative percent standard deviation (%RSD) values were calculated and were within the control limit of 20%. Laboratory precision was acceptable.

*SDG 24E0373:* For batch BMF0134, a laboratory triplicate was not analyzed. Precision was evaluated based on the field duplicate set. Precision was acceptable.

### *TOC:*

One sample from each laboratory batch was analyzed in duplicate or triplicate to evaluate laboratory precision. Relative percent difference (RPD) or %RSD values for detected analytes must be less than 20% for results greater than five times the RL. For results less than 5x the RL, the difference between the sample and duplicate (or standard deviation for triplicates) must be less than 2x the RL.

When RPD or RSD outliers indicated uncertainty in the measured results for the samples, results for all samples in the batch and the laboratory replicate samples were estimated (J/UJ-9A). The following outliers were noted:

***SDGs 24F0050, 24F0109, 24F0134:*** For Batch BMF0609, Sample LDW24-SS1377 from 24F0109 was analyzed in triplicate. The RSD value for TOC was greater than the control limit. The RPD value between the parent sample and DUP2 was also greater than the control limit. Results for this analyte were estimated (J-9A) for all samples and laboratory replicate samples in the batch.

***SDG 24G0390, 24G0402:*** For Batch BMG0426, Sample LDW24-IT1601B from SDG 24G0390 was analyzed in triplicate. The RPD values for TOC between the parent sample and each duplicate were greater than the control limit. Results for TOC were estimated (J-9A) for all samples and the laboratory replicate samples in the batch.

***SDG 24E0341:*** For Batch BMH0653, Sample LDW24-SC1390B was analyzed in triplicate. The RPD value for TOC between the parent sample and the duplicate was slightly greater than the control limit. Since the RPD value between the parent sample and the triplicate was acceptable, and the RSD for the triplicate was acceptable, no qualifiers were assigned.

***SDG 24G0631, 24H0071:*** For Batch BMI0168, Sample LDW24-IT1555A from SDG 24G0631 was analyzed in triplicate. The RPD value for TOC between the parent sample and the triplicate was greater than the control limit. The RPD between the parent sample and the duplicate was acceptable, as was the RSD for the triplicate. Therefore, the results for TOC were estimated (J-9A) for the parent sample and the triplicate (BMI0168-DUP8) only.

***SDG 24K0393:*** For Batch BML0078, Sample LDW24-IT1402A-FD was analyzed in triplicate. The RPD value for TOC between the parent sample and the duplicate was greater than the control limit. The RPD between the parent and the triplicate was acceptable, as was the RSD for the triplicate. The result for TOC was estimated (J-9A) for the duplicate (BML0078-DUP1) only.

***SDG 24K0562:*** For Batch BML0379, Sample LDW24-SC1405B was analyzed in triplicate. The RPD value for TOC between the parent sample and the triplicate was greater than the control limit. The RPD between the parent and the duplicate was acceptable, as was the RSD for the triplicate. The result for TOC was estimated (J-9A) for the triplicate (BML0379-DUP2).

For Batch BML0380, Sample LDW24-IT1560D was analyzed in triplicate. Although the RPD values were greater than the control limit, the concentrations of the duplicates were less than 5x the RL; therefore, the difference values were evaluated. The difference values as well as the triplicate RSD were within control limits; no qualifiers were assigned.

**SDG 24K0644:** For Batch BNA0021, Sample LDW24-SC1329E was analyzed in triplicate. The RPD value for TOC between the parent sample and the duplicate was greater than the control limit. In addition, the RSD for the triplicate was greater than the control limit. Results for TOC were estimated (J-9A) for all samples and laboratory replicate samples in the batch.

**SDG 24K0648, 24L0182:** For Batch BNA0051, Sample LDW24-SC1549B was analyzed in triplicate. The RPD value for TOC between the parent sample and the duplicate was slightly greater than the control limit. Since the RPD value between the parent sample and triplicate was acceptable, and the RSD for the triplicate was acceptable, only results for the parent sample and the duplicate (BNA0051-DUP7) were estimated (J-9A).

**Sulfide:**

Sulfide analyses were subcontracted to another laboratory.

SUBCONTRACT LAB BATCH	SDG	BATCH ANALYSIS DATE	LABORATORY DUPLICATE	COMMENT
BBF0270	24F0424	6/21/24	None	Laboratory precision could not be evaluated
BBF0380	24F0459 24F0485 24F0537	6/28/24	None	Laboratory precision could not be evaluated
BBG0174	24G0166 24G0224 24G0227	7/15/24	None	Evaluated precision using field duplicate from SDG 24G0166: LDW24-SS1474 and LDW24-SS1474-FD
BBG0431	24G0556	8/7/24	None	Evaluated precision using the MS/MSD

**Field Duplicates**

For sediment samples, the RPD control limit is 50% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the absolute difference between the sample and duplicate must be less than 2x the RL. No data were qualified based on field duplicate precision outliers. Users of the data should consider the impact of field precision outliers on the reported results.

SDG	PARENT SAMPLE	FIELD DUPLICATE	TEST	OUTLIER
24E0373	LDW24-SC1541C	LDW24-SC1541C-FD	TOC TS	--
24E0404	LDW24-SC1520B	LDW24-SC1520B-FD	TOC TS	--
	LDW24-IT1513A	LDW24-IT1513A-FD		--
	LDW24-SC1544G	LDW24-SC1544G-FD		--
24E0429	LDW24-SC1536B	LDW24-SC1536B-FD	TOC TS	--
24E0457	LDW24-SC1439G	LDW24-SC1439G-FD	TOC TS	--
24E0517	LDW24-SC1386E	LDW24-SC1386E-FD	TOC TS	--

SDG	PARENT SAMPLE	FIELD DUPLICATE	TEST	OUTLIER
24E0560	LDW24-IT1428C	LDW24-IT1428C-FD	TOC	--
	LDW24-IT1426B	LDW24-IT1426B-FD	TS	--
24E0608	LDW24-SC1507A	LDW24-SC1507A-FD	TOC	--
	LDW24-SC1406E	LDW24-SC1406E-FD	TS	--
24E0631	LDW24-SC1335I	LDW24-SC1335I-FD	TOC TS	--
24E0670	LDW24-SC1582C	LDW24-SC1582C-FD	TOC TS	--
24E0716	LDW24-SC1339D	LDW24-SC1339D-FD	TOC	--
	LDW24-SC1344D	LDW24-SC1344D-FD	TS	--
24F0008	LDW24-SC1416C	LDW24-SC1416C-FD	TOC	--
	LDW24-IT1546B	LDW24-IT1546B-FD	TS	--
24F0050	LDW24-SS1523	LDW24-SS1523-FD	TOC TS	--
24F0109	LDW24-SS1402	LDW24-SS1402-FD	TOC TS	--
24F0134	LDW24-SS1411	LDW24-SS1411-FD	TOC TS	--
24F0260	LDW24-SC1441E	LDW24-SC1441E-FD	TOC TS	--
24F0261	LDW24-IT1443A	LDW24-IT1443A-FD	TOC TS	--
24F0288	LDW24-SC1383C	LDW24-SC1383C-FD	TOC TS	--
24F0332	LDW24-SC1431C	LDW24-SC1431C-FD	TOC TS	--
24F0366	LDW24-SC1343E	LDW24-SC1343E-FD	TOC TS	--
24F0426	LDW24-IT1455A	LDW24-IT1455A-FD	TOC TS	--
24F0459	LDW24-SS1357	LDW24-SS1357-FD	TOC TS	--
24F0557	LDW24-IT1454A	LDW24-IT1454A-FD	TOC TS	--
24F0598	LDW24-IT1448B	LDW24-IT1448B-FD	TOC	--
	LDW24-IT1457C	LDW24-IT1457C-FD	TS	--
24G0166	LDW24-SS1474	LDW24-SS1474-FD	Sulfide	62%
			Ammonia	--
24G0224	LDW24-SS1565	LDW24-SS1565-FD	TOC TS	--
24G0227	LDW24-SC1340E	LDW24-SC1340E-FD	TOC TS	--
	LDW24-SC1532A	LDW24-SC1532A-FD		--
	LDW24-IT1527A	LDW24-IT1527A-FD		--
	LDW24-SS1455	LDW24-SS1455-FD		--
	LDW24-IT1568A	LDW24-IT1568A-FD		--

SDG	PARENT SAMPLE	FIELD DUPLICATE	TEST	OUTLIER
24G0270	LDW24-SC1468A	LDW24-SC1468A-FD	TOC	--
	LDW24-SC1341E	LDW24-SC1341E-FD	TS	--

For the following field duplicate sets, the parent sample was analyzed during Tier 1 and the field duplicates were analyzed during Tier 2.

SDG	PARENT SAMPLE (AS PART OF TIER 1)	DATE ANALYZED	FIELD DUPLICATE ID (AS PART OF TIER 2)	DATE ANALYZED	OUTLIER
24E0457 24I0537	LDW24-SC1501C	5/28/24 (TS)	LDW24-SC1501C-FD	9/27/24 (TS)	--
		5/29/24 (TOC)		10/3/24 (TOC)	--
24F0426 24I0539	LDW24-SC1384E	7/5/24 (TS)	LDW24-SC1384E-FD	9/27/24 (TS)	--
		7/24/24 (TOC)		10/3/24 (TOC)	--
24E0716 24I0647	LDW24-SC1336D	6/19/24 (TS)	LDW24-SC1336D-FD	10/3/24 (TS)	--
		6/25/24 (TOC)		10/8/24 (TOC)	--
24G0270 24I0655	LDW24-IT1374A	7/31/24 (TS)	LDW24-IT1374A-FD	10/2/24 (TS)	--
		8/9/24 (TOC)		10/17/24 (TOC)	--
24G0224 24I0655	LDW24-IT1413B	7/26/24 (TS)	LDW24-IT1413B-FD	10/7/24 (TS)	--
		7/20/24 (TOC)		10/19/24 (TOC)	--
24F0223 24I0655	LDW24-SC1425G	6/28/24 (TS)	LDW24-SC1425G-FD	10/2/24 (TS)	--
		7/2/24 (TOC)		10/19/24 (TOC)	--
24F0223 24I0664	LDW24-SC1433G	6/25/24 (TS)	LDW24-SC1433G-FD	10/3/24 (TS)	--
		7/2/24 (TOC)		10/19/24 (TOC)	--
24F0260 24I0664	LDW24-1442C	6/27/24 (TS)	LDW24-SC1442C-FD	10/3/24 (TS)	--
		7/3/24 (TOC)		10/19/24 (TOC)	--
24F0332 24I0664	LDW24-SC1452E	7/2/24 (TS)	LDW24-SC1452E-FD	10/3/24 (TS)	--
		7/10/24 (TOC)		10/19/24 (TOC)	--
24F0222 24I0664	LDW24-SC1460F	6/28/24 (TS)	LDW24-SC1460F-FD	10/3/24 (TS)	--
		7/2/24 (TOC)		10/19/24 (TOC)	--
24F0485 24I0664	LDW24-SC1489D	7/17/24 (TS)	LDW24-SC1489D-FD	10/3/24 (TS)	--
		7/26/24 (TOC)		10/19/24 (TOC)	--
24E0608 24K0393	LDW24-SC1559A	6/21/24 (TS)	LDW24-SC1559A-FD	11/20/24 (TS)	--
		6/3/24 (TOC)		12/18/24 (TOC)	--
24E0608 24K0393	LDW24-IT1402A	6/21/24 (TS)	LDW24-IT1402A-FD	11/20/24 (TS)	--
		6/3/24 (TOC)		12/11/24 (TOC)	--
24G0270 24K0393	LDW24-IT1376A	7/31/24 (TS)	LDW24-IT1376A-FD	11/25/24 (TS)	--
		8/9/24 (TOC)		12/12/24 (TOC)	55.8%
24G0270 24K0393	LDW24-SC1347E	7/31/24 (TS)	LDW24-SC1347E-FD	11/25/24 (TS)	--
		8/9/24 (TOC)		12/12/24 (TOC)	--
24G0307 24K0393	LDW24-IT1378A	8/8/24 (TS)	LDW24-IT1378A-FD	11/25/24 (TS)	--
		8/14/24 (TOC)		12/12/24 (TOC)	--
24G0270 24K0648	LDW24-SC1341F	7/30/24 (TS)	LDW24- SC1341F -FD	12/3/24 (TS)	--
		8/9/24 (TOC)		1/8/25 (TOC)	--
24G0227 24K0648	LDW24-IT1528B	7/30/24 (TS)	LDW24- IT1528B -FD	12/3/24 (TS)	--
		8/13/24 (TOC)		1/8/25 (TOC)	--

SDG	PARENT SAMPLE (AS PART OF TIER 1)	DATE ANALYZED	FIELD DUPLICATE ID (AS PART OF TIER 2)	DATE ANALYZED	OUTLIER
24E0608 24K0562	LDW24-SS1317	6/24/24 (TS)	LDW24-SS1317-FD	9/27/24 (TS)	--
		6/2/24 (TOC)		12/3/24 (TOC)	--
24G0270 24K0648	LDW24-SC1341F	7/30/24 (TS)	LDW24- SC1341F -FD	12/3/24 (TS)	--
		8/9/24 (TOC)		1/8/25 (TOC)	--
24G0227 24K0648	LDW24-IT1528B	7/30/24 (TS)	LDW24- IT1528B -FD	12/3/24 (TS)	--
		8/13/24 (TOC)		1/8/25 (TOC)	--

### Calculation Verification

*SDGs 24E0608, 24F0459, 24G0166:* Several TOC, ammonia and TS results were verified by recalculation from the raw data. No calculation or transcription errors were found.

### OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical methods. With the exceptions noted above, accuracy was acceptable as demonstrated by the LCS, SRM, and MS recoveries, and precision was acceptable as demonstrated by the MS/MSD, laboratory duplicate, and field duplicate RPD values as well as the laboratory triplicate RSD values.

Results were estimated based on holding time and cooler temperature outliers, MS and SRM accuracy outliers, and MS/MSD and laboratory replicate precision outliers.

All data, as qualified, are acceptable for use.



## **APPENDIX A**

# **DATA QUALIFIER DEFINITIONS REASON CODES AND CRITERIA TABLES**

## **DATA VALIDATION QUALIFIER CODES**

### **Based on National Functional Guidelines**

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

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U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.
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## DATA QUALIFIER REASON CODES

Group	Code	Reason for Qualification
Sample Handling	1	Improper Sample Handling or Sample Preservation (i.e., headspace, cooler temperature, pH, summa canister pressure); Exceeded Holding Times
Instrument Performance	24	Instrument Performance (i.e., tune, resolution, retention time window, endrin breakdown, lock-mass)
	5A	Initial Calibration (RF, %RSD, r <sup>2</sup> )
	5B	Calibration Verification (CCV, CCAL; RF, %D, %R) Use bias flags (H,L) <sup>1</sup> where appropriate
	5C	Initial Calibration Verification (ICV %D, %R) Use bias flags (H,L) <sup>1</sup> where appropriate
Blank Contamination	6	Field Blank Contamination (Equipment Rinsate, Trip Blank, etc.)
	7	Lab Blank Contamination (i.e., method blank, instrument blank, etc.) Use low bias flag (L) <sup>1</sup> for negative instrument blanks
Precision and Accuracy	8	Matrix Spike (MS and/or MSD) Recoveries Use bias flags (H,L) <sup>1</sup> where appropriate
	9A	Precision (Lab QC replicates: LCS/LCSD, MS/MSD, Lab Replicate)
	9B	Precision (Field QC replicates)
	10	Laboratory Control Sample Recoveries (a.k.a. Blank Spikes) Use bias flags (H,L) <sup>1</sup> where appropriate
	12	Reference Material Use bias flags (H,L) <sup>1</sup> where appropriate
	13	Surrogate Spike Recoveries (a.k.a. labeled compounds, recovery standards) Use bias flags (H,L) <sup>1</sup> where appropriate
Interferences	16	ICP/ICP-MS Serial Dilution Percent Difference
	17	ICP/ICP-MS Interference Check Standard Recovery Use bias flags (H,L) <sup>1</sup> where appropriate
	19	Internal Standard Performance (i.e., area, retention time, recovery)
	22	Elevated Detection Limit due to Interference (i.e., chemical and/or matrix)
	23	Bias from Matrix Interference (i.e. diphenyl ether, PCB/pesticides)
Identification and Quantitation	2	Chromatographic pattern in sample does not match pattern of calibration standard
	3	2 <sup>nd</sup> column confirmation (RPD or %D)
	4	Tentatively Identified Compound (TIC) (associated with NJ only)
	20	Calibration Range or Linear Range Exceeded
	25	Compound Identification (i.e., ion ratio, retention time, relative abundance, etc.)
	27	Alkylated PAH compound not calibrated (C1-C4 homologs) - calculated using response from parent compounds
	28	Multiple PCB Aroclors reported in sample (overlapping patterns)
Miscellaneous	11	A more appropriate result is reported (multiple reported analyses i.e., dilutions, re-extractions, etc. Associated with "R" and "DNR" only)
	14	Other (See DV report for details)

<sup>1</sup>H = high bias indicated

L = low bias indicated

EcoChem, Inc.

**Dioxin/Furan Analysis by HRMS**  
**(Based on NFG 2016 & NFG 2020<sup>1</sup> and Methods EPA 1613B<sup>3</sup> and SW-846 8290A<sup>2</sup>)**  
**Draft**

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Sample Handling</b>				
Cooler/Storage Temperature Preservation	Cooler temps: All 0-6°C Store at laboratory: Waters/Seds/Soils ≤ 6°C & in the dark Tissues <-10°C & in the dark Store extracts at <-10°C in the dark  Preservation Aqueous: If residual Cl <sub>2</sub> is present, 80 mg Thiosulfate per L must be added. If pH is not 7 - 9, it must be adjusted to 7 - 9	If not properly stored or preserved: J(pos)/R(ND) if thiosulfate not added if Cl <sub>2</sub> present; J(pos)/UJ(ND) if pH not adjusted J(pos)/UJ(ND) if cooler temp > 20°C (EcoChem PJ)  J(pos)/UJ(ND) if not stored at required temp at laboratory	1	EcoChem PJ, see TM-05 Other guidance (DMMP, QAPP) may require samples to be frozen at -20°C
Holding Time	<b>If properly stored,</b> <b>Extraction (all matrices):</b> 1 year from collection <b>Analysis (all matrices):</b> 1 year from extraction	If HT exceeded: J(pos)/UJ(ND); (or R for non-detects for gross exceedance - PJ)	1	EcoChem PJ, see TM-05 Gross exceedance = > 1 year 2020 NFG Other programs or project guidance documents may have overriding holding time requirements (e.g. SW8290 is 30 days/90 days)
<b>Instrument Performance</b>				
Mass Resolution (PFK)(Tuning)	<b>PFK (Perfluorokerosene)</b> Analyzed prior to ICAL and at the beg/end of each 12 hr. shift. ≥10,000 resolving power at low and high mass in each descriptor group (e.g. m/z 304.9824 & m/z 380.9760 in Fn )  Lock-mass: for each descriptor, exact m/z within 5 ppm of theoretical m/z (Table 7 of Method 1613B) (e.g. 380.9760 ± 0.0019 amu or 319.8645±0.0016).  <i>(acceptable tune is demonstrated when peak profile w/in 200 ppm window at 5% peak height)</i> Note: Laboratory can choose other peaks to monitor	R(pos)/No qualifier(ND) all analytes in all samples associated with the tune if < 10,000 or not demonstrated.  PJ if exact mass not within 5 ppm of theoretical mass	24	Notify PM  See Figure 2 from Method 8290A for peak profile showing correct zeroing of detector
Windows Defining Mix (WDM)	Should contain first and last eluting isomers in each homologous series. Analyze after PFK, before ICAL, and at beginning of each 12 hour period. Peaks for first and last eluters must be within established retention time windows for each selector group (chlorination level)	If not performed at required frequency but calibration OK, qualify only homologue totals: J(pos)/R(ND) If failed and issues with detecting 2,3,7,8-substituted analytes, R(pos)/R(ND)  If peaks are not completely within windows (clipped): If natives are ok, J(pos)/UJ(ND) homologs (Totals) If natives are affected, R all results for that selector group	24	Notify PM
AND  Isomer Specificity Check (ISC)	Must be analyzed before ICAL and CCAL Evaluate using measurements on SICPs For DB-5 Col: 2378-TCDD & 1238-TCDD For DB-225 Col: 2378-TCDF & 2347-TCDF Valley ≤ 25% (valley = (x/y)*100%) <sup>6</sup> If other columns used, resolution must be demonstrated for closest eluting peaks to 2378-TCDD or 2378-TCDF	If resolution criteria not met but calibration is OK, J (pos) tetra - hexa and HpCDF congeners no qualifier (ND)  If resolution criteria not met and issues with resolution of 2,3,7,8-substituted analytes, R(pos)/R(ND)	24	<b>EcoChem PJ, see TM-05, Rev. 2;</b> Note: TCDF is evaluated only if second column confirmation is performed

**Dioxin/Furan Analysis by HRMS**  
 (Based on NFG 2016 & NFG 2020<sup>1</sup> and Methods EPA 1613B<sup>3</sup> and SW-846 8290A<sup>2</sup>)  
 Draft

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Instrument Performance (continued)</b>				
<b>OR</b>  Column Performance Solution (CPS) (combined WDM and ISC)	See criteria for Windows Defining Mix and Isomer Specificity Check above	See criteria for Windows Defining Mix and Isomer Specificity Check above	24	<b>Notify PM</b>  <b>EcoChem PJ, see TM-05, Rev. 2;</b> Note: TCDF is evaluated only if second column confirmation is performed
Initial Calibration <b>Sensitivity</b>	S/N ratio > 10 for all native and labeled compounds in CS1 std. Minimum levels in Method 1613B, Table 2 must be met.	J(pos)/R(ND)	5A	<b>EcoChem PJ, see TM-05, Rev. 2</b>
Initial Calibration <b>Selectivity</b>	<b>Ion Abundance Ratio</b> Method 1613B: Table 8 (required m/z to monitor) Table 9 (QC limits) Method 8290A: Table 8	J(pos)/R(ND)		
Initial Calibration (Minimum 5 stds.) <b>Stability</b>	Method 1613B: %RSD < 20% for native compounds %RSD < 35% for labeled compounds  Method 8290A: %RSD < 20% for native compounds %RSD < 30% for labeled compounds	J(pos)/UJ(ND) natives if %RSD > 20% for native No action for labeled		
	Lock Mass in Method 1613B Table 8 shall not vary by more than ±20% (> 20% indicates presence of coeluting interferences.)	Notify PM Method requires new ICAL		
	RT for native and labeled is within RTW (Method 1613B, Table 2) and RT between Cal Stds are consistent.  Absolute RT of <sup>13</sup> C <sub>12</sub> -1234-TCDD >25 min on DB5 & >15 min on DB-225	Narrate, no action R(pos)/R(ND) for large shifts		<b>EcoChem PJ, see TM-05, Rev. 2</b>
Continuing Calibration (Prior to each 12 hr. shift) <b>Sensitivity</b>	S/N ratio for CCAL standard > 10	If <10, elevate Det. Limit or R(ND)	5B	
Continuing Calibration (Prior to each 12 hr. shift) <b>Selectivity</b>	<b>Ion Abundance Ratio</b> Method 1613B: Table 8 (required m/z to monitor) Table 9 (QC limits) Method 8290A: Table 8	For congener with ion ratio outlier, J(pos) natives in all samples associated with CCAL. No action for labeled congener ion ratio outliers.	25	<b>EcoChem PJ, see TM-05</b>

**Dioxin/Furan Analysis by HRMS**  
 (Based on NFG 2016 & NFG 2020<sup>1</sup> and Methods EPA 1613B<sup>3</sup> and SW-846 8290A<sup>2</sup>)  
 Draft

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Instrument Performance (continued)</b>				
Continuing Calibration (Prior to each 12 hr. shift) <b>Stability</b>	Beginning of every 12-hour shift (beginning and end for Method 8290A) %D +/- 20% for native compounds %D +/- 30% for labeled compounds <b>(Must meet limits in Table 6, Method 1613B)</b>  If %D in the closing CCAL are within 25%/35%, the mean RF from the two CCAL may be used to calculate samples <b>(Section 8.3.2.4 of 8290).</b>	<b>Labeled compounds:</b> Narrate, no action. <b>Native compounds:</b> 1613: J(pos)/UJ(ND) if %D is outside Table 6 limits J(pos)/R(ND) if %D is +/- 75% of Table 6 limits  8290: J(pos)/UJ(ND) if %D = 20% - 75% J(pos)/R(ND) if %D > 75%	5B (H,L) <sup>4</sup>	
	Absolute RT of <sup>13</sup> C <sub>12</sub> -1234-TCDD and <sup>13</sup> C <sub>12</sub> -123789-HxCDD should be +/- 15 seconds of ICAL  RRT for all other compounds must meet criteria listed in Table 2 Method 1316.	Narrate, no action	5B	<b>EcoChem PJ, see TM-05</b>
<b>Blank Contamination</b>				
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > RL	U(pos) if sample result is < action level (5x)  EMPC values in method blank treated as positive result when EMPC values are reported for samples.	7	Hierarchy of blank review: #1 - Review MB, qualify as needed #2 - Review FB, qualify as needed  Project criteria for EMPC overrides this criteria. Other option: EMPC < QL is U-25; EMPC > QL is J-25
Field Blank (FB)	FB: frequency as per QAPP No detected compounds > RL	U(pos) if result is < 5X action level.  EMPC values in method blank treated as positive result when EMPC values are reported for samples.	6	
<b>Precision and Accuracy</b>				
MS/MSD (recovery)	<b>MS/MSD not typically required for HRMS analyses.</b> If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	J(pos) if both %R > UCL - high bias J(pos)/UJ(ND) if both %R < LCL - low bias J(pos)/R(ND) if both %R < 10% - very low bias J(pos)/UJ(ND) if one > UCL & one < LCL, with no bias <b>PJ if only one %R outlier</b>	8 (H,L) <sup>4</sup>	No action if only one spike %R is outside criteria. No action if parent concentration is >4x the amount spiked.  Qualify parent sample only unless other QC indicates systematic problems.
MS/MSD (RPD)	<b>MS/MSD not typically required for HRMS analyses.</b> If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	J(pos) in parent sample if RPD > CL	9	Qualify parent sample only.

**Dioxin/Furan Analysis by HRMS**  
 (Based on NFG 2016 & NFG 2020<sup>1</sup> and Methods EPA 1613B<sup>3</sup> and SW-846 8290A<sup>2</sup>)  
 Draft

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Precision and Accuracy (continued)</b>				
LCS (or OPR)	One per lab batch (of ≤ 20 samples) Use most current laboratory control limits <b>or</b> Limits from Table 6 of 1613B	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias PJ if not prepared with samples	10 (H,L) <sup>4</sup>	No action if only one spike %R is outside criteria, when LCSD is analyzed.  Qualify all associated samples.
LCS/LCSD (RPD)	<b>LCSD not typically required for HRMS analyses.</b> One set per matrix and batch of 20 samples RPD < 35%	J(pos) assoc. compound in all samples if RPD > CL	9	Qualify all associated samples.
Lab Duplicate (RPD)	<b>Lab Dup not typically required for HRMS analyses.</b> One per lab batch (of ≤ 20 samples) Use most current laboratory control limits	J(pos)/UJ(ND) if RPD > CL	9	Qualify parent sample
Labeled Compounds (Internal Standards and cleanup standards)	Added to all samples %R = 40% - 135% in all samples 8290 %R must meet limits in Table 7 Method 1613B	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias R(pos)/R(ND) if not added	13 (H,L) <sup>4</sup>	
	Ion Abundance Ratio Method 1613B: Table 8 (required m/z to monitor) Table 9 (QC limits) Method 8290A: Table 8	Ion Abundance Ratio: Out for sample/OK for CAL Stds: J(pos)/UJ(ND) Out for sample and CAL Stds: J(pos)/R(ND)	13	
Field Duplicates	Solids: RPD <50% OR difference < 2X RL (for results < 5X RL)  Aqueous: RPD <35% OR difference < 1X RL (for results < 5X RL)	Narrate and qualify if required by project Qualify Totals values if associated with outliers (TEQ, if reported, are not evaluated or qualified)	9	<b>Use professional judgment</b>
<b>Compound ID and Calculation</b>				
Quantitation/ Identification	All ions for each isomer must maximize within +/- 2 seconds. S/N ratio >2.5 (labeled/internal stds >10) Ion ratios must meet criteria listed in Table 8 Method 8290, or Table 9 of 1613B; RRTs w/in limits in Table 2 of 1613B	Narrate in report; qualify if necessary NJ(pos) for retention time outliers. J(pos) for ion ratio outliers.	25	<b>EcoChem PJ, see TM-05</b> Stage 4 Data package should have SICIP <sup>5</sup> for two target analyte channels, labeled standards, diphenyl ether trace, and lock-mass trace.
EMPC (estimated maximum possible concentration)	If quantitation identification criteria (ion abundance ratio) are not met, laboratory should report an EMPC value.	If laboratory correctly reported an EMPC value, qualify the native compound and total homolog groups as J(pos) to indicate that the value is an estimated maximum possible concentration. If laboratory reports EMPC as ND, no qualifier - note in report.  Use QAPP/SOW criteria if different (e.g. U(pos) for native; J(pos) for total homologues)	25	<b>Use professional judgment See TM-18</b>

**Dioxin/Furan Analysis by HRMS**  
 (Based on NFG 2016 & NFG 2020<sup>1</sup> and Methods EPA 1613B<sup>3</sup> and SW-846 8290A<sup>2</sup>)  
 Draft

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Compound ID and Calculation (continued)</b>				
Interferences	Interferences from chlorodiphenyl ether compounds	<b>Stage 4 DV:</b> If raw abundance > 10% of target compound raw abundance UJ(pos) If raw abundance ≤ 10% of target compound raw abundance J(pos) <b>Stage 2A, 2B DV: J(pos)</b>	23H <sup>4</sup>	See TM-16
		If laboratory did not monitor PCDPE interference ions, J(pos)/UJ(ND) all target and total furan results and discuss non-conformance in report.	14	
	Lock masses baseline must not deviate +/- 20% Exact m/z within 5 ppm of theoretical m/z from values in Table 8 of 1613B	<b>For associated analytes (deflection at same RT as target analyte)</b> J(pos) if present; J results identified as EMPC Reject (R) if deflection > 50%	14L <sup>4</sup> 14	See TM-17 No bias for rejected data
Second Column Confirmation	All 2,3,7,8-TCDF hits must be confirmed on a DB-225 (or equiv) column. All QC criteria must also be met for the confirmation analysis.	Report the DB-225 value. DNR the DB-5 value If not performed use PJ.	11	EcoChem PJ, see TM-05
Calculation Check	Check 10% of field & QC sample results	Contact laboratory for resolution and/or corrective action	na	Full data validation only.
<b>Electronic Data Deliverable (EDD)</b>				
Verification of EDD to hardcopy data	EcoChem verify @ 10% unless problems noted; then increase level up to 100% for next several packages.	Depending on scope of problem, correct at EcoChem (minor issues) to resubmittal by laboratory (major issues).	na	EcoChem Project Manager and/or Database Administrator will work with lab to provide long-term corrective action.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Use "DNR" to flag results that will not be reported.	11	

<sup>1</sup> National Functional Guidelines for High Resolution Superfund Methods Data Review, April 2016 & November 2020

<sup>2</sup> Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS), USEPA SW-846, Method 8290A, February 2007

<sup>3</sup> EPA Method 1613, Rev.B, Tetra-through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGS/HRMS, October 1994

<sup>4</sup> NFG 2020 suggests using "+ / -" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

<sup>5</sup> SICPs = Selected Ion Current Profiles

<sup>6</sup> x = height from valley of least resolved adjacent isomer to baseline; y = peak height of the shorter for the adjacent peaks

**Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)**  
**(Based on NFG 2017, 2020 and SW-846 Method 8270E)**  
**Draft**

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
For all QC Elements, project limits from QAPP/Work Plan may supersede method limits described in this criteria table.				
<b>Sample Handling</b>				
Cooler/Storage Temperature Preservation	≤ 6°C sediment/tissues may require storage at -20°C	If PJ is to qualify: J (pos)/UJ (ND)	1	Use PJ for temp outliers; see <b>TM-20</b> No action necessary if sample arrive at lab same day collected
Holding Time	Aqueous: Extraction 7 days from collection Solid: Extraction 14 days from collection Extraction Holding Time may be extended to 1 year for frozen sediments/tissues Analysis (all matrices): 40 days from extraction	J (pos)/UJ (ND) if HT exceeded J (pos)/R (ND) if gross exceedance (exceeded by >2x HT)	1	Alert PM for gross exceedance situation
<b>Instrument Performance</b>				
Tuning	DFTPP prior to ICAL, should meet criteria in Table 3 of method (not required at start of 12 hour sequence if CCV acceptable)	R (pos/ND) all analytes in all samples if tune not analyzed Use PJ if ion ratio criteria not met	24	
Initial Calibration <b>Sensitivity</b>	RRF ≥ 0.05 except: RRF ≥ 0.01 poor responders * If alt cal model used (e.g. quadratic), low std calculate to be within 50% of true value	If PJ is to qualify: J (pos)/UJ (ND)	5A	<b>TM-06</b> PJ - no action if response is stable (ICAL RSD and CCAL %D acceptable) NFG has analyte specific RRF requirements, but allows PJ for qualification, method does not specify min RRF
Initial Calibration <b>Stability</b>	Minimum 5 standards %RSD ≤ 20.0% <b>or</b> co-efficient of determination (r <sup>2</sup> ) > 0.99	J (pos) if %RSD > limit <b>or</b> r <sup>2</sup> value <0.99	5A	
Initial Calibration Verification Check	Prepared from second source; analyze after each ICAL Percent recovery limits = 70-130%	J (pos) %R > UCL J (pos)/UJ (ND) %R < LCL	5C (H,L) <sup>1</sup>	QAPP may have overriding accuracy limits.
Continuing Calibration <b>Sensitivity</b>	Prior to sample analysis and every 12 hours RRF ≥ 0.05 except: RRF ≥ 0.01 poor responders	If PJ is to qualify: J (pos)/UJ (ND)	5B	see ICAL RRF guidance NFG requires closing CCAL; evaluate if present
Continuing Calibration <b>Stability</b>	%D ≤ 20%	J (pos) - %D outside control limit and high bias J (pos)/UJ (ND) - %D outside control limit and low bias	5B (H,L) <sup>1</sup>	QAPP may have overriding limits. Evaluate RRF or concentration to determine bias. NFG says to UJ ND regardless of bias (bias not addressed)
Continuing Calibration <b>degradation</b>	Low level CCAL Std %D 50%-150%	J (pos) if %D > 150% J (pos)/UJ (ND) if %D < 50%	5B (H,L) <sup>1</sup>	NFG does not address low level CCAL
Internal Standards	Added to all samples Acceptable Range: IS area: 50% to 200% of assoc CCAL or midpoint ICAL or average ICAL RT: within 30 seconds of CC RT	J (pos) if > 200% J (pos)/UJ (ND) if < 50% J (pos)/R (ND) if < 25% If RT >30 seconds use <b>PJ</b>	19	Qualify compounds quantified using particular internal standard

Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)  
(Based on NFG 2017, 2020 and SW-846 Method 8270E)

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Blank Contamination</b>				
Method Blank (MB)	MB: One per matrix per batch (≤ 20 samples)	If blank result < RL U(pos) if sample result is < action level (5x) and < RL J(pos) if sample result is < action level (5X) and > RL  If blank result > RL U(pos) if result is < 2X blank result J(pos) if result is > 2X blank result but ≤ action level (5X)	7	If blank is >RL and samples not > 10X blank or ND, lab should re-extract Alert PM if MB > RL and lab did not perform necessary re-extraction  5x Action Level all target analytes <b>Hierarchy of blank review:</b> <b>#1 - Review MB, qualify as needed #2 - Review FB , qualify as needed</b> <b>FB may need to be converted to same units as field samples</b> NFG specifies elevating to CRQL for sample results < CRQL or J results > CRQL
Field Blank (FB)	No detected compounds > MDL	R(pos) TIC using 10x rule	6	
<b>Precision and Accuracy</b>				
Surrogates	Minimum of 3 acid & 3 base/neutral (B/N) compounds added to all samples (for full TL list) Within laboratory control limits	1 outlier allowed per fraction if 3 used, If qualification needed: J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND) if %R < 10%	13 (H,L) <sup>1</sup>	Qualify all compounds in associated fraction Do not qualify if only 1 acid and/or 1 B/N surrogate is out, unless <10%. If 1 surrogate outlier < 10% then J (pos)/R (ND) unless LCL is 10% or less, then PJ for non-detects
LCS/LCSD (recovery)	One per matrix per batch (of ≤ 20 samples) LCSD not required by NFG or method Use method acceptance criteria/laboratory limits	J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND)%R < 10%	10 (H,L) <sup>1</sup>	If LCS/LCSD analyzed, qualify if only one %R is outside of control limits. PJ: if UCL is < 100% and %R is > UCL but less than 100%, don't qualify for high bias QAPP may have overriding accuracy limits. Qualify all samples in batch
LCS/LCSD (RPD)	If LCSD analyzed RPD < lab limits	J (pos)	9	Qualify all associated samples. QAPP may have overriding precision limits.
MS/MSD (recovery)	Not required by method, but recommended One per matrix per batch (of ≤ 20 samples) Use laboratory limits	J (pos) %R > UCL J (pos)/UJ (ND) if both %R < LCL J (pos)/R (ND) if both %R < 10% J (pos)/UJ (ND) if one > UCL & one < LCL, with no bias	8 (H,L) <sup>1</sup>	No action if only one spike %R is outside criteria, unless one is <10% No action if parent concentration is >4x the amount spiked. Qualify parent sample only. QAPP may have overriding accuracy limits
MS/MSD (RPD)	One per matrix per batch (of ≤ 20 samples) Use laboratory limits	J (pos) in parent sample if RPD > CL	9	Qualify parent sample only QAPP may have overriding precision control limits RPD is still evaluated, even if sample > 4x spike added
Reference Material (RM, SRM, or CRM)	EcoChem Default: Result ±20% of the 95% confidence interval of the true value (NIST SRM) or within manufacturers specified limits (other RMs)	J (pos)/UJ (ND) if < LCL J (pos) if > UCL	12 (H,L) <sup>1</sup>	QAPP may have overriding accuracy limits. Limits not applicable for non-certified analytes (NIST SRM) Limits not applicable if TV < RL
Field Duplicates	<b>EcoChem Default</b> Solids: RPD < 50% OR difference < 2X RL (for results < 5X RL) Aqueous: RPD < 35% OR difference < 1X RL (for results < 5X RL)	J (pos)/UJ (ND) Qualify only parent and field duplicate samples	9	See <b>TM-24</b> QAPP may have overriding limits Use MDL for ND (rather than zero) when calculating difference NFG does not have requirements for field duplicate evaluation

**DATA VALIDATION CRITERIA**

**Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)  
 (Based on NFG 2017, 2020 and SW-846 Method 8270E)**

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Compound Identification, Quantitation, and Calculation</b>				
Retention times and relative ion intensities	RRT within 0.06 of standard RRT or RT drift within ± 10 seconds.  Ion relative intensity within 30% of standard	U (pos) if identification criteria not met	25	
TICs	Major ions (>10%) in reference must be present in sample; intensities agree within 20%; check identification	NJ the TIC unless	4	TICs are no longer commonly reported
Calibration Range	Results greater than highest calibration standard	Qualify J (pos)	20	If result from dilution analysis is not reported.
Dilutions, Re-extractions, and Reanalyses	Report only one result per analyte	Use "DNR" to flag results that will not be reported.	11	<b>TM-04</b> EcoChem Policy for Rejection/Selection Process for Multiple Results  Note: If result is DNR-flagged for specific QC issue, use reason code for that issue

National Functional Guidelines for Organic Superfund Methods Data Review, January 2017

National Functional Guidelines for Organic Superfund Methods Data Review, November 2020

Method SW846 8270E Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 6, June 2018.

<sup>1</sup>NFG suggests using "+ / -" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

(pos): Positive Result(s)

(ND): Non-detects

\* Common "Poor Responder" compounds include acetophenone, atrazine, benzaldehyde, 1,1-biphenyl, bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, carbazole, 4-chloroaniline, di-n-butyl phthalate, 3,3-dichlorobenzidine, diethyl phthalate, dimethyl phthalate, 4,6-dinitro-2-methylphenol, 2,4-dinitrophenol, di-n-octyl phthalate, hexachlorobutadiene, 2-nitroaniline, 3-nitroaniline, 4-nitroaniline, n-nitroso-di-n-phenylamine, 2,2'-oxybis-(1-chloropropane), 1,2,4,5-tetrachlorobenzene, 2,3,4,6-tetrachlorophenol. See method for additional poor responders that are not typically included in a standard TCL.

**Pesticides by GC**  
**(Based on Organic NFG 2017/2020 and SW-846 Method 8081B) - DRAFT**

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Sample Handling</b>				
Cooler/Storage Temperature Preservation	0-6°C Tissue/sediments (may be frozen -20°C)	J (pos)/UJ (ND) if greater than 6° C	1	Use Professional Judgment (PJ) to qualify for temperature outlier. (TM-20)
Holding Time	<i>Extraction Aqueous:</i> 7 days from collection <i>Extraction Solid:</i> 14 days from collection <i>Extraction Tissue/Sediment (frozen):</i> 1 year <i>Analysis (all matrices):</i> 40 days from extraction	J (pos)/UJ (ND) if ext/analyzed > HT J (pos)/R (ND) if gross exceedance (> 2x HT)	1	Gross exceedance > 2x HT, as per NFG 1999
<b>Instrument Performance</b>				
Resolution Check	Beginning of ICAL sequence Within RTW and resolution > 60%	NJ (pos)/R (ND) results	14	CLP criterion; might not be submitted with SW846 data package
Retention Times	Surrogates: TCMX (± 0.05); DCB (± 0.10) Target analytes: within RTW	NJ (pos)/R (ND) results for analytes with RT shifts	24	Use PJ based on examination of raw data
Breakdown (PEM)	DDT Breakdown: ≤ 20% Endrin Breakdown: ≤ 20% Combined Breakdown: ≤ 30% Compounds within RTW, Resolution >90%	If 4,4'-DDT is detected: J (pos) 4,4'-DDT, 4,4'-DDD and 4,4'-DDE If 4,4'-DDT is ND and either 4,4'-DDD or 4,4'-DDE are detected: R (ND) 4,4'-DDT, NJ (pos) DDD and DDE If Endrin is detected: J (pos) Endrin, Endrin Aldehyde and Endrin Ketone If Endrin is ND and either EA or EK are detected: R (ND) Endrin, NJ (pos) EA and EK	5A	Method 8081B breakdown criterion: ≤ 15%. For combined breakdown outliers, apply qualifiers considering the degree of individual breakdown.

**Pesticides by GC**  
**(Based on Organic NFG 2017/2020 and SW-846 Method 8081B) - DRAFT**

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Instrument Performance (continued)</b>				
Initial Calibration	Single Component Compounds & surrogates: RSD ≤ 20% alpha-BHC and delta-BHC: RSD ≤ 25% toxaphene: RSD ≤ 30% <b>or</b> correlation coefficient (r-value) ≥ 0.995 OR Minimum 6-point with coefficient of determination (r <sup>2</sup> -value) ≥ 0.99	J (pos) if %RSD greater than control limit <b>or</b> r-value < 0.995 <b>or</b> r <sup>2</sup> -value < 0.99	5A	Refer to TM-01 for additional information.
Initial Calibration Verification (ICV)	No NFG criteria Project specific	J (pos) if > UCL J (pos)/UJ (ND) if < LCL	5B	Use bias flags (H,L) <sup>(1)</sup> where appropriate
Continuing Calibration	CS3 (midpoint cal std) %D ± 20% Analyzed prior to each 12 hour shift	If > 20% (high bias): J (pos) If < 20% (low bias): J (pos)/UJ (ND)	5B	lab may run alternating PEM/CS3 Refer to TM-01 for additional information. Use bias flags (H,L) <sup>(1)</sup> where appropriate
<b>Blank Contamination</b>				
Method Blank (MB)	One per matrix per batch (of ≤ 20 samples) No detected compounds > RL	U (pos) if result is less than appropriate 5X action level.	7	<b>Hierarchy of blank review:</b> #1 - Review MB and IB, qualify as needed #2 - Review FB , qualify as needed  <b>Note: Actions as per NFG 1999</b>  Note: IB not required by method
Field Blank (FB)	FB: frequency as per QAPP No detected compounds > RL	U (pos) if result is less than appropriate 5X action level.	6	
Instrument Blanks (IB)	Analyzed at the beginning and end of every 12 hour sequence No analyte > CRQL	U (pos) if result is less than appropriate 5X action level.	7	

Pesticides by GC  
(Based on Organic NFG 2017/2020 and SW-846 Method 8081B) - DRAFT

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Precision and Accuracy</b>				
MS/MSD (recovery)	One set per matrix per batch (of ≤ 20 samples) Method or project acceptance limits	Qualify parent only unless other QC indicates systematic problems. J (pos) if both %R > upper control limit (UCL) J (pos)/UJ (ND) if both %R < lower control limit (LCL) J (pos)/R (ND) if both %R < 10% (< 20 for NFG 2020)	8	No action if only one spike %R is outside criteria No action if native analyte conc. > 5x the amount spiked Use bias flags (H,L) <sup>(1)</sup> where appropriate
MS/MSD (RPD)	One set per matrix per batch (of ≤ 20 samples) Method or project acceptance limits	Qualify parent only unless other QC indicates systematic problems. J (pos) if RPD > control limit	9	No action if parent is ND
LCS	One per lab batch (of ≤ 20 samples) Method or project acceptance limits	J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND) if %R < 10%	10	Qualify all associated samples. Use bias flags (H,L) <sup>(1)</sup> where appropriate
LCS/LCSD (RPD)	if analyzed use MS/MSD RPD criteria	J (pos) assoc. compound in all samples	9	LCSD not required by method or NFG
Surrogates	TCMX and DCBP added to every sample %R = 30% - 150% or project limits  For blanks, LCS/LCSD, PEM, CCAL, and samples: RT of TCMX should be +/- 0.05 min, DCBP +/- 0.10 min of ICAL mean RT	J (pos) if either %R > UCL J (pos)/UJ (ND) if either %R < LCL J (pos)/R (ND) if either %R < 10%  PJ for RT Outliers	13	If %R < 10% (dilution is a factor), use PJ Use bias flags (H,L) <sup>(1)</sup> where appropriate
Internal Standards (if used)	Acceptable Range: IS area = 50% to 200% of CCAL area RT within 30 seconds of CC RT	J (pos) if area > 200% J (pos)/UJ (ND) if area < 50% J (pos)/R (ND) if area < 25% RT > 30 seconds, narrate	19	
Field Duplicates	<b>Solids:</b> RPD < 50% or difference < 2X RL (for results < 5X RL) <b>Aqueous:</b> RPD < 35% or difference < 1X RL (for results < 5X RL)	J (pos)/UJ (ND) Qualify only parent and field duplicate samples	9	Use project limits if specified

**Pesticides by GC**  
**(Based on Organic NFG 2017/2020 and SW-846 Method 8081B) - DRAFT**

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Compound Identification/Quantification</b>				
Quantitation/ Identification	Between two columns: RPD < 40% or %D < 25% Within Retention Time Windows on both columns.	J (pos) if RPD = 40% - 60% (25% - 60% for %D) NJ (pos) if > 60% R (pos) if RTW criterion not met	3	See TM-08 for additional info
Calibration Range	On-column concentration < high calibration standard	J (pos) if conc > high standard and sample was not diluted	20	
Dilutions Re-extractions and/or Reanalyses	Report only one result per analyte	Use "DNR" to flag results that will not be reported.	11	TM-04 for additional info
<b>Sample Clean-up</b>				
GPC/Sulfur/ Florisil	GPC or Florisil cleanup standards 80% - 120%	J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND) if %R < 10%	14	Cleanups are optional under SW846 Use bias flags (H,L) <sup>(1)</sup> where appropriate

National Functional Guidelines for Organic Superfund Methods Data Review, January, 2017

National Functional Guidelines for Organic Superfund Methods Data Review, November 2020

Organochlorine Pesticides by Gas Chromatography USEPA Method SW846 8081B, Feb 2007, Rev. 2

SW846, Chapter 4, Organic Analytes

Determinative Chromatographic Separations, Method 8000C, March 2003, Rev.3

<sup>1</sup> NFG suggests using "+ / -" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

**PCB Aroclors by GC**  
(Based on Organic NFG 2017/2020 and SW-846 Method 8082A) - DRAFT

QC Element	Acceptance Criteria (NFG)	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Sample Handling</b>					
Cooler/Storage Temperature Preservation	0-6°C Tissue/sediments (may be frozen -20°C)	NFG <sup>(1)</sup> Method <sup>(2)</sup>	<b>If required by project:</b> J (pos)/UJ (ND) if greater than 6° C	1	Use Professional Judgment (PJ) to qualify for temperature outlier. Current SW846 criterion is ≤ 6° C <sup>(3)</sup>
Holding Time	<b>Extraction Aqueous:</b> 7 days from collection <b>Extraction Solid:</b> 14 days from collection <b>Extraction Tissue/Sediment (frozen):</b> 1 year <b>Analysis (all matrices):</b> 40 days from extraction	NFG <sup>(1)</sup> Method <sup>(2)</sup>	<b>If required by project:</b> J (pos)/UJ (ND) if ext/analyzed > HT	1	Use PJ to qualify for holding times Current SW846 does not have an extraction holding time limit, but recommends one year. <sup>(3)</sup>
<b>Instrument Performance</b>					
Retention Times	Surrogates: TCMX (± 0.05); DCB (± 0.10) Aroclors (± 0.07)	NFG <sup>(1)</sup>	NJ (pos)/R (ND) results for analytes with RT shifts	24	
Initial Calibration	Minimum 5 point with RSD ≤ 20% OR correlation coefficient (r-value) ≥ 0.995 OR Minimum 6-point with co-efficient of determination (r <sup>2</sup> -value) ≥ 0.99	NFG <sup>(1)</sup> Method <sup>(4)</sup>	J (pos) if %RSD greater than 20% OR r-value < 0.995 OR r <sup>2</sup> -value < 0.99	5A	Refer to TM-01 for additional information. Use bias flags (H,L) <sup>(5)</sup> where appropriate
Initial Calibration Verification (ICV)	No NFG criteria. Project specific.	Project	J (pos) if > UCL J (pos)/UJ (ND) if < LCL	5B	Use bias flags (H,L) where appropriate
Continuing Calibration (Prior to each 12 hr. shift)	%D ± 20%	Method <sup>(2)</sup>	If > 20% (high bias): J (pos) If < 20% (low bias): J (pos)/UJ (ND)	5B	Refer to TM-01 for additional information. Use bias flags (H,L) where appropriate
<b>Blank Contamination</b>					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > RL	NFG <sup>(1)</sup> Method <sup>(2)</sup>	U (pos) if result is less than appropriate 5X action level.	7	<b>Hierarchy of blank review:</b> <b>#1 - Review MB and IB, qualify as needed</b> <b>#2 - Review FB, qualify as needed</b>  Note: Actions as per NFG 1999  Note: IB not required by method
Field Blank (FB)	FB: frequency as per QAPP No detected compounds > RL	NFG <sup>(1)</sup> Method <sup>(2)</sup>	U (pos) if result is less than appropriate 5X action level.	6	
Instrument Blanks (IB)	Analyzed at the beginning and end of every 12 hour sequence No analyte > CRQL	NFG <sup>(1)</sup>	U (pos) if result is less than appropriate 5X action level.	7	
<b>Precision and Accuracy</b>					
MS/MSD (recovery)	One set per matrix per batch (of ≤ 20 samples) AR1016 and AR1260: %R = 29% - 135%, or project limits	NFG <sup>(1)</sup> Method <sup>(2)</sup> EcoChem Standard Policy	Qualify parent only unless other QC indicates systematic problems. J (pos) if both %R > upper control limit (UCL) J (pos)/UJ (ND) if both %R < lower control limit (LCL) J (pos)/R (ND) if both %R < 10%	8	No action if only one spike %R is outside criteria. No action if native analyte conc. > 5x the amount spiked. Use bias flags (H,L) where appropriate. Actions apply to all Aroclors in parent sample.

**PCB Aroclors by GC**  
(Based on Organic NFG 2017/2020 and SW-846 Method 8082A) - DRAFT

QC Element	Acceptance Criteria (NFG)	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Precision and Accuracy</b>					
MS/MSD (RPD)	One set per matrix per batch (of ≤ 20 samples) AR1016: RPD < 15%, AR1260: RPD < 20% or project limits	NFG <sup>(1)</sup> Method <sup>(2)</sup>	Qualify parent only unless other QC indicates systematic problems. J (pos) if RPD > control limit	9	No action if parent is ND.
LCS	One per lab batch (of ≤ 20 samples) AR1016 and AR1260: %R = 50% - 150%, or project limits	NFG <sup>(1)</sup> EcoChem Standard Policy	J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND) if %R < 10%	10	Use bias flags (H,L) where appropriate. Actions apply to all Aroclors in associated samples.
LCS/LCSD (RPD)	if analyzed use MS/MSD RPD criteria	NFG <sup>(1)</sup>	J (pos) assoc. compound in all samples	9	LCSD not required by method or NFG
Surrogates	TCMX and DCBP added to every sample %R = 30% - 150% or project limits	NFG <sup>(1)</sup> Method <sup>(2)</sup>	J (pos) if either %R > UCL J (pos)/UJ (ND) if either %R < LCL J (pos)/R (ND) if either %R < 10%	13	If %R < 10% (sample dilution is a factor), use PJ Use bias flags (H,L) where appropriate
Internal Standards (if used)	Acceptable Range: IS area = 50% to 200% of CCAL area RT within 30 seconds of CC RT	Method <sup>(2)</sup>	J (pos) if area > 200% J (pos)/UJ (ND) if area < 50% J (pos)/R (ND) if area < 25% RT > 30 seconds, narrate	19	
Field Duplicates	<b>Solids:</b> RPD < 50% OR difference < 2X RL (for results < 5X RL) <b>Aqueous:</b> RPD < 35% OR difference < 1X RL (for results < 5X RL)	EcoChem Standard Policy	J (pos)/UJ (ND) Qualify only parent and field duplicate samples	9	QAPP may have overriding limits
<b>Compound Identification/Quantification</b>					
Quantitation/ Identification	Between two columns: RPD < 40% or %D < 25% Within Retention Time Windows on both columns.	NFG <sup>(1)</sup> Method <sup>(2)</sup>	J (pos) if RPD = 40% - 60% (25% - 60% for %D) NJ (pos) if > 60% R (pos) if RTW criterion not met	3	See TM-08 for additional info.
Calibration Range	on column concentration < high calibration standard	NFG <sup>(1)</sup> Method <sup>(2)</sup>	J (pos) if conc > high standard and sample was not diluted	20	
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Standard reporting policy	Use "DNR" to flag results that will not be reported.	11	TM-04 Rev. 1 for additional info.
<b>Sample Clean-up</b>					
GPC/Sulfur/ Florisil/Acid	No criteria - cleanups are optional	NFG <sup>(1)</sup> Method <sup>(2)</sup>	Use Professional Judgment	14	special cleanups may be required for project cleanup standards may be associated with GPC/florisil cleanups

<sup>1</sup> National Functional Guidelines for Organic Data Review, January 2017 & November 2020<sup>2</sup> Polychlorinated Biphenyls (PCBs) by Gas Chromatography USEPA Method SW846 8082A, Feb 2007, Rev. 1<sup>3</sup> SW846, Chapter 4, Organic Analytes<sup>4</sup> Determinative Chromatographic Separations, Method 8000C, March 2003, Rev.3<sup>5</sup> "H" = high bias indicated; "L" = low bias indicated

(pos): Positive Result

(ND): Not detected

**DATA VALIDATION CRITERIA**

Metals by ICP-MS  
(Based on Inorganic NFG 2017, 2020 and SW-846 6020B) - Draft

Table: NFG-ICPMS  
Revision No.:3 Draft  
Last Rev. Date: 5/30/2023  
Page: 1 of 4

QC Element	EcoChem Acceptance Criteria	EcoChem Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Sample Handling</b>				
Cooler / Storage Temperature Preservation	<b>Solid:</b> Cooler temperature $\leq 6^{\circ}\text{C}$ <b>Aqueous:</b> Nitric Acid to pH < 2 <b>Dissolved Metals:</b> 0.45 $\mu\text{m}$ filter, preserve to pH < 2 after filtration	Cooler Temps: <b>If required by project</b> J (pos)/UJ (ND) if $>12^{\circ}\text{C}$ Aqueous: J (pos)/UJ (ND) if pH > 2	1	Use <b>PJ</b> to qualify for temperature outlier (Tech memo TM-20) Current SW846 criterion is $\leq 6^{\circ}\text{C}$ No quals for pH (or temp) if samples preserved by lab immediately upon receipt and within 1 day of collection.
Holding Time	All matrices: 180 days from date sampled Frozen soils, sediments, tissues (-20°C) - HT extended to 1 year	J (pos)/UJ (ND) if holding time exceeded	1	NFG 2020 J (pos)/R (ND)
<b>Instrument Performance</b>				
Tune	Analyzed prior to ICAL tuning solution analyzed 5 times with RSD $\leq 5\%$ Mass calibration < 0.1 amu difference from target mass Resolution < 0.9 amu @ 10% peak height	J(pos)/UJ(ND) if tune criteria not met. R (pos)/R (ND) if no tune performed	5A	Use <b>PJ</b> to evaluate tune. Alternate Resolution criteria may apply based on instrument specs (i.e <0.75 amu at 5% peak height)
Initial Calibration (ICAL)	Based on instrument requirements, blank + 1 standard minimum requirement for calibration If more than 1 standard used, $r \geq 0.995$	J (pos)/UJ (ND) if $r < 0.995$ . If not analyzed at proper frequency R (pos)/R (ND)	5A	$r > 0.995$ or $r2 > 0.99$ , Use PJ if $> 30\%D$ for individual standards
Initial Calibration Verification (ICV)	Independent source analyzed immediately after calibration %R within $\pm 10\%$ of true value	J (pos)/R or UJ (ND) if %R < 75% J (pos)/UJ (ND) if %R < 90% J (pos) if %R > 110% If not analyzed at proper frequency J (pos)/UJ (ND)	5A (H,L) <sup>3</sup>	Qualify all samples in run
Reporting Limit (RL) Standard Low Level ICV/CCV	concentration at RL %R = 70%-130%	J (pos) < 2x RL / R (ND) if %R < 50% J (pos) < 2x RL / UJ (ND) if %R 50 - 69% J (pos) < 2x RL if %R > 130% OR USE For results < 2x RL: J (pos)/UJ (ND) if %R < 70%, J (pos) if %R > 130% If not analyzed at proper frequency J (pos)/UJ (ND)	5A (H,L) <sup>3</sup>	Qualify all samples in run. 6020B: 80%-120%. QAPP/lab limits may vary
<b>Instrument Performance cont'd</b>				
Continuing Calibration Verification (CCV)	Immediately following ICV/ICB, then every two hours or ten samples, and at end of run. %R within $\pm 10\%$ of true value	J (pos)/R (ND) if %R < 75% J (pos)/UJ (ND) if %R < 90% J (pos) if %R > 110%	5B (H,L) <sup>3</sup>	Qualify samples bracketed by CCV outliers

**DATA VALIDATION CRITERIA**

Metals by ICP-MS  
(Based on Inorganic NFG 2017, 2020 and SW-846 6020A) - Draft

QC Element	EcoChem Acceptance Criteria	EcoChem Action for Non-Conformance	Reason Code	Discussion and Comments
Interference Check Samples (ICSA / ICSAB)	ICSAB %R 80% - 120% (85%-115% NFG 2020) for all spiked elements   ICSA   < 2*RL for all unspiked elements	For samples with Al, Ca, Fe, Mg > ICS levels: <b>ICSAB:</b> J ( pos)/R (ND) if %R < 50% J (pos)/UJ (ND) if %R = 50% - 79% (84% 6020B) J (pos) if %R > 120% (115% 6020B) <b>ICSA:</b> J (pos) < 2x ICSA /UJ (ND) for ICSA <Neg MDL J (pos) < 2x ICSA for ICSA > 2x RL NFG 2020 J (pos) < 10x ICSA/UJ (ND) for ICSA < Neg RL	17 (H,L) <sup>3</sup>	Use <b>PJ</b> and molecular interferences to evaluate ICSA to determine if bias is present. Refer to <b>TM-14</b> for additional information. 6020B uses SIC only: unspiked < 2x RL.
<b>Blank Contamination</b>				
Method Blank (MB)	One per matrix per batch of (of ≤ 20 samples) Blank conc < MDL	Action level is 5x absolute value of blank conc. U (pos) if result is < 5X method blank concentration. For negative blanks: J (pos)/UJ (ND) results < 5X action level If not prepared at proper frequency J (pos)/UJ (ND)	7	Refer to <b>TM-02</b> for additional information. Blank Evaluation based on NFG 1994.
Instrument Blanks (ICB/CCB)	After each ICV & CCV   blank concentration   < MDL	Action level is 5x absolute value of blank conc. For positive blanks: U (pos) results < 5X action level For negative blanks: J (pos)/UJ (ND) results < 5X action level If not analyzed at proper frequency J (pos)/UJ (ND)	Pos Blks: 7 Neg Blks: 7L <sup>3</sup>	Use blanks bracketing samples for Qualification Refer to <b>TM-02</b> for additional information. <b>Hierarchy of blank review:</b> <b>#1 - Review MB, qualify as needed #2 - Review IB, qualify as needed #3 - Review FB , qualify as needed</b>
Field Blank (FB)	Blank conc < MDL	U (pos) if result is < 5X action level, as per analyte.	6	Qualify in associated field samples only. Refer to <b>TM-02</b> for additional information.
QC Element	EcoChem Acceptance Criteria	EcoChem Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Precision and Accuracy</b>				
Internal Standards (IS)	Added to all samples. All analytes must be associated with an internal standard >30% of cal blank IS	J(pos)/UJ(ND) all analytes associated with IS outlier	19	
LCS (recovery)	One per matrix per batch (of ≤ 20 samples); LCSD not required %R between 80-120%	J (pos)/R (ND) if %R <50% J (pos)/UJ (ND) if %R 50% - 79% J (pos) if %R > 120% If not prepared at proper frequency J (pos)/UJ (ND)	10 (H,L) <sup>3</sup>	Qualify all samples in batch QAPP may have overriding accuracy limits. NFG Limits: 70% -130%, J (pos)/R (ND) if %R <40% J (pos)/UJ (ND) if %R 40% - 69%. J (pos) if %R > 130% R (pos) > 150% Qualify if only one %R outlier.
LCS/LCSD (RPD)	LCSD not required, if analyzed: RPD ≤ 20%	J (pos)/UJ (ND) if RPD > 20%	9	Qualify all samples in batch QAPP may have overriding precision limits.
MS/MSD (recovery)	One per matrix per batch (of ≤ 20 samples); MSD not required %R between 75-125%	J (pos) if %R > 125% J (pos)/UJ (ND) if %R <75% J (pos)/R (ND) if %R < 30%, unless post digestion spike analyzed, J (pos)/UJ (ND) if post digestion spike %R OK	8 (H,L) <sup>3</sup>	No action if only one spike %R is outside criteria. NA if parent concentration >4x the amount spiked. Qualify all samples in batch. QAPP may have overriding accuracy limits. NFG 2020 If not analyzed at proper frequency J (pos)/UJ (ND)

**DATA VALIDATION CRITERIA**

Metals by ICP-MS  
(Based on Inorganic NFG 2017, 2020 and SW-846 6020A) - Draft

QC Element	EcoChem Acceptance Criteria	EcoChem Action for Non-Conformance	Reason Code	Discussion and Comments
Post Digestion Spikes	If MS is outside 75-125%, post-spike should be analyzed 75%-125%	Only used to support MS qualification decisions	NA	No qualifiers assigned based solely on this element.
MS/MSD (RPD)	MSD not required, if analyzed: RPD ≤ 20%	J (pos)/UJ (ND) if RPD > 20%	9	QAPP may have overriding precision limits.
Laboratory Duplicate	One per matrix per batch (of ≤ 20 samples) RPD ≤ 20% for results ≥ 5x RL Solids (either result): difference < 2X RL for results < 5X RL Aqueous (either result): difference < 1X RL for results < 5X RL	J (pos)/UJ (ND) if RPD > 20% or if difference > control limit	9	Qualify all samples in batch. QAPP may have overriding precision limits. NFG 2020 If not analyzed at proper frequency J (pos)/UJ (ND)
<b>Precision and Accuracy cont'd</b>				
Reference Material (RM, SRM, or CRM)	Result ±20% of the 95% confidence interval of the true value for analytes	J (pos)/UJ (ND) if < LCL J (pos) if > UCL	12 (H,L) <sup>3</sup>	QAPP may have overriding accuracy limits. Some manufacturers may have different RM control limits
Serial Dilution	Analyze one sample per matrix at a 5x dilution %D < 20% for original sample conc. > 25x RL	J(pos)/UJ(ND) if %D > 20% and native sample concentration > 50x MDL	16	Note serial dilutions for soil are reported in ug/L, but the MDL is in mg/kg. The units need to be adjusted. Qualify all samples in batch. NFG 2020: If not analyzed at proper frequency J (pos)/UJ (ND). 6020A: when > 100x MDL %D < 10%. 6020B: when >25x RL %D < 20%
Field Duplicate	Solids: RPD < 50% OR difference < 2X RL (for either result < 5X RL) Aqueous: RPD < 35% OR difference < 1X RL (for either result < 5X RL)	Narrate and qualify if required by project <b>(EcoChem PJ)</b> Qualify only field duplicate samples J(pos)/UJ(ND)	9	QAPP may have overriding precision limits. When one result ND, use MDL value
<b>Compound Quantitation</b>				
Total and Dissolved Comparison	Total > Dissolved	J (pos)/UJ (ND) if Dissolved > Total and results fall outside of standard duplicate precision criteria	14	
Calibration Range	Results < instrument linear range	if result exceeds linear range and sample was not diluted J (pos)	20	
Dilutions, Re- extractions and/or Reanalyses	Report only one result per analyte	Use "DNR" to flag results that will not be reported.	11	<b>TM-04</b> EcoChem Policy for Rejection/Selection Process for Multiple Results

<sup>1</sup> National Functional Guidelines for Inorganic Superfund Data Review, 2020.

<sup>2</sup> Method SW846 6020A Inductively Coupled Plasma-Mass Spectrometry (ICP-MS), Revision 2 July 2014

<sup>3</sup> "H" = high bias indicated; "L" = low bias indicated

<sup>4</sup> SW846, Chapter 3, Inorganic Analytes

(pos): Positive Result

(ND): Not detected

**Mercury by CVAA**  
**(Based on Inorganic NFG 2017, 2020 and SW846 7470A & 7471B) -DRAFT**

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Sample Handling</b>				
Cooler / Storage Temperature Preservation	<b>Solid:</b> Cooler temperature $\leq 6^{\circ}\text{C}$ <b>Aqueous:</b> Nitric Acid to pH < 2 <b>Dissolved Metals:</b> 0.45 $\mu\text{m}$ filter, preserve to pH < 2 after filtration	Cooler Temps: <b>If required by project</b> J (pos)/UJ (ND) 6-10°C, J (pos)/R (ND) >10°C Aqueous: J (pos)/UJ (ND) if pH > 2	1	Use <b>PJ</b> to qualify for temperature outlier (Tech memo TM-20). Current SW846 criterion is $\leq 6^{\circ}\text{C}$ No quals for pH if samples preserved by lab immediately upon receipt and within 1 day of collection. NFG 2020 upper temp limit 10°C, EcoChem PJ: TM-20 is 12°C
Holding Time	28 days from date sampled Frozen solids and tissues HT extended to 6 months	J (pos)/UJ (ND) if HT exceeded	1	
<b>Instrument Performance</b>				
Initial Calibration (ICAL)	Daily Calibration Blank + 5 standards, one $\leq$ RL Correlation coefficient (r) $\geq 0.995$	J (pos)/UJ (ND) if r < 0.995 R (pos)/R (ND) if not performed at required frequency.	5A (H,L) <sup>1</sup>	Use J (pos)/UJ (ND) if > 30%D for individual standards
Initial Calibration Verification (ICV)	Independent source analyzed immediately after ICAL %R within $\pm 15\%$ of true value	J (pos)/UJ (ND) if %R <85% J (pos)/UJ (ND) if not performed at required frequency. J(pos) if %R >115%	5A (H,L) <sup>1</sup>	Qualify all samples in run
Reporting Limit (RL) Standard	Conc = RL %R = 70-130%	J (pos) < 2x RL / R (ND) if %R <50% J (pos) < 2x RL / UJ (ND) if %R 50 - 69% J (pos) < 2x RL if %R > 130%	5A (H,L) <sup>1</sup>	Qualify all samples in run
Continuing Calibration Verification (CCV)	At beginning of run, every ten samples, and again after last sample. %R within $\pm 15\%$ of true value	J (pos)/UJ (ND) if %R <85% J(pos) if %R >115% J (pos)/UJ (ND) if not performed at required frequency.	5B (H,L) <sup>1</sup>	Qualify samples bracketed by CCV outliers
<b>Blank Contamination</b>				
Method Blank (MB)	One per matrix per batch of (of $\leq 20$ samples) Blank conc < MDL	Action level is 5x absolute value of blank conc. U (pos) if result is < 5X method blank concentration. For negative blanks: J (pos)/UJ (ND) results < 5X action level If not prepared at proper frequency J (pos)/UJ (ND)	7	Refer to <b>TM-02</b> for additional information. Blank Evaluation based on NFG 1994

**Mercury by CVAA**  
 (Based on Inorganic NFG 2017, 2020 and SW846 7470A & 7471B) -DRAFT

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Blank Contamination</b>				
Instrument Blanks (ICB/CCB)	After each ICV & CCV   blank concentration   < MDL	Action level is 5x absolute value of blank conc. For positive blanks: U (pos) results < 5X action level For negative blanks: J (pos)/UJ (ND) results < 5X action level If not analyzed at proper frequency J (pos)/UJ (ND)	Pos Blanks: 7 Neg Blanks: 7L <sup>1</sup>	Use blanks bracketing samples for Qualification Refer to <b>TM-02</b> for additional information. <b>Hierarchy of blank review:</b> <b>#1 - Review MB, qualify as needed</b> <b>#2 - Review IB , qualify as needed</b> <b>#3 - Review FB , qualify as needed</b>
Field Blank (FB)	Blank conc < MDL	U (pos) if result is < 5X action level, as per analyte.	6	Qualify in associated field samples only. Refer to <b>TM-02</b> for additional information.
<b>Precision and Accuracy</b>				
Laboratroy Control Sample (recovery)	One per matrix per batch (of ≤ 20 samples); LCSD not required %R between 80-120%	J (pos)/R (ND) if %R <50% J (pos)/UJ (ND) if %R 50% - 79% J (pos) if %R > 120%	10 (H,L) <sup>1</sup>	Qualify all samples in batch QAPP may have overriding accuracy limits. NFG 2020 If not analyzed at proper frequency J (pos)/UJ (ND). Qualify if only one %R outlier.
LCS/LCSD (RPD)	LCSD not required, if analyzed: RPD ≤ 20%	J (pos)/UJ (ND) if RPD > 20%	9	Qualify all samples in batch QAPP may have overriding precision limits.
Matris Spike/Matrix Spike Duplicate MS/MSD (recovery)	One per matrix per batch (of ≤ 20 samples); MSD not required %R between 75-125%	J (pos) if %R > 125% J (pos)/UJ (ND) if %R <75% J (pos)/R (ND) if %R < 30%	8 (H,L) <sup>1</sup>	No action if only one spike %R is outside criteria. NA if parent concentration >4x the amount spiked. Qualify all samples in batch. QAPP may have overriding accuracy limits. NFG 2020 If not analyzed at proper frequency J (pos)/UJ (ND)
MS/MSD (RPD)	MSD not required, if analyzed: RPD ≤ 20%	J (pos)/UJ (ND) if RPD > 20%	9	QAPP may have overriding precision limits.
Laboratory Duplicate	One per matrix per batch (of ≤ 20 samples) RPD ≤ 20% for results ≥ 5x RL  Solids (either result): difference < 2X RL for results < 5X RL Aqueous (either result): difference < 1X RL for results < 5X RL	J (pos)/UJ (ND) if RPD > 20% or if difference > control limit	9	Qualify all samples in batch. QAPP may have overriding precision limits. NFG 2020 If not analyzed at proper frequency J (pos)/UJ (ND)

**Mercury by CVAA  
(Based on Inorganic NFG 2017, 2020 and SW846 7470A & 7471B) -DRAFT**

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Precision and Accuracy</b>				
Reference Material (RM, SRM, or CRM)	Result $\pm 20\%$ of the 95% confidence interval of the true value for analytes	J (pos)/UJ (ND) if < LCL J (pos) if > UCL	12 (H,L) <sup>1</sup>	QAPP may have overriding accuracy limits. Some manufacturers may have different RM control limits
Field Duplicate	Solids: RPD < 50% OR difference < 2X RL (for either result < 5X RL) Aqueous: RPD < 35% OR difference < 1X RL (for either result < 5X RL)	Qualify only parent and field duplicate samples J (pos)/UJ (ND)	9	QAPP may have overriding precision limits. Client/QAPP may not require qualification based on field precision. When one result ND, use MDL value
<b>Compound Quantitation</b>				
Total and Dissolved Comparison	Total > Dissolved	J (pos)/UJ (ND) if Dissolved > Total and results fall outside of standard duplicate precision criteria	14	
Calibration Range	Results < instrument linear range	if result exceeds linear range and sample was not diluted J (pos)	20	
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Use "DNR" to flag results that will not be reported.	11	<b>TM-04</b> EcoChem Policy for Rejection/Selection Process for Multiple Results

National Functional Guidelines for Inorganic Superfund Data Review, January 2017 & November 2020.

(pos): Positive Result

Method SW846 7470A Mercury in Liquid Waste (Manual Cold-Vapor Technique), Revision 1, September 1994.

(ND): Not Detected

Method SW846 7471B Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique), Revision 2, February 2007.

SW846, Chapter 3, Inorganic Analytes

<sup>1</sup> "H" = high bias indicated; "L" = low bias indicated

# DATA VALIDATION CRITERIA

Table: CONV-Probe  
 Revision No.: 1  
 Last Rev. Date: 9/21/23  
 Page: 1 of 1

## Conventional Methods by Probe (e.g., pH, conductivity, dissolved oxygen) - DRAFT (Based on Inorganic NFG 2017, 2020 and EPA methods)

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Sample Handling</b>				
Cooler/Storage Temperature Preservation	Cooler temperature: ≤6°C Preservation: Analyte/Method Specific	J (pos)/UJ (ND) if preservation requirements not met	1	Use <b>PJ</b> to qualify for cooler temp outliers. No qualifiers required if received same day as collection Notify PM of any rejected data
Holding Time	Analyte/Method Specific	J (pos)/UJ (ND) if holding time exceeded	1	NFG 2020: J (pos)/R (ND)
<b>Instrument Performance/Accuracy</b>				
Calibration	Where applicable to method probe calibrated according to manufacturer specifications	J (pos)/UJ (ND) if not calibrated	5A	
Calibration Verification / Laboratory Control Sample	Where applicable to method check standard analyzed to verify calibration of probe	J(D)/UJ(ND) if %R < LCL J(D) if %R > UCL Not analyzed at the required frequency: J (pos)/UJ (ND)	5B (H,L) <sup>1</sup>	Qualify all samples in run
<b>Precision</b>				
Laboratory Duplicate	One per matrix per batch (of ≤ 20 samples) RPD ≤ 20% for results ≥ 5x RL  Solids: difference < 2X RL if either result < 5X RL Aqueous: difference < 1X RL if either result < 5X RL	J (pos)/UJ (ND) if RPD > 20% or if difference > control limit NFG 2020: If not prepared at proper frequency: J (pos)/UJ (ND)	9	Qualify all samples in batch. QAPP may have overriding precision limits.
Field Duplicate	Solids: RPD < 50% (for results ≥ 5x RL) OR difference < 2X RL (if either result < 5X RL)  Aqueous: RPD < 35% (for results ≥ 5x RL) OR difference < 1X RL (if either result < 5X RL)	Qualify only parent and field duplicate samples J (pos)/UJ (ND)	9	QAPP may have overriding precision limits. Client/QAPP may not require qualification based on field precision. When one result ND, use MDL value
<b>Compound Quantitation</b>				
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Use "DNR" to flag results that will not be reported.	11	<b>TM-04</b> EcoChem Policy for Rejection/Selection Process for Multiple Results  Note: If result is DNR-flagged for specific QC issue, use reason code for that issue

National Functional Guidelines for Inorganic Superfund Data Review, January 2017.  
 SW846 or EPA Standard Methods

<sup>1</sup>"H" = high bias indicated; "L" = low bias indicated

(pos): Positive Result  
 (ND): Not Detected

# DATA VALIDATION CRITERIA

## Conventional Methods by Gravimetric Analysis (e.g., Total Solids, Total Dissolved Solids, Total Suspended Solids, Grain Size) (Based on Inorganic NFG 2017 & 2020 and EPA methods)

QC Element	EcoChem Acceptance Criteria	Source of Criteria	EcoChem Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Sample Handling</b>					
Cooler/Storage Temperature Preservation	Cooler temperature: 4°C±2°C Preservation: Analyte/Method Specific	Method <sup>(1)</sup> NFG <sup>(2)</sup>	J (pos)/UJ (ND) if preservation requirements not met	1	Use <b>PJ</b> to qualify for cooler temp outliers.
Holding Time	Analyte/Method Specific	Method NFG <sup>(2)</sup>	J (pos)/UJ (ND) if holding time exceeded	1	
<b>Blank Contamination</b>					
Method Blank (MB)	If required by method, one per matrix per batch of (of ≤ 20 samples) Blank conc < MDL	NFG <sup>(1)</sup> Method <sup>(2)</sup>	U (pos) if result is < 5X method blank concentration	7	Refer to <b>TM-02</b> for additional information. Blank Evaluation based on NFG 1994
<b>Precision and Accuracy</b>					
LCS (If appropriate to method)	One per matrix per batch (of ≤ 20 samples) %R between 80-120%	Method <sup>(2)</sup>	J (pos)/R (ND) if %R < 50% J (pos)/UJ (ND) if %R 50% - 79% J (pos) if %R > 120%	10 (H,L) <sup>3</sup>	Qualify all samples in batch QAPP may have overriding accuracy limits.
Reference Material (RM, SRM, or CRM)	Result ±20% of the 95% confidence interval of the true value for analytes	EcoChem standard policy	J (pos)/UJ (ND) if < LCL J (pos) if > UCL	12 (H,L) <sup>3</sup>	QAPP may have overriding accuracy limits. Some manufacturers may have different RM control limits
Laboratory Duplicate	One per matrix per batch (of ≤ 20 samples) RPD ≤ 20% for results ≥ 5x RL Solids: difference < 2X RL for results < 5X RL Aqueous: difference < 1X RL for results < 5X RL	NFG <sup>(1)</sup> Method <sup>(2)</sup>	J (pos)/UJ (ND) if RPD > 20% For Grain Size, no action if results for fraction are less than 5%	9	Qualify all samples in batch, except Grain Size - qualify parent only. QAPP may have overriding precision limits.
Field Duplicate	Solids: RPD < 50% (for results ≥ 5x RL) OR difference < 2X RL (for results < 5X RL) Aqueous: RPD < 35% (for results ≥ 5x RL) OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	Qualify only parent and field duplicate samples J (pos)/UJ (ND)	9	QAPP may have overriding precision limits. Client/QAPP may not require qualification based on field precision.

**Conventional Methods by Gravimetric Analysis (e.g., Total Solids, Total Dissolved Solids, Total Suspended Solids, Grain Size)  
(Based on Inorganic NFG 2017 & 2020 and EPA methods)**

QC Element	EcoChem Acceptance Criteria	Source of Criteria	EcoChem Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Compound Quantitation</b>					
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte per sample	EcoChem standard policy	Use "DNR" to flag results that will not be reported.	11	

<sup>1</sup> National Functional Guidelines for Inorganic Superfund Data Review, January 2017 & November 2020.

<sup>2</sup> SW846 or EPA Standard Methods

<sup>3</sup> "H" = high bias indicated; "L" = low bias indicated

(pos): Positive Result

(ND): Not Detected

# DATA VALIDATION CRITERIA

Table: CONV-Calibrated  
 Revision No.: 1  
 Last Rev. Date: 9/21/23  
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## Conventional Methods with Instrument Calibrations (e.g., Ion Chromatography, Total Organic Carbon) - DRAFT (Based on Inorganic NFG 2017, 2020 and EPA methods)

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Sample Handling</b>				
Cooler/Storage Temperature Preservation	Cooler temperature: ≤6°C Preservation: Analyte/Method Specific	If preservation requirements not met: 6-10°C: J (pos)/UJ (ND), >10°C: J (pos)/R (ND)	1	Use <b>PJ</b> to qualify for cooler temp outliers. No qualifiers required if received same day as collection Notify PM of any rejected data
Holding Time	Analyte/Method Specific	J (pos)/UJ (ND) if holding time exceeded	1	NFG 2020: J (pos)/R (ND)
<b>Instrument Performance</b>				
Initial Calibration (ICAL)	blank + multiple standards as per method requirements r ≥ 0.995	J (pos)/UJ (ND) for r < 0.995 Not analyzed at the required frequency: R (pos)/R (ND)	5A	Individual standards < 30%D Notify PM of any rejected data
Initial Calibration Verification (ICV)	Independent source analyzed immediately after calibration %R method specific	J (pos)/UJ (ND) if %R < lower control limit (LCL) J (pos) if %R > upper control limit (UCL) Not analyzed at the required frequency: J (pos)/UJ (ND)	5A (H,L) <sup>1</sup>	Qualify all samples in run
Continuing Calibration Verification (CCV)	immediately following ICV, every 10 samples, and end of run %R method specific	J(pos)/UJ(ND) if %R < LCL J(pos) if %R > UCL Not analyzed at the required frequency: J (pos)/UJ (ND)	5B (H,L) <sup>1</sup>	Qualify samples bracketed by CCV outliers
<b>Blank Contamination</b>				
Method Blank (MB)	One per matrix per batch of (of ≤ 20 samples) Blank conc < MDL	For positive blanks: U (pos) results < 5X action level For negative blanks: J (pos)/UJ (ND) results < 5X action level Not analyzed at the required frequency: J (pos)/UJ (ND)	7	Refer to <b>TM-02</b> for additional information.
Instrument Blanks (ICB/CCB)	After each ICV & CCV   blank concentration   < MDL	Action level is 5x absolute value of blank conc. For positive blanks: U (pos) results < 5X action level For negative blanks: J (pos)/UJ (ND) results < 5X action level Not analyzed at the required frequency: J (pos)/UJ (ND)	Pos Blanks: 7 Neg Blanks: 7L <sup>1</sup>	Use blanks bracketing samples for Qualification Refer to <b>TM-02</b> for additional information. <b>Hierarchy of blank review:</b> #1 - Review MB, qualify as needed #2 - Review IB, qualify as needed #3 - Review FB, qualify as needed

# DATA VALIDATION CRITERIA

Table: CONV-Calibrated

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## Conventional Methods with Instrument Calibrations (e.g., Ion Chromatography, Total Organic Carbon) - DRAFT (Based on Inorganic NFG 2017, 2020 and EPA methods)

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Blank Contamination</b>				
Field Blank (FB)	Blank conc < MDL	For positive blanks: U (pos) results < 5X action level For negative blanks: J (pos)/UJ (ND) results < 5X action level	6	Qualify in associated field samples only. Refer to <b>TM-02</b> for additional information.
<b>Precision and Accuracy</b>				
Laboratory Control Sample (LCS)	One per matrix per batch (of ≤ 20 samples) %R within Method control limits (or Laboratory control limits if none specified in method)	J (pos)/UJ (ND) if %R < LCL J (pos) if %R > UCL J (pos)/ R (ND) if %R < 50% J (pos) if %R > 140% NFG 2020: If not prepared at proper frequency: J (pos)/UJ (ND)	10 (H,L) <sup>1</sup>	If LCS/LCSD analyzed, qualify if only one %R is outside of control limits. Qualify all samples in batch QAPP may have overriding accuracy limits.  Notify PM of any rejected data
Reference Materials (RM, CRM, SRM)	Result ±20% of the 95% confidence interval of the true value for analytes	J (pos)/UJ (ND) if < LCL J (pos) if > UCL	12 (H,L) <sup>1</sup>	QAPP may have overriding accuracy limits. Some manufacturers may have different RM control limits
Matrix Spike/ Matrix Spike Duplicate (MS/MSD)	Where applicable to method; MSD may not be required One per matrix per batch (of ≤ 20 samples) For samples <4x spike level, %R within method control limits (or Laboratory control limits if	J (pos)/UJ (ND) if %R < LCL J (pos) if %R > UCL NFG 2020: If not prepared at proper frequency: J (pos)/UJ (ND)	8 (H,L) <sup>1</sup>	Qualify all samples in batch No action if native analyte concentration ≥ 4x spike added. Qualify all samples in batch. QAPP may have overriding accuracy limits. MS/MSD: No action if only one spike %R is outside criteria.
Laboratory Duplicate (or MS/MSD)	One per matrix per batch (of ≤ 20 samples) RPD ≤ 20% for results ≥ 5x RL  Solids: diff < 2X RL if either result < 5X RL Aqueous: diff < 1X RL if either result < 5X RL	J (pos)/UJ (ND) if RPD > 20% or if difference > control limit NFG 2020: If not prepared at proper frequency: J (pos)/UJ (ND)	9	Qualify all samples in batch. QAPP may have overriding precision limits.
Field Duplicate	Solids: RPD <50% (for results ≥ 5x RL) OR difference < 2X RL (if either result < 5X RL)  Aqueous: RPD <35% (for results ≥ 5x RL) OR difference < 1X RL (if either result < 5X RL)	Qualify only parent and field duplicate samples J (pos)/UJ (ND)	9	QAPP may have overriding precision limits. Client/QAPP may not require qualification based on field precision. When one result ND, use MDL value
<b>Compound Quantitation</b>				
Linear Range	Sample concentrations less than highest calibration standard	If result exceeds linear range & sample was not diluted: J (pos)	20	

# DATA VALIDATION CRITERIA

Table: CONV-Calibrated  
 Revision No.: 1  
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**Conventional Methods with Instrument Calibrations (e.g., Ion Chromatography, Total Organic Carbon) - DRAFT**  
 (Based on Inorganic NFG 2017, 2020 and EPA methods)

QC Element	Acceptance Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
<b>Compound Quantitation</b>				
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Use "DNR" to flag results that will not be reported.	11	<b>TM-04</b> EcoChem Policy for Rejection/Selection Process for Multiple Results  Note: If result is DNR-flagged for specific QC issue, use reason code for that issue

National Functional Guidelines for Inorganic Superfund Data Review, January 2017.  
 SW846 or EPA Standard Methods

(pos): Positive Result  
 (ND): Not Detected

<sup>1</sup>"H" = high bias indicated; "L" = low bias indicated



## **APPENDIX B**

# **QUALIFIED DATA SUMMARY TABLE**

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	1,2,3,4,6,7,8,9-OCDD	14800	pg/g	E	J	20
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	1,2,3,7,8-PeCDD	5.74	pg/g	K	J	25
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	2,3,7,8-TCDF	6.14	pg/g		DNR	11
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	Total HpCDD w/ EMPCs	2800	pg/g	E	J	20
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	Total HpCDF w/ EMPCs	1900	pg/g	JK	U	25
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	Total HxCDF w/ EMPCs	675	pg/g	JK	U	25
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	Total PeCDD w/ EMPCs	71.9	pg/g	JK	U	25
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	Total PeCDF w/ EMPCs	304	pg/g	JK	U	25
23314	LDW24-SC1341F-FD	23314001	EPA 1613B	Total TCDD w/ EMPCs	15.7	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	1,2,3,4,7,8-HxCDD	0.928	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	1,2,3,6,7,8-HxCDF	4.35	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	1,2,3,7,8-PeCDD	0.729	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	Total HxCDD w/ EMPCs	43.7	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	Total HxCDF w/ EMPCs	172	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	Total PeCDD w/ EMPCs	9.77	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	Total PeCDF w/ EMPCs	53.6	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	Total TCDD w/ EMPCs	3.56	pg/g	JK	U	25
23314	LDW24-SC1343H	23314002	EPA 1613B	Total TCDF w/ EMPCs	20.1	pg/g	JK	U	25
23314	LDW24-SC1343J	23314003	EPA 1613B	Total HxCDD w/ EMPCs	2.81	pg/g	JK	U	25
23314	LDW24-SC1343J	23314003	EPA 1613B	Total PeCDD w/ EMPCs	1.37	pg/g	JK	U	25
23314	LDW24-SC1343J	23314003	EPA 1613B	Total PeCDF w/ EMPCs	0.362	pg/g	JK	U	25
23314	LDW24-SC1343J	23314003	EPA 1613B	Total TCDD w/ EMPCs	1.7	pg/g	JK	U	25
23314	LDW24-SC1343J	23314003	EPA 1613B	Total TCDF w/ EMPCs	1.57	pg/g	JK	U	25
23314	LDW24-SC1344H	23314004	EPA 1613B	1,2,3,7,8-PeCDF	0.929	pg/g	JK	U	25
23314	LDW24-SC1344H	23314004	EPA 1613B	2,3,7,8-TCDF	1.18	pg/g		DNR	11
23314	LDW24-SC1344H	23314004	EPA 1613B	Total HxCDF w/ EMPCs	70.5	pg/g	JK	U	25
23314	LDW24-SC1344H	23314004	EPA 1613B	Total PeCDD w/ EMPCs	12.6	pg/g	JK	U	25
23314	LDW24-SC1344H	23314004	EPA 1613B	Total PeCDF w/ EMPCs	48.7	pg/g	JK	U	25
23314	LDW24-SC1344H	23314004	EPA 1613B	Total TCDD w/ EMPCs	6.42	pg/g	JK	U	25
23314	LDW24-SC1344H	23314004	EPA 1613B	Total TCDF w/ EMPCs	32.5	pg/g	JK	U	25
23314	LDW24-SC1344J	23314005	EPA 1613B	1,2,3,7,8,9-HxCDF	0.917	pg/g	JK	U	25
23314	LDW24-SC1344J	23314005	EPA 1613B	1,2,3,7,8-PeCDD	1.34	pg/g	JK	U	25
23314	LDW24-SC1344J	23314005	EPA 1613B	2,3,7,8-TCDF	1.75	pg/g		DNR	11
23314	LDW24-SC1344J	23314005	EPA 1613B	Total HxCDD w/ EMPCs	30.2	pg/g	J	J	9A
23314	LDW24-SC1344J	23314005	EPA 1613B	Total HxCDF w/ EMPCs	81	pg/g	JK	U	25
23314	LDW24-SC1344J	23314005	EPA 1613B	Total PeCDD w/ EMPCs	14.5	pg/g	JK	U	25
23314	LDW24-SC1344J	23314005	EPA 1613B	Total PeCDF w/ EMPCs	120	pg/g	JK	U	25

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
23314	LDW24-SC1344J	23314005	EPA 1613B	Total TCDD w/ EMPCs	7.6	pg/g	JK	UJ	9A,25
23314	LDW24-SC1344J	23314005	EPA 1613B	Total TCDF w/ EMPCs	77.5	pg/g	K	J	25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	1,2,3,7,8,9-HxCDD	1.79	pg/g	JK	U	25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	1,2,3,7,8,9-HxCDF	1.13	pg/g	JK	U	25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	1,2,3,7,8-PeCDD	1.46	pg/g	JK	U	25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	2,3,7,8-TCDF	2.31	pg/g		DNR	11
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	Total HxCDD w/ EMPCs	40.1	pg/g	JK	UJ	9A,25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	Total HxCDF w/ EMPCs	90.3	pg/g	JK	U	25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	Total PeCDD w/ EMPCs	17.1	pg/g	JKQ	UJ	23H,25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	Total PeCDF w/ EMPCs	127	pg/g	JKQ	UJ	23H,25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	Total TCDD w/ EMPCs	11.4	pg/g	JK	UJ	9A,25
23314	LDW24-SC1344J DUP	23314006	EPA 1613B	Total TCDF w/ EMPCs	85.6	pg/g	K	J	25
23314	LDW24-IT1376A-FD	23314007	EPA 1613B	1,2,3,4,6,7,8,9-OCDD	4430	pg/g	E	J	20
23314	LDW24-IT1376A-FD	23314007	EPA 1613B	2,3,7,8-TCDD	0.663	pg/g	JK	U	25
23314	LDW24-IT1376A-FD	23314007	EPA 1613B	2,3,7,8-TCDF	44.4	pg/g		DNR	11
23314	LDW24-IT1376A-FD	23314007	EPA 1613B	Total HxCDD w/ EMPCs	200	pg/g	JK	U	25
23314	LDW24-IT1376A-FD	23314007	EPA 1613B	Total HxCDF w/ EMPCs	133	pg/g	JK	U	25
23314	LDW24-IT1376A-FD	23314007	EPA 1613B	Total PeCDD w/ EMPCs	37.4	pg/g	JK	U	25
23314	LDW24-IT1376A-FD	23314007	EPA 1613B	Total PeCDF w/ EMPCs	433	pg/g	JK	U	25
23314	LDW24-IT1376A-FD	23314007	EPA 1613B	Total TCDD w/ EMPCs	7.63	pg/g	JK	U	25
23314	LDW24-IT1376B	23314008	EPA 1613B	1,2,3,4,7,8,9-HpCDF	17.1	pg/g	JK	U	25
23314	LDW24-IT1376B	23314008	EPA 1613B	1,2,3,7,8-PeCDD	19.7	pg/g	JK	U	25
23314	LDW24-IT1376B	23314008	EPA 1613B	2,3,7,8-TCDF	62.7	pg/g	K	DNR	11
23314	LDW24-IT1376B	23314008	EPA 1613B	Total HpCDF w/ EMPCs	665	pg/g	JK	U	25
23314	LDW24-IT1376B	23314008	EPA 1613B	Total HxCDD w/ EMPCs	591	pg/g	JK	U	25
23314	LDW24-IT1376B	23314008	EPA 1613B	Total HxCDF w/ EMPCs	689	pg/g	JK	U	25
23314	LDW24-IT1376B	23314008	EPA 1613B	Total PeCDD w/ EMPCs	202	pg/g	JK	U	25
23314	LDW24-IT1376B	23314008	EPA 1613B	Total TCDD w/ EMPCs	71.7	pg/g	K	J	25
23314	LDW24-IT1376B	23314008	EPA 1613B	Total TCDF w/ EMPCs	5080	pg/g	EK	J	20,25
23314	LDW24-SC1533	23314009	EPA 1613B	1,2,3,4,7,8-HxCDF	0.361	pg/g	JK	U	25
23314	LDW24-SC1533	23314009	EPA 1613B	1,2,3,6,7,8-HxCDD	0.64	pg/g	JK	U	25
23314	LDW24-SC1533	23314009	EPA 1613B	1,2,3,6,7,8-HxCDF	0.196	pg/g	JK	U	25
23314	LDW24-SC1533	23314009	EPA 1613B	1,2,3,7,8,9-HxCDD	0.285	pg/g	JK	U	25
23314	LDW24-SC1533	23314009	EPA 1613B	2,3,4,6,7,8-HxCDF	0.196	pg/g	BJ	U	7
23314	LDW24-SC1533	23314009	EPA 1613B	Total HxCDD w/ EMPCs	8.53	pg/g	JK	U	25
23314	LDW24-SC1533	23314009	EPA 1613B	Total HxCDF w/ EMPCs	4.29	pg/g	JK	U	25
23314	LDW24-SC1533	23314009	EPA 1613B	Total PeCDD w/ EMPCs	0.371	pg/g	JK	U	25

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
23314	LDW24-SC1533	23314009	EPA 1613B	Total PeCDF w/ EMPCs	1.47	pg/g	JK	U	25
23314	LDW24-SS1829	23314010	EPA 1613B	1,2,3,4,6,7,8,9-OCDD	9470	pg/g	E	J	20
23314	LDW24-SS1829	23314010	EPA 1613B	1,2,3,4,7,8-HxCDF	5.85	pg/g	K	J	25
23314	LDW24-SS1829	23314010	EPA 1613B	1,2,3,7,8-PeCDD	2.08	pg/g	JK	U	25
23314	LDW24-SS1829	23314010	EPA 1613B	2,3,7,8-TCDF	1.82	pg/g	K	DNR	11
23314	LDW24-SS1829	23314010	EPA 1613B	Total HpCDF w/ EMPCs	296	pg/g	JK	U	25
23314	LDW24-SS1829	23314010	EPA 1613B	Total HxCDF w/ EMPCs	109	pg/g	JK	U	25
23314	LDW24-SS1829	23314010	EPA 1613B	Total PeCDD w/ EMPCs	19.7	pg/g	JK	U	25
23314	LDW24-SS1829	23314010	EPA 1613B	Total PeCDF w/ EMPCs	44.1	pg/g	JK	U	25
23314	LDW24-SS1829	23314010	EPA 1613B	Total TCDD w/ EMPCs	2.55	pg/g	JK	U	25
23314	LDW24-SS1829	23314010	EPA 1613B	Total TCDF w/ EMPCs	20.6	pg/g	K	J	25
23314	LDW24-SC1382F	23314011	EPA 1613B	1,2,3,7,8-PeCDD	1.77	pg/g	JK	U	25
23314	LDW24-SC1382F	23314011	EPA 1613B	2,3,7,8-TCDF	1.77	pg/g		DNR	11
23314	LDW24-SC1382F	23314011	EPA 1613B	Total HpCDF w/ EMPCs	573	pg/g	JK	U	25
23314	LDW24-SC1382F	23314011	EPA 1613B	Total HxCDD w/ EMPCs	78.4	pg/g	JK	U	25
23314	LDW24-SC1382F	23314011	EPA 1613B	Total HxCDF w/ EMPCs	195	pg/g	JK	U	25
23314	LDW24-SC1382F	23314011	EPA 1613B	Total PeCDD w/ EMPCs	20.9	pg/g	JK	U	25
23314	LDW24-SC1382F	23314011	EPA 1613B	Total PeCDF w/ EMPCs	75.9	pg/g	JK	U	25
23314	LDW24-SC1382F	23314011	EPA 1613B	Total TCDD w/ EMPCs	7.44	pg/g	JK	U	25
23314	LDW24-SC1382F	23314011	EPA 1613B	Total TCDF w/ EMPCs	42.2	pg/g	K	J	25
23314	LDW24-IT1829	23314012	EPA 1613B	1,2,3,4,6,7,8,9-OCDD	14400	pg/g	E	J	20
23314	LDW24-IT1829	23314012	EPA 1613B	1,2,3,4,7,8-HxCDD	5.3	pg/g	K	J	25
23314	LDW24-IT1829	23314012	EPA 1613B	2,3,7,8-TCDF	1.61	pg/g		DNR	11
23314	LDW24-IT1829	23314012	EPA 1613B	Total HpCDD w/ EMPCs	7300	pg/g	E	J	20
23314	LDW24-IT1829	23314012	EPA 1613B	Total HxCDD w/ EMPCs	442	pg/g	JK	U	25
23314	LDW24-IT1829	23314012	EPA 1613B	Total HxCDF w/ EMPCs	162	pg/g	JK	U	25
23314	LDW24-IT1829	23314012	EPA 1613B	Total PeCDD w/ EMPCs	26.3	pg/g	JK	U	25
23314	LDW24-IT1829	23314012	EPA 1613B	Total PeCDF w/ EMPCs	59.3	pg/g	JK	U	25
23314	LDW24-IT1829	23314012	EPA 1613B	Total TCDD w/ EMPCs	4.35	pg/g	JK	U	25
23314	LDW24-IT1829	23314012	EPA 1613B	Total TCDF w/ EMPCs	25.5	pg/g	K	J	25
23314	LDW24-SS1377	23314013	EPA 1613B	1,2,3,4,7,8,9-HpCDF	0.527	pg/g	JK	U	25
23314	LDW24-SS1377	23314013	EPA 1613B	1,2,3,7,8,9-HxCDD	0.923	pg/g	JK	U	25
23314	LDW24-SS1377	23314013	EPA 1613B	1,2,3,7,8-PeCDD	0.384	pg/g	JK	U	25
23314	LDW24-SS1377	23314013	EPA 1613B	2,3,4,6,7,8-HxCDF	0.453	pg/g	BJK	U	7,25
23314	LDW24-SS1377	23314013	EPA 1613B	Total HpCDF w/ EMPCs	18.6	pg/g	JK	U	25
23314	LDW24-SS1377	23314013	EPA 1613B	Total HxCDD w/ EMPCs	10.6	pg/g	JK	U	25
23314	LDW24-SS1377	23314013	EPA 1613B	Total HxCDF w/ EMPCs	10.4	pg/g	JK	U	25

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
23314	LDW24-SS1377	23314013	EPA 1613B	Total PeCDD w/ EMPCs	1.75	pg/g	JK	U	25
23314	LDW24-SC1383E	23314014	EPA 1613B	1,2,3,4,7,8-HxCDD	1.13	pg/g	JK	U	25
23314	LDW24-SC1383E	23314014	EPA 1613B	1,2,3,7,8-PeCDD	0.879	pg/g	JK	U	25
23314	LDW24-SC1383E	23314014	EPA 1613B	2,3,7,8-TCDF	1.27	pg/g	K	DNR	11
23314	LDW24-SC1383E	23314014	EPA 1613B	Total HxCDD w/ EMPCs	73.5	pg/g	JK	U	25
23314	LDW24-SC1383E	23314014	EPA 1613B	Total PeCDD w/ EMPCs	12.4	pg/g	JK	U	25
23314	LDW24-SC1383E	23314014	EPA 1613B	Total PeCDF w/ EMPCs	106	pg/g	JK	U	25
23314	LDW24-SC1383E	23314014	EPA 1613B	Total TCDD w/ EMPCs	4.5	pg/g	JK	U	25
23314	LDW24-SC1383E	23314014	EPA 1613B	Total TCDF w/ EMPCs	22.8	pg/g	JK	U	25
23314	LDW24-IT1522B	23314015	EPA 1613B	1,2,3,7,8-PeCDD	0.744	pg/g	JK	U	25
23314	LDW24-IT1522B	23314015	EPA 1613B	1,2,3,7,8-PeCDF	0.374	pg/g	JK	U	25
23314	LDW24-IT1522B	23314015	EPA 1613B	Total HxCDD w/ EMPCs	21	pg/g	JK	U	25
23314	LDW24-IT1522B	23314015	EPA 1613B	Total HxCDF w/ EMPCs	20.8	pg/g	JK	U	25
23314	LDW24-IT1522B	23314015	EPA 1613B	Total PeCDD w/ EMPCs	5.11	pg/g	JK	U	25
23314	LDW24-IT1522B	23314015	EPA 1613B	Total PeCDF w/ EMPCs	12	pg/g	JK	U	25
23314	LDW24-IT1522B	23314015	EPA 1613B	Total TCDF w/ EMPCs	8.38	pg/g	JK	U	25
23314	LDW24-IT1522C	23314016	EPA 1613B	1,2,3,4,6,7,8-HpCDF	0.346	pg/g	JK	U	25
23314	LDW24-IT1522C	23314016	EPA 1613B	Total HpCDD w/ EMPCs	4.27	pg/g	JK	U	25
23314	LDW24-IT1522C	23314016	EPA 1613B	Total HpCDF w/ EMPCs	0.74	pg/g	JK	U	25
23314	LDW24-IT1522C	23314016	EPA 1613B	Total HxCDD w/ EMPCs	0.872	pg/g	JK	U	25
23314	LDW24-SC1544F	23314017	EPA 1613B	1,2,3,7,8,9-HxCDF	1.93	pg/g	JK	U	25
23314	LDW24-SC1544F	23314017	EPA 1613B	1,2,3,7,8-PeCDD	1.5	pg/g	JK	U	25
23314	LDW24-SC1544F	23314017	EPA 1613B	2,3,7,8-TCDF	1.48	pg/g		DNR	11
23314	LDW24-SC1544F	23314017	EPA 1613B	Total HpCDF w/ EMPCs	212	pg/g	JK	U	25
23314	LDW24-SC1544F	23314017	EPA 1613B	Total HxCDF w/ EMPCs	104	pg/g	JK	U	25
23314	LDW24-SC1544F	23314017	EPA 1613B	Total PeCDD w/ EMPCs	15.2	pg/g	JK	U	25
23314	LDW24-SC1544F	23314017	EPA 1613B	Total PeCDF w/ EMPCs	73.2	pg/g	JK	U	25
23314	LDW24-SC1544F	23314017	EPA 1613B	Total TCDD w/ EMPCs	7.57	pg/g	JK	U	25
23314	LDW24-SC1544F	23314017	EPA 1613B	Total TCDF w/ EMPCs	41.5	pg/g	K	J	25
23314	LDW24-SC1544H	23314018	EPA 1613B	1,2,3,4,6,7,8,9-OCDF	0.799	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	1,2,3,4,6,7,8-HpCDF	0.488	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	1,2,3,4,7,8-HxCDF	0.179	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	1,2,3,7,8-PeCDF	0.173	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	Total HpCDD w/ EMPCs	2.59	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	Total HpCDF w/ EMPCs	1.33	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	Total HxCDD w/ EMPCs	1.17	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	Total HxCDF w/ EMPCs	0.612	pg/g	BJK	U	25

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
23314	LDW24-SC1544H	23314018	EPA 1613B	Total PeCDF w/ EMPCs	0.893	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	Total TCDD w/ EMPCs	0.277	pg/g	JK	U	25
23314	LDW24-SC1544H	23314018	EPA 1613B	Total TCDF w/ EMPCs	0.847	pg/g	JK	U	25
23314	LDW24-SC1532A	23314019	EPA 1613B	1,2,3,6,7,8-HxCDF	1.8	pg/g	JK	U	25
23314	LDW24-SC1532A	23314019	EPA 1613B	1,2,3,7,8-PeCDD	1.46	pg/g	JK	U	25
23314	LDW24-SC1532A	23314019	EPA 1613B	2,3,7,8-TCDF	1.15	pg/g		DNR	11
23314	LDW24-SC1532A	23314019	EPA 1613B	Total HxCDF w/ EMPCs	58.8	pg/g	JK	U	25
23314	LDW24-SC1532A	23314019	EPA 1613B	Total PeCDD w/ EMPCs	11.9	pg/g	JK	U	25
23314	LDW24-SC1532A	23314019	EPA 1613B	Total PeCDF w/ EMPCs	24.5	pg/g	JK	U	25
23314	LDW24-SC1532A	23314019	EPA 1613B	Total TCDD w/ EMPCs	4.94	pg/g	JK	U	25
23314	LDW24-SC1532A	23314019	EPA 1613B	Total TCDF w/ EMPCs	13.3	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	1,2,3,4,7,8,9-HpCDF	0.412	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	1,2,3,4,7,8-HxCDF	0.949	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	1,2,3,6,7,8-HxCDF	0.266	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	1,2,3,7,8,9-HxCDF	0.228	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	1,2,3,7,8-PeCDD	0.302	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	2,3,4,6,7,8-HxCDF	0.372	pg/g	BJ	U	7
23314	LDW24-IT1594B	23314020	EPA 1613B	Total HpCDF w/ EMPCs	21.4	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	Total HxCDF w/ EMPCs	7.88	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	Total PeCDD w/ EMPCs	1.3	pg/g	JK	U	25
23314	LDW24-IT1594B	23314020	EPA 1613B	Total PeCDF w/ EMPCs	2.56	pg/g	JK	U	25
23314	LDW24-IT1594A	23314021	EPA 1613B	1,2,3,4,6,7,8,9-OCDD	58400	pg/g	E	J	20
23314	LDW24-IT1594A	23314021	EPA 1613B	1,2,3,7,8-PeCDD	29	pg/g	K	J	25
23314	LDW24-IT1594A	23314021	EPA 1613B	2,3,7,8-TCDF	5.83	pg/g		DNR	11
23314	LDW24-IT1594A	23314021	EPA 1613B	Total HpCDD w/ EMPCs	11100	pg/g	E	J	20
23314	LDW24-IT1594A	23314021	EPA 1613B	Total HpCDF w/ EMPCs	3250	pg/g	JK	U	25
23314	LDW24-IT1594A	23314021	EPA 1613B	Total HxCDF w/ EMPCs	1170	pg/g	JK	U	25
23314	LDW24-IT1594A	23314021	EPA 1613B	Total PeCDD w/ EMPCs	179	pg/g	K	J	25
23314	LDW24-IT1594A	23314021	EPA 1613B	Total PeCDF w/ EMPCs	349	pg/g	JK	U	25
23314	LDW24-IT1594A	23314021	EPA 1613B	Total TCDD w/ EMPCs	49.7	pg/g	K	J	25
23314	LDW24-IT1594A	23314021	EPA 1613B	Total TCDF w/ EMPCs	141	pg/g	JK	U	25
23315	LDW24-SS1533	23315001	EPA 1613B	1,2,3,7,8-PeCDD	1.81	ng/kg	JK	U	25
23315	LDW24-SS1533	23315001	EPA 1613B	2,3,7,8-TCDF	1.88	ng/kg		DNR	11
23315	LDW24-SS1533	23315001	EPA 1613B	Total HpCDF w/ EMPCs	334	ng/kg	JK	U	25
23315	LDW24-SS1533	23315001	EPA 1613B	Total HxCDD w/ EMPCs	106	ng/kg	JK	U	25
23315	LDW24-SS1533	23315001	EPA 1613B	Total PeCDD w/ EMPCs	19.6	ng/kg	JK	U	25
23315	LDW24-SS1533	23315001	EPA 1613B	Total PeCDF w/ EMPCs	39.1	ng/kg	JKQ	UJ	23H,25

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
23315	LDW24-SS1533	23315001	EPA 1613B	Total TCDF w/ EMPCs	40	ng/kg	JK	U	25
23315	LDW24-IT1601I	23315002	EPA 1613B	2,3,7,8-TCDF	0.631	ng/kg	JK	U	25
23315	LDW24-IT1601I	23315002	EPA 1613B	Total HpCDF w/ EMPCs	221	ng/kg	JK	U	25
23315	LDW24-IT1601I	23315002	EPA 1613B	Total HxCDD w/ EMPCs	38.6	ng/kg	JK	U	25
23315	LDW24-IT1601I	23315002	EPA 1613B	Total HxCDF w/ EMPCs	72.2	ng/kg	JK	U	25
23315	LDW24-IT1601I	23315002	EPA 1613B	Total PeCDD w/ EMPCs	10.4	ng/kg	JK	U	25
23315	LDW24-IT1601I	23315002	EPA 1613B	Total PeCDF w/ EMPCs	16.8	ng/kg	JK	U	25
23315	LDW24-IT1601I	23315002	EPA 1613B	Total TCDD w/ EMPCs	3.98	ng/kg	JK	U	25
23315	LDW24-IT1601I	23315002	EPA 1613B	Total TCDF w/ EMPCs	9.79	ng/kg	JK	U	25
23315	LDW24-IT1601C	23315003	EPA 1613B	1,2,3,4,7,8-HxCDD	0.538	ng/kg	JK	U	25
23315	LDW24-IT1601C	23315003	EPA 1613B	2,3,7,8-TCDF	1.42	ng/kg	K	DNR	11
23315	LDW24-IT1601C	23315003	EPA 1613B	Total HxCDD w/ EMPCs	12.9	ng/kg	JK	U	25
23315	LDW24-IT1601C	23315003	EPA 1613B	Total PeCDD w/ EMPCs	10.5	ng/kg	JK	U	25
23315	LDW24-IT1601C	23315003	EPA 1613B	Total PeCDF w/ EMPCs	7.01	ng/kg	JK	U	25
23315	LDW24-IT1601C	23315003	EPA 1613B	Total TCDD w/ EMPCs	7.55	ng/kg	JK	U	25
23315	LDW24-IT1601C	23315003	EPA 1613B	Total TCDF w/ EMPCs	23.6	ng/kg	JK	U	25
23315	LDW24-IT1597B	23315004	EPA 1613B	1,2,3,4,7,8,9-HpCDF	1.07	ng/kg	JK	U	25
23315	LDW24-IT1597B	23315004	EPA 1613B	1,2,3,7,8-PeCDD	2	ng/kg	JK	U	25
23315	LDW24-IT1597B	23315004	EPA 1613B	Total HpCDF w/ EMPCs	79.1	ng/kg	JK	U	25
23315	LDW24-IT1597B	23315004	EPA 1613B	Total PeCDD w/ EMPCs	11.2	ng/kg	JK	U	25
23315	LDW24-IT1597B	23315004	EPA 1613B	Total PeCDF w/ EMPCs	19.2	ng/kg	JK	U	25
23315	LDW24-IT1597B	23315004	EPA 1613B	Total TCDD w/ EMPCs	1.75	ng/kg	JK	U	25
23315	LDW24-IT1597B	23315004	EPA 1613B	Total TCDF w/ EMPCs	10.5	ng/kg	JK	U	25
23315	LDW24-IT1377A	23315005	EPA 1613B	1,2,3,7,8-PeCDD	0.462	ng/kg	JK	U	25
23315	LDW24-IT1377A	23315005	EPA 1613B	Total HxCDD w/ EMPCs	11.7	ng/kg	JK	U	25
23315	LDW24-IT1377A	23315005	EPA 1613B	Total HxCDF w/ EMPCs	9.47	ng/kg	JK	U	25
23315	LDW24-IT1377A	23315005	EPA 1613B	Total PeCDD w/ EMPCs	1.6	ng/kg	JK	U	25
23315	LDW24-IT1377A	23315005	EPA 1613B	Total PeCDF w/ EMPCs	8.96	ng/kg	JK	U	25
23315	LDW24-IT1377A	23315005	EPA 1613B	Total TCDD w/ EMPCs	0.422	ng/kg	JK	U	25
23315	LDW24-IT1377A	23315005	EPA 1613B	Total TCDF w/ EMPCs	13.1	ng/kg	JK	U	25
23315	LDW24-IT1605E	23315006	EPA 1613B	1,2,3,4,6,7,8-HpCDF	5.22	ng/kg	K	J	25
23315	LDW24-IT1605E	23315006	EPA 1613B	1,2,3,4,7,8-HxCDD	0.436	ng/kg	JK	U	25
23315	LDW24-IT1605E	23315006	EPA 1613B	1,2,3,4,7,8-HxCDF	0.799	ng/kg	BJK	U	25
23315	LDW24-IT1605E	23315006	EPA 1613B	2,3,4,7,8-PeCDF	0.588	ng/kg	JK	U	25
23315	LDW24-IT1605E	23315006	EPA 1613B	Total HpCDF w/ EMPCs	14.4	ng/kg	K	J	25
23315	LDW24-IT1605E	23315006	EPA 1613B	Total HxCDD w/ EMPCs	7.93	ng/kg	JK	U	25
23315	LDW24-IT1605E	23315006	EPA 1613B	Total HxCDF w/ EMPCs	6.89	ng/kg	JK	U	25

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
23315	LDW24-IT1605E	23315006	EPA 1613B	Total PeCDD w/ EMPCs	0.729	ng/kg	JK	U	25
23315	LDW24-IT1605E	23315006	EPA 1613B	Total PeCDF w/ EMPCs	6.87	ng/kg	JK	U	25
23315	LDW24-IT1605E	23315006	EPA 1613B	Total TCDD w/ EMPCs	0.388	ng/kg	JK	U	25
23315	LDW24-IT1605E	23315006	EPA 1613B	Total TCDF w/ EMPCs	7.96	ng/kg	JK	U	25
24E0313	LDW24-SC1511B	24E0313-01	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24E0313	LDW24-SC1511B	24E0313-01	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24E0313	LDW24-SC1511B	24E0313-01	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24E0313	LDW24-SC1511B	24E0313-01	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24E0313	LDW24-SC1511B	24E0313-01	EPA 8082A	Aroclor-1248	54.5	ug/kg	P1	DNR	11
24E0313	LDW24-SC1511B	24E0313-01	EPA 8082A	Aroclor-1254	79.6	ug/kg	P1	DNR	11
24E0313	LDW24-SC1511B	24E0313-01	EPA 8082A	Aroclor-1260	60.9	ug/kg		DNR	11
24E0313	LDW24-SC1511B	24E0313-01RE1	EPA 8082A	Aroclor-1248	44	ug/kg	P1	J	3
24E0313	LDW24-SC1511B	24E0313-01RE1	EPA 8082A	Aroclor-1260	56.5	ug/kg		J	10H
24E0313	LDW24-SC1511C	24E0313-02	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24E0313	LDW24-SC1511C	24E0313-02	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24E0313	LDW24-SC1511C	24E0313-02	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24E0313	LDW24-SC1511C	24E0313-02	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24E0313	LDW24-SC1511C	24E0313-02	EPA 8082A	Aroclor-1248	131	ug/kg	D	DNR	11
24E0313	LDW24-SC1511C	24E0313-02	EPA 8082A	Aroclor-1254	157	ug/kg	D	DNR	11
24E0313	LDW24-SC1511C	24E0313-02	EPA 8082A	Aroclor-1260	127	ug/kg	D	DNR	11
24E0313	LDW24-SC1511C	24E0313-02RE1	EPA 8082A	Aroclor-1260	133	ug/kg		J	10H,19
24E0313	LDW24-SC1511E	24E0313-03	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24E0313	LDW24-SC1511E	24E0313-03	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24E0313	LDW24-SC1511E	24E0313-03	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24E0313	LDW24-SC1511E	24E0313-03	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24E0313	LDW24-SC1511E	24E0313-03	EPA 8082A	Aroclor-1248	355	ug/kg	D	DNR	11
24E0313	LDW24-SC1511E	24E0313-03	EPA 8082A	Aroclor-1254	414	ug/kg	D	DNR	11
24E0313	LDW24-SC1511E	24E0313-03	EPA 8082A	Aroclor-1260	153	ug/kg	D	DNR	11
24E0313	LDW24-SC1511E	24E0313-03RE1	EPA 8082A	Aroclor-1260	152	ug/kg	P1 D	J	10H
24E0313	LDW24-SC1511G	24E0313-04	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24E0313	LDW24-SC1511G	24E0313-04	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24E0313	LDW24-SC1511G	24E0313-04	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24E0313	LDW24-SC1511G	24E0313-04	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24E0313	LDW24-SC1511G	24E0313-04	EPA 8082A	Aroclor-1248	49.2	ug/kg	P1	DNR	11
24E0313	LDW24-SC1511G	24E0313-04	EPA 8082A	Aroclor-1254	61	ug/kg	P1	DNR	11
24E0313	LDW24-SC1511G	24E0313-04	EPA 8082A	Aroclor-1260	40.3	ug/kg	P1	DNR	11
24E0313	LDW24-SC1511G	24E0313-04RE1	EPA 8082A	Aroclor-1260	32.3	ug/kg	P1	J	3,10H

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0313	LDW24-SC1511I	24E0313-05	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24E0313	LDW24-SC1511I	24E0313-05	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24E0313	LDW24-SC1511I	24E0313-05	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24E0313	LDW24-SC1511I	24E0313-05	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24E0313	LDW24-SC1511I	24E0313-05	EPA 8082A	Aroclor-1248		ug/kg	U	DNR	11
24E0313	LDW24-SC1511I	24E0313-05	EPA 8082A	Aroclor-1254	11.6	ug/kg	P1	DNR	11
24E0313	LDW24-SC1511I	24E0313-05	EPA 8082A	Aroclor-1260	6.4	ug/kg	P1	DNR	11
24E0313	LDW24-SC1511I	24E0313-05RE1	EPA 8082A	Aroclor-1254	5.6	ug/kg		J	3
24E0313	LDW24-SC1515B	24E0313-06	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24E0313	LDW24-SC1515B	24E0313-06	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24E0313	LDW24-SC1515B	24E0313-06	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24E0313	LDW24-SC1515B	24E0313-06	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24E0313	LDW24-SC1515B	24E0313-06	EPA 8082A	Aroclor-1248	67.5	ug/kg	D	DNR	11
24E0313	LDW24-SC1515B	24E0313-06	EPA 8082A	Aroclor-1254	86.2	ug/kg	D	DNR	11
24E0313	LDW24-SC1515B	24E0313-06	EPA 8082A	Aroclor-1260	70.2	ug/kg	D	DNR	11
24E0313	LDW24-SC1515B	24E0313-06RE1	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	13L
24E0313	LDW24-SC1515B	24E0313-06RE1	EPA 8082A	Aroclor-1221		ug/kg	U	UJ	13L
24E0313	LDW24-SC1515B	24E0313-06RE1	EPA 8082A	Aroclor-1232		ug/kg	U	UJ	13L
24E0313	LDW24-SC1515B	24E0313-06RE1	EPA 8082A	Aroclor-1242		ug/kg	U	UJ	13L
24E0313	LDW24-SC1515B	24E0313-06RE1	EPA 8082A	Aroclor-1248	51.1	ug/kg	P1	J	3,13L
24E0313	LDW24-SC1515B	24E0313-06RE1	EPA 8082A	Aroclor-1254	78.6	ug/kg	P1	J	3,13L
24E0313	LDW24-SC1515B	24E0313-06RE1	EPA 8082A	Aroclor-1260	62.2	ug/kg		J	10H,13L
24E0341	LDW24-SC1390B	24E0341-01	EPA 8082A	Aroclor-1260	92.8	ug/kg	D	J	12H
24E0341	LDW24-SC1390C	24E0341-02	EPA 8082A	Aroclor-1260	52.8	ug/kg	D	J	12H
24E0341	LDW24-SC1390G	24E0341-03	EPA 8082A	Aroclor-1260	25.8	ug/kg	D	J	12H
24E0341	LDW24-SC1390E	24E0341-04	EPA 8082A	Aroclor-1260	45.1	ug/kg	D	J	12H
24E0341	LDW24-IT1524A	24E0341-06	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24E0341	LDW24-SC1525	24E0341-07	EPA 1613B	1,2,3,6,7,8-HxCDF	1.68	ng/kg	EMPC	J	25
24E0341	LDW24-SC1525	24E0341-07	EPA 1613B	1,2,3,7,8-PeCDD	1.49	ng/kg	EMPC	J	25
24E0341	LDW24-SC1525	24E0341-07	EPA 1613B	2,3,4,7,8-PeCDF	0.953	ng/kg	EMPC J	U	25
24E0341	LDW24-SC1525	24E0341-07	EPA 1613B	2,3,7,8-TCDD	0.411	ng/kg	EMPC J	U	25
24E0341	LDW24-SC1525	24E0341-07	EPA 1613B	2,3,7,8-TCDF	0.875	ng/kg	EMPC J	U	25
24E0341	LDW24-SC1525	24E0341-07	EPA 1613B	Total TCDF	3.23	ng/kg		J	9A
24E0341	LDW24-SC1525	24E0341-07	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	8L
24E0341	LDW24-SC1525	24E0341-07	EPA 8082A	Aroclor-1248	25.8	ug/kg	P1	J	3
24E0341	LDW24-SC1525	24E0341-07	EPA 8082A	Aroclor-1254	38.9	ug/kg	P1	NJ	3
24E0341	LDW24-SC1525	24E0341-07	EPA 8082A	Aroclor-1260	65.7	ug/kg		J	8L

**Qualified Data Summary Table  
LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0341	LDW24-SC1534C	24E0341-08	EPA 8082A	Aroclor-1260	36.1	ug/kg	P1 D	J	12H
24E0341	LDW24-SC1534D	24E0341-09	EPA 8082A	Aroclor-1260	49.7	ug/kg	D	J	12H
24E0341	LDW24-SC1534F	24E0341-10	EPA 8082A	Aroclor-1260	73.7	ug/kg	D	J	12H
24E0341	LDW24-SC1534H	24E0341-11	EPA 8082A	Aroclor-1260	29.2	ug/kg	P1 D	J	12H
24E0341	LDW24-SC1534J	24E0341-12	EPA 8082A	Aroclor-1260	5.4	ug/kg		J	3,12H
24E0341	LDW24-SC1534L	24E0341-13	EPA 8082A	Aroclor-1254	9.8	ug/kg	P1	J	3
24E0341	LDW24-SC1534L	24E0341-13	EPA 8082A	Aroclor-1260	7	ug/kg	P1	NJ	3,12H
24E0341	LDW24-SC1510D	24E0341-14	EPA 8082A	Aroclor-1260	98.4	ug/kg	D	J	12H
24E0341	LDW24-SC1510E	24E0341-15	EPA 8082A	Aroclor-1260	94	ug/kg	D	J	12H
24E0341	LDW24-SC1510G	24E0341-16	EPA 8082A	Aroclor-1248	218	ug/kg	P1 D	J	3
24E0341	LDW24-SC1510G	24E0341-16	EPA 8082A	Aroclor-1260	150	ug/kg	P1 D	J	12H
24E0341	LDW24-SC1510I	24E0341-17	EPA 8082A	Aroclor-1260	65	ug/kg	D	J	12H
24E0341	LDW24-SC1510K	24E0341-18	EPA 8082A	Aroclor-1260	22	ug/kg	D	J	12H
24E0341	LDW24-SC1525DUP1	BME0752-DUP1	EPA 1613B	1,2,3,7,8,9-HxCDF	0.77	ng/kg	EMPC J	U	25
24E0341	LDW24-SC1525DUP1	BME0752-DUP1	EPA 1613B	1,2,3,7,8-PeCDF	0.49	ng/kg	* EMPC J	U	25
24E0341	LDW24-SC1525DUP1	BME0752-DUP1	EPA 1613B	2,3,4,6,7,8-HxCDF	1.82	ng/kg	* EMPC	J	25
24E0341	LDW24-SC1525DUP1	BME0752-DUP1	EPA 1613B	2,3,7,8-TCDD	0.376	ng/kg	EMPC J	U	25
24E0341	LDW24-SC1525DUP1	BME0752-DUP1	EPA 1613B	2,3,7,8-TCDF	0.902	ng/kg	EMPC J	U	25
24E0341	LDW24-SC1525DUP1	BME0752-DUP1	EPA 1613B	Total TCDF	9.34	ng/kg		J	9A
24E0373	LDW24-SC1541C	24E0373-02	EPA 8082A	Aroclor-1248	31.9	ug/kg	P1	J	3
24E0373	LDW24-SC1541C	24E0373-02	EPA 8082A	Aroclor-1254	46.9	ug/kg	P1	J	3
24E0373	LDW24-SC1541C	24E0373-02	EPA 8082A	Aroclor-1260	26.7	ug/kg		J	12H
24E0373	LDW24-SC1541C-FD	24E0373-03	EPA 8082A	Aroclor-1248	34.8	ug/kg	P1	NJ	3
24E0373	LDW24-SC1541C-FD	24E0373-03	EPA 8082A	Aroclor-1254	49	ug/kg	P1	J	3
24E0373	LDW24-SC1541C-FD	24E0373-03	EPA 8082A	Aroclor-1260	36.9	ug/kg		J	12H
24E0373	LDW24-SC1541D	24E0373-04	EPA 8082A	Aroclor-1248	41	ug/kg	P1	J	3
24E0373	LDW24-SC1541D	24E0373-04	EPA 8082A	Aroclor-1254	67.3	ug/kg	P1	J	3
24E0373	LDW24-SC1541D	24E0373-04	EPA 8082A	Aroclor-1260	33	ug/kg		J	12H
24E0373	LDW24-SC1541F	24E0373-05	EPA 8082A	Aroclor-1248	54.8	ug/kg	P1	NJ	3
24E0373	LDW24-SC1541F	24E0373-05	EPA 8082A	Aroclor-1254	72.9	ug/kg	P1	J	3
24E0373	LDW24-SC1541F	24E0373-05	EPA 8082A	Aroclor-1260	31.1	ug/kg		J	12H
24E0373	LDW24-SC1541H	24E0373-06	EPA 8082A	Aroclor-1254	74.6	ug/kg	P1	J	3
24E0373	LDW24-SC1541H	24E0373-06	EPA 8082A	Aroclor-1260	30.3	ug/kg		J	12H
24E0373	LDW24-SC1541J	24E0373-07	EPA 8082A	Aroclor-1248	45.4	ug/kg	P1	J	3
24E0373	LDW24-SC1541J	24E0373-07	EPA 8082A	Aroclor-1254	82.3	ug/kg	P1	J	3
24E0373	LDW24-SC1541J	24E0373-07	EPA 8082A	Aroclor-1260	77.2	ug/kg		J	12H
24E0373	LDW24-SC1541L	24E0373-08	EPA 8082A	Aroclor-1260	15.5	ug/kg		J	12H

**Qualified Data Summary Table  
LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0373	LDW24-SC1533	24E0373-09	EPA 8082A	Aroclor-1260	52	ug/kg	P1 D	J	3,12H
24E0373	LDW24-SC1535B	24E0373-10	EPA 8082A	Aroclor-1260	162	ug/kg	D	J	12H
24E0373	LDW24-SC1535C	24E0373-11	EPA 8082A	Aroclor-1254	228	ug/kg	P1 D	J	3
24E0373	LDW24-SC1535C	24E0373-11	EPA 8082A	Aroclor-1260	136	ug/kg	D	J	12H
24E0373	LDW24-SC1535E	24E0373-12	EPA 8082A	Aroclor-1248	536	ug/kg	P1 D	J	3
24E0373	LDW24-SC1535E	24E0373-12	EPA 8082A	Aroclor-1260	256	ug/kg	D	J	12H
24E0373	LDW24-SC1535G	24E0373-13	EPA 8082A	Aroclor-1260	144	ug/kg	D	J	12H
24E0373	LDW24-SC1535I	24E0373-14	EPA 8082A	Aroclor-1248	93.9	ug/kg	P1	NJ	3
24E0373	LDW24-SC1535I	24E0373-14	EPA 8082A	Aroclor-1254	141	ug/kg	P1	NJ	3
24E0373	LDW24-SC1535I	24E0373-14	EPA 8082A	Aroclor-1260	96.8	ug/kg		J	12H
24E0373	LDW24-SC1535K	24E0373-15	EPA 8082A	Aroclor-1254	3.9	ug/kg	J	NJ	3,13H
24E0373	LDW24-SC1535K	24E0373-15	EPA 8082A	Aroclor-1260	7.9	ug/kg		J	3,13H,19
24E0373	LDW24-SC1535K	24E0373-15RE1	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24E0373	LDW24-SC1535K	24E0373-15RE1	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24E0373	LDW24-SC1535K	24E0373-15RE1	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24E0373	LDW24-SC1535K	24E0373-15RE1	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24E0373	LDW24-SC1535K	24E0373-15RE1	EPA 8082A	Aroclor-1248		ug/kg	U	DNR	11
24E0373	LDW24-SC1535K	24E0373-15RE1	EPA 8082A	Aroclor-1254		ug/kg	U	DNR	11
24E0373	LDW24-SC1535K	24E0373-15RE1	EPA 8082A	Aroclor-1260		ug/kg	U	DNR	11
24E0373	LDW24-SC1542B	24E0373-16	EPA 1613B	1,2,3,4,7,8,9-HpCDF	5.55	ng/kg	EMPC	J	25
24E0373	LDW24-SC1542B	24E0373-16	EPA 1613B	1,2,3,7,8-PeCDF	0.957	ng/kg	EMPC J	U	25
24E0373	LDW24-SC1542B	24E0373-16	EPA 1613B	2,3,7,8-TCDF	2.05	ng/kg	X	J	23H
24E0373	LDW24-SC1542B	24E0373-16	EPA 8082A	Aroclor-1260	185	ug/kg	D	J	12H
24E0373	LDW24-SC1542C	24E0373-17	EPA 1613B	1,2,3,7,8-PeCDD	1.79	ng/kg	EMPC	J	25
24E0373	LDW24-SC1542C	24E0373-17	EPA 1613B	2,3,7,8-TCDF	1.52	ng/kg	X	J	23H
24E0373	LDW24-SC1542C	24E0373-17	EPA 8082A	Aroclor-1248	356	ug/kg	P1 D	J	3
24E0373	LDW24-SC1542C	24E0373-17	EPA 8082A	Aroclor-1260	154	ug/kg	D	J	12H
24E0373	LDW24-SC1542E	24E0373-18	EPA 1613B	1,2,3,4,7,8-HxCDD	0.899	ng/kg	EMPC J	U	25
24E0373	LDW24-SC1542E	24E0373-18	EPA 1613B	1,2,3,6,7,8-HxCDD	5.48	ng/kg	EMPC	J	25
24E0373	LDW24-SC1542E	24E0373-18	EPA 1613B	1,2,3,6,7,8-HxCDF	2.25	ng/kg	EMPC	J	25
24E0373	LDW24-SC1542E	24E0373-18	EPA 1613B	1,2,3,7,8-PeCDD	0.507	ng/kg	EMPC J	U	25
24E0373	LDW24-SC1542E	24E0373-18	EPA 1613B	2,3,7,8-TCDD	0.34	ng/kg	EMPC J	U	25
24E0373	LDW24-SC1542E	24E0373-18	EPA 8082A	Aroclor-1260	55.3	ug/kg	D	J	12H
24E0373	LDW24-SC1542G	24E0373-19	EPA 1613B	2,3,7,8-TCDD	0.916	ng/kg	EMPC J	U	25
24E0373	LDW24-SC1542G	24E0373-19	EPA 1613B	2,3,7,8-TCDF	8.64	ng/kg	X	J	23H
24E0373	LDW24-SC1542G	24E0373-19	EPA 1613B	OCDD	11500	ng/kg	E	J	20
24E0373	LDW24-SC1542G	24E0373-19	EPA 8082A	Aroclor-1248	332	ug/kg	P1 D	J	3

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0373	LDW24-SC1542G	24E0373-19	EPA 8082A	Aroclor-1260	253	ug/kg	D	J	12H
24E0373	LDW24-SC1542I	24E0373-20	EPA 1613B	1,2,3,4,7,8-HxCDD	0.549	ng/kg	EMPC J	U	25
24E0373	LDW24-SC1542I	24E0373-20	EPA 1613B	1,2,3,7,8-PeCDF	0.913	ng/kg	EMPC J	U	25
24E0373	LDW24-SC1542I	24E0373-20	EPA 1613B	2,3,7,8-TCDF	0.995	ng/kg	X J	J	23H
24E0373	LDW24-SC1542I	24E0373-20	EPA 8082A	Aroclor-1260	158	ug/kg	D	J	12H
24E0373	LDW24-SC1542K	24E0373-21	EPA 1613B	1,2,3,7,8-PeCDF	2.17	ng/kg	EMPC	J	25
24E0373	LDW24-SC1542K	24E0373-21	EPA 1613B	2,3,7,8-TCDD	0.651	ng/kg	EMPC J	U	25
24E0373	LDW24-SC1542K	24E0373-21	EPA 1613B	2,3,7,8-TCDF	3.58	ng/kg	X	J	5BL,23H
24E0373	LDW24-SC1542K	24E0373-21	EPA 1613B	OCDF	242	ng/kg		J	5BL
24E0373	LDW24-SC1542K	24E0373-21	EPA 8082A	Aroclor-1260	67.9	ug/kg	D	J	12H
24E0404	LDW24-SC1520B-FD	24E0404-02	EPA 8082A	Aroclor-1248	112	ug/kg	P1 D	J	3
24E0404	LDW24-IT1513A	24E0404-04	EPA 1613B	1,2,3,4,7,8-HxCDF	0.508	ng/kg	EMPC J	U	25
24E0404	LDW24-IT1513A	24E0404-04	EPA 1613B	1,2,3,6,7,8-HxCDD	0.864	ng/kg	EMPC J	U	25
24E0404	LDW24-IT1513A	24E0404-04	EPA 1613B	1,2,3,6,7,8-HxCDF	0.656	ng/kg	EMPC J	U	25
24E0404	LDW24-IT1513A	24E0404-04	EPA 1613B	1,2,3,7,8,9-HxCDD	0.9	ng/kg	EMPC J	U	25
24E0404	LDW24-IT1513A	24E0404-04	EPA 1613B	2,3,7,8-TCDF	1.44	ng/kg	EMPC X	J	23H,25
24E0404	LDW24-IT1513A	24E0404-04	EPA 1613B	OCDF	4.97	ng/kg	EMPC	J	25
24E0404	LDW24-IT1513A	24E0404-04	EPA 6020	Copper	18.8	mg/kg		J	9A
24E0404	LDW24-IT1513A	24E0404-04	EPA 6020	Zinc	54.5	mg/kg		J	9A
24E0404	LDW24-IT1513A	24E0404-04	EPA 7471B	Mercury	0.0591	mg/kg		J	8H
24E0404	LDW24-IT1513A	24E0404-04	EPA 8082A	Aroclor-1248	8.5	ug/kg	P1	J	3
24E0404	LDW24-IT1513A-FD	24E0404-05	EPA 1613B	1,2,3,4,7,8-HxCDF	0.314	ng/kg	EMPC J	U	25
24E0404	LDW24-IT1513A-FD	24E0404-05	EPA 1613B	2,3,4,6,7,8-HxCDF	0.464	ng/kg	EMPC J	U	25
24E0404	LDW24-IT1513A-FD	24E0404-05	EPA 1613B	2,3,4,7,8-PeCDF	0.465	ng/kg	EMPC J	U	25
24E0404	LDW24-IT1513A-FD	24E0404-05	EPA 1613B	2,3,7,8-TCDF	0.812	ng/kg	EMPC J	UJ	5BL,25
24E0404	LDW24-IT1513A-FD	24E0404-05	EPA 1613B	OCDF	4.09	ng/kg		J	5BL
24E0404	LDW24-IT1513A-FD	24E0404-05	EPA 6020	Copper	18.2	mg/kg		J	9A
24E0404	LDW24-IT1513A-FD	24E0404-05	EPA 6020	Zinc	53	mg/kg		J	9A
24E0404	LDW24-IT1513A-FD	24E0404-05	EPA 8082A	Aroclor-1248	9.6	ug/kg	P1	J	3
24E0404	LDW24-SC1544B	24E0404-06	EPA 1613B	2,3,4,7,8-PeCDF	2.74	ng/kg	EMPC	J	25
24E0404	LDW24-SC1544B	24E0404-06	EPA 1613B	2,3,7,8-TCDD	0.483	ng/kg	EMPC J	U	25
24E0404	LDW24-SC1544B	24E0404-06	EPA 1613B	2,3,7,8-TCDF	2.88	ng/kg	X	J	23H
24E0404	LDW24-SC1544C	24E0404-07	EPA 1613B	2,3,7,8-TCDF	6.65	ng/kg	EMPC X	J	5BL,23H,25
24E0404	LDW24-SC1544C	24E0404-07	EPA 1613B	OCDD	17700	ng/kg	E	J	20
24E0404	LDW24-SC1544C	24E0404-07	EPA 1613B	OCDF	2890	ng/kg		J	5BL
24E0404	LDW24-SC1544C	24E0404-07	EPA 8082A	Aroclor-1248	450	ug/kg	P1 D	J	3
24E0404	LDW24-SC1544E	24E0404-08	EPA 1613B	2,3,7,8-TCDF	3.37	ng/kg	X	J	5BL,23H

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0404	LDW24-SC1544E	24E0404-08	EPA 1613B	OCDD	6220	ng/kg	E	J	20
24E0404	LDW24-SC1544E	24E0404-08	EPA 1613B	OCDF	522	ng/kg		J	5BL
24E0404	LDW24-SC1544E	24E0404-08	EPA 8082A	Aroclor-1248	157	ug/kg	P1 D	J	3
24E0404	LDW24-SC1544E	24E0404-08	EPA 8082A	Aroclor-1254	198	ug/kg	P1 D	J	3
24E0404	LDW24-SC1544G	24E0404-09	EPA 1613B	1,2,3,4,7,8,9-HpCDF	1.02	ng/kg	EMPC	J	25
24E0404	LDW24-SC1544G	24E0404-09	EPA 1613B	1,2,3,4,7,8-HxCDF	1.86	ng/kg	EMPC	J	25
24E0404	LDW24-SC1544G	24E0404-09	EPA 1613B	1,2,3,6,7,8-HxCDD	1.89	ng/kg	EMPC	J	25
24E0404	LDW24-SC1544G	24E0404-09	EPA 1613B	2,3,4,6,7,8-HxCDF	0.876	ng/kg	EMPC J	U	25
24E0404	LDW24-SC1544G	24E0404-09	EPA 1613B	2,3,4,7,8-PeCDF	0.629	ng/kg	EMPC J	U	25
24E0404	LDW24-SC1544G	24E0404-09	EPA 1613B	2,3,7,8-TCDF	0.705	ng/kg	EMPC X J	UJ	5BL,23H,25
24E0404	LDW24-SC1544G	24E0404-09	EPA 1613B	OCDF	23.6	ng/kg		J	5BL
24E0404	LDW24-SC1544G	24E0404-09	EPA 8082A	Aroclor-1248	6.7	ug/kg		NJ	3
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 1613B	1,2,3,4,7,8,9-HpCDF	1.96	ng/kg	EMPC	J	25
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 1613B	1,2,3,4,7,8-HxCDD	0.658	ng/kg	EMPC J	U	25
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 1613B	1,2,3,7,8,9-HxCDF	0.702	ng/kg	EMPC J	U	25
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 1613B	1,2,3,7,8-PeCDD	0.584	ng/kg	EMPC J	U	25
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 1613B	2,3,4,6,7,8-HxCDF	1.15	ng/kg	EMPC	J	25
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 1613B	2,3,4,7,8-PeCDF	0.94	ng/kg	EMPC J	U	25
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 1613B	2,3,7,8-TCDF	0.734	ng/kg	X J	J	5BL,23H
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 1613B	OCDF	34.7	ng/kg		J	5BL
24E0404	LDW24-SC1544G-FD	24E0404-10	EPA 8082A	Aroclor-1248	8.2	ug/kg	P1	NJ	3
24E0404	LDW24-SC1544I	24E0404-11	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24E0404	LDW24-SC1563G	24E0404-15	EPA 8082A	Aroclor-1248	26.7	ug/kg	P1 D	J	3
24E0429	LDW24-IT1545A	24E0429-01	EPA 1613B	1,2,3,7,8-PeCDD	3.71	ng/kg	EMPC	J	25
24E0429	LDW24-IT1545A	24E0429-01	EPA 1613B	2,3,4,7,8-PeCDF	2.92	ng/kg	EMPC	J	25
24E0429	LDW24-IT1545A	24E0429-01	EPA 1613B	2,3,7,8-TCDF	2.45	ng/kg	EMPC X	J	23H,25
24E0429	LDW24-IT1545A	24E0429-01	EPA 1613B	OCDD	4690	ng/kg	E B	J	20
24E0429	LDW24-IT1545A	24E0429-01	EPA 1613B	Total PeCDD	3.99	ng/kg		J	9A
24E0429	LDW24-IT1545A	24E0429-01	EPA 8082A	Aroclor-1248	236	ug/kg	D	UJ	5CL
24E0429	LDW24-IT1550A	24E0429-03	EPA 1613B	1,2,3,4,6,7,8-HpCDF	0.239	ng/kg	EMPC J	U	25
24E0429	LDW24-IT1550A	24E0429-03	EPA 8082A	Aroclor-1248	13	ug/kg	P1	J	3
24E0429	LDW24-IT1550A	24E0429-03	EPA 8082A	Aroclor-1254	35.9	ug/kg	P1	NJ	3
24E0429	LDW24-IT1550B	24E0429-04	EPA 6020	Copper	18.6	mg/kg		J	9A
24E0429	LDW24-IT1550B	24E0429-04	EPA 6020	Zinc	44.4	mg/kg		J	9A
24E0429	LDW24-IT1550C	24E0429-05	EPA 6020	Copper	15.7	mg/kg		J	9A
24E0429	LDW24-IT1550C	24E0429-05	EPA 6020	Zinc	41.5	mg/kg		J	9A
24E0429	LDW24-IT1550E	24E0429-06	EPA 6020	Copper	33.3	mg/kg		J	9A

**Qualified Data Summary Table  
LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0429	LDW24-IT1550E	24E0429-06	EPA 6020	Zinc	61.6	mg/kg		J	9A
24E0429	LDW24-IT1550G	24E0429-07	EPA 6020	Copper	27.6	mg/kg		J	9A
24E0429	LDW24-IT1550G	24E0429-07	EPA 6020	Zinc	56.9	mg/kg		J	9A
24E0429	LDW24-SC1536B	24E0429-08	EPA 8082A	Aroclor-1260	6.5	ug/kg	P1	J	3
24E0429	LDW24-IT1562C	24E0429-15	EPA 8082A	Aroclor-1254	4.3	ug/kg		J	3
24E0429	LDW24-IT1545ADUP1	BME0753-DUP1	EPA 1613B	1,2,3,7,8,9-HxCDF	1.76	ng/kg	* EMPC	J	25
24E0429	LDW24-IT1545ADUP1	BME0753-DUP1	EPA 1613B	1,2,3,7,8-PeCDF	1.55	ng/kg	EMPC	J	25
24E0429	LDW24-IT1545ADUP1	BME0753-DUP1	EPA 1613B	2,3,4,6,7,8-HxCDF	2.86	ng/kg	EMPC	J	25
24E0429	LDW24-IT1545ADUP1	BME0753-DUP1	EPA 1613B	2,3,4,7,8-PeCDF	2.68	ng/kg	EMPC	J	25
24E0429	LDW24-IT1545ADUP1	BME0753-DUP1	EPA 1613B	2,3,7,8-TCDD	1.07	ng/kg	* EMPC	J	25
24E0429	LDW24-IT1545ADUP1	BME0753-DUP1	EPA 1613B	2,3,7,8-TCDF	1.8	ng/kg	X *	J	23H
24E0429	LDW24-IT1545ADUP1	BME0753-DUP1	EPA 1613B	OCDD	4550	ng/kg	E B	J	20
24E0429	LDW24-IT1545ADUP1	BME0753-DUP1	EPA 1613B	Total PeCDD	8.7	ng/kg		J	9A
24E0457	LDW24-SC1501C	24E0457-01	EPA 8082A	Aroclor-1248	38.7	ug/kg	P1	J	3
24E0457	LDW24-SC1501C	24E0457-01	EPA 8082A	Aroclor-1254	63.6	ug/kg	P1	J	3
24E0457	LDW24-SC1439D	24E0457-02	EPA 8082A	Aroclor-1248	70.4	ug/kg	P1	J	3
24E0457	LDW24-SC1439E	24E0457-03	EPA 8082A	Aroclor-1248	99.9	ug/kg	P1	J	3
24E0457	LDW24-SC1439G	24E0457-04	EPA 8082A	Aroclor-1248	26.4	ug/kg	P1	J	3
24E0457	LDW24-SC1439G-FD	24E0457-05	EPA 8082A	Aroclor-1248	20.8	ug/kg	P1	J	3
24E0457	LDW24-SC1439I	24E0457-06	EPA 8082A	Aroclor-1248	112	ug/kg	P1	J	3
24E0457	LDW24-SC1439I	24E0457-06	EPA 8082A	Aroclor-1254	95	ug/kg	P1	J	3
24E0457	LDW24-SC1439K	24E0457-07	EPA 8082A	Aroclor-1248	174	ug/kg	P1	J	3
24E0457	LDW24-SC1439M	24E0457-08	EPA 8082A	Aroclor-1248	245	ug/kg	P1 D	J	3
24E0517	LDW24-IT1469A	24E0517-01	EPA 1613B	1,2,3,4,7,8-HxCDF	7.48	ng/kg	EMPC	J	25
24E0517	LDW24-IT1469A	24E0517-01	EPA 1613B	1,2,3,6,7,8-HxCDF	3.94	ng/kg	EMPC	J	25
24E0517	LDW24-IT1469A	24E0517-01	EPA 1613B	1,2,3,7,8,9-HxCDD	11.1	ng/kg	EMPC	J	25
24E0517	LDW24-IT1469A	24E0517-01	EPA 1613B	1,2,3,7,8-PeCDF	1.57	ng/kg	EMPC	J	25
24E0517	LDW24-IT1469A	24E0517-01	EPA 1613B	2,3,7,8-TCDD	0.856	ng/kg	EMPC J	U	25
24E0517	LDW24-IT1469A	24E0517-01	EPA 1613B	2,3,7,8-TCDF	2.54	ng/kg	X	J	23H
24E0517	LDW24-IT1469A	24E0517-01	EPA 8082A	Aroclor-1254	65.5	ug/kg	P1	J	3
24E0517	LDW24-IT1470B	24E0517-02	EPA 1613B	1,2,3,4,7,8-HxCDD	9.1	ng/kg	EMPC	J	25
24E0517	LDW24-IT1470B	24E0517-02	EPA 1613B	2,3,7,8-TCDD	0.951	ng/kg	EMPC J	U	25
24E0517	LDW24-IT1470B	24E0517-02	EPA 1613B	2,3,7,8-TCDF	5.94	ng/kg	X EMPC	J	23H,25
24E0517	LDW24-IT1470B	24E0517-02	EPA 1613B	OCDD	9490	ng/kg	E B	J	20
24E0517	LDW24-IT1470C	24E0517-03	EPA 1613B	2,3,7,8-TCDF	2.75	ng/kg	X	J	23H
24E0517	LDW24-IT1470C	24E0517-03	EPA 1613B	OCDD	10100	ng/kg	E B	J	20
24E0517	LDW24-IT1470E	24E0517-04	EPA 1613B	2,3,7,8-TCDF	26.1	ng/kg	X	J	23H

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0517	LDW24-IT1470E	24E0517-04	EPA 8082A	Aroclor-1254	133	ug/kg	P1	J	3
24E0517	LDW24-IT1470E	24E0517-04	EPA 8082A	Aroclor-1260	181	ug/kg	P1	J	3
24E0517	LDW24-IT1470E	24E0517-04RE1	EPA 1613B	OCDD	63100	ng/kg	E Z B	J	20
24E0517	LDW24-IT1470G	24E0517-05	EPA 1613B	1,2,3,4,7,8-HxCDD	2.77	ng/kg	EMPC	J	25
24E0517	LDW24-IT1470G	24E0517-05	EPA 1613B	1,2,3,7,8,9-HxCDF	1.74	ng/kg	EMPC	J	25
24E0517	LDW24-IT1470G	24E0517-05	EPA 1613B	1,2,3,7,8-PeCDF	0.756	ng/kg	EMPC J	U	25
24E0517	LDW24-IT1470G	24E0517-05	EPA 1613B	2,3,4,7,8-PeCDF	0.786	ng/kg	EMPC J	U	25
24E0517	LDW24-IT1470G	24E0517-05	EPA 1613B	2,3,7,8-TCDD	0.727	ng/kg	EMPC J	U	25
24E0517	LDW24-IT1470G	24E0517-05	EPA 1613B	2,3,7,8-TCDF	1.53	ng/kg	X	J	23H
24E0517	LDW24-SC1386B	24E0517-06	EPA 8082A	Aroclor-1248	185	ug/kg	P1 D	J	3
24E0517	LDW24-SC1386C	24E0517-07	EPA 8082A	Aroclor-1248	139	ug/kg	P1 D	J	3
24E0517	LDW24-SC1386C	24E0517-07	EPA 9060	Total Organic carbon	2.34	%		J	12L
24E0517	LDW24-SC1386E	24E0517-08	EPA 8082A	Aroclor-1248	247	ug/kg	P1 D	J	3
24E0517	LDW24-SC1386E	24E0517-08	EPA 9060	Total Organic carbon	2.38	%		J	12L
24E0517	LDW24-SC1386E-FD	24E0517-09	EPA 8082A	Aroclor-1248	228	ug/kg	P1 D	J	3
24E0517	LDW24-SC1386E-FD	24E0517-09	EPA 9060	Total Organic carbon	3.01	%		J	12L
24E0517	LDW24-SC1386G	24E0517-10	EPA 9060	Total Organic carbon	2.7	%		J	12L
24E0517	LDW24-SC1386I	24E0517-11	EPA 9060	Total Organic carbon	1.74	%		J	12L
24E0517	LDW24-SC1385E	24E0517-14	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	8L
24E0517	LDW24-SC1385E	24E0517-14	EPA 8082A	Aroclor-1260	18.5	ug/kg		J	8L
24E0560	LDW24-IT1418B	24E0560-01	EPA 8082A	Aroclor-1248	14.8	ug/kg	P1	NJ	3
24E0560	LDW24-IT1418B	24E0560-01	EPA 9060	Total Organic carbon	4.37	%		J	12L
24E0560	LDW24-IT1418C	24E0560-02	EPA 8082A	Aroclor-1248	9.1	ug/kg	P1	NJ	3
24E0560	LDW24-IT1418C	24E0560-02	EPA 9060	Total Organic carbon	3.07	%		J	12L
24E0560	LDW24-IT1418E	24E0560-03	EPA 8082A	Aroclor-1248	21.8	ug/kg	P1	NJ	3
24E0560	LDW24-IT1418E	24E0560-03	EPA 9060	Total Organic carbon	4.12	%		J	12L
24E0560	LDW24-IT1418G	24E0560-04	EPA 8082A	Aroclor-1260	11.7	ug/kg	P1	NJ	3
24E0560	LDW24-IT1418G	24E0560-04	EPA 9060	Total Organic carbon	2.34	%		J	12L
24E0560	LDW24-IT1428B	24E0560-05	EPA 9060	Total Organic carbon	0.93	%		J	12L
24E0560	LDW24-IT1428C	24E0560-06	EPA 9060	Total Organic carbon	1.04	%		J	12L
24E0560	LDW24-IT1428C-FD	24E0560-07	EPA 9060	Total Organic carbon	0.84	%		J	12L
24E0560	LDW24-IT1428E	24E0560-08	EPA 9060	Total Organic carbon	1.5	%		J	12L
24E0560	LDW24-IT1428G	24E0560-09	EPA 9060	Total Organic carbon	0.98	%		J	12L
24E0560	LDW24-IT1426B	24E0560-10	EPA 8082A	Aroclor-1248	50.5	ug/kg	P1	NJ	3
24E0560	LDW24-IT1426B	24E0560-10	EPA 8082A	Aroclor-1254	109	ug/kg	P1	J	3
24E0560	LDW24-IT1426B	24E0560-10	EPA 9060	Total Organic carbon	2.56	%		J	12L
24E0560	LDW24-IT1426B-FD	24E0560-11	EPA 8082A	Aroclor-1248	62.7	ug/kg	P1	NJ	3

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0560	LDW24-IT1426B-FD	24E0560-11	EPA 8082A	Aroclor-1254	106	ug/kg	P1	J	3
24E0560	LDW24-IT1426B-FD	24E0560-11	EPA 9060	Total Organic carbon	2.43	%		J	12L
24E0560	LDW24-IT1426C	24E0560-12	EPA 8082A	Aroclor-1248	27.4	ug/kg	P1	NJ	3
24E0560	LDW24-IT1426C	24E0560-12	EPA 9060	Total Organic carbon	3.17	%		J	12L
24E0560	LDW24-IT1426E	24E0560-13	EPA 8082A	Aroclor-1248	11.8	ug/kg	P1	NJ	3
24E0560	LDW24-IT1426E	24E0560-13	EPA 9060	Total Organic carbon	3.57	%		J	12L
24E0560	LDW24-IT1426G	24E0560-14	EPA 9060	Total Organic carbon	3.23	%		J	12L
24E0560	LDW24-SC1465A	24E0560-15	EPA 8082A	Aroclor-1254	52.5	ug/kg	P1	J	3
24E0560	LDW24-SC1465A	24E0560-15	EPA 9060	Total Organic carbon	3.55	%		J	12L
24E0560	LDW24-IT1418BDUP1	BME0711-DUP1	EPA 9060	Total Organic carbon	3.61	%		J	12L
24E0560	LDW24-IT1418BDUP2LT	BME0711-DUP2	EPA 9060	Total Organic carbon	3.85	%		J	12L
24E0605	LDW24-SC1309A	24E0605-02	EPA 8082A	Aroclor-1260	60.9	ug/kg	P1	J	3
24E0605	LDW24-SS1404	24E0605-05	EPA 8082A	Aroclor-1248	775	ug/kg	D	J	13H
24E0605	LDW24-SS1404	24E0605-05	EPA 8082A	Aroclor-1254	838	ug/kg	D	J	13H
24E0605	LDW24-SS1404	24E0605-05	EPA 8082A	Aroclor-1260	588	ug/kg	D	J	13H
24E0605	LDW24-IT1829	24E0605-09	EPA 8082A	Aroclor-1248	49.3	ug/kg	P1	J	3
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	1,2,3,4,6,7,8-HpCDD	2410	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	1,2,3,4,6,7,8-HpCDF	78.2	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	1,2,3,4,7,8,9-HpCDF	6.85	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	1,2,3,4,7,8-HxCDD	7.72	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	1,2,3,6,7,8-HxCDD	44.5	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	1,2,3,7,8,9-HxCDD	11.4	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	1,2,3,7,8,9-HxCDF	5.05	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	2,3,7,8-TCDF	0.804	ng/kg	EMPC X J	UJ	23H,25
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	OCDD	14300	ng/kg	E	J	9A,20
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	OCDF	286	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	Total HpCDD	9580	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	Total HpCDF	337	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	Total HxCDD	1070	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	Total HxCDF	142	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	Total PeCDD	8.05	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 1613B	Total PeCDF	24.2	ng/kg		J	9A
24E0605	LDW24-SS1828	24E0605-10	EPA 8082A	Aroclor-1248	10.8	ug/kg	P1	J	3
24E0605	LDW24-SS1828	24E0605-10	EPA 8082A	Aroclor-1260	12.8	ug/kg	P1	NJ	3
24E0605	LDW24-IT1828	24E0605-11	EPA 1613B	1,2,3,7,8,9-HxCDF	2.15	ng/kg		J	13L
24E0605	LDW24-IT1828	24E0605-11	EPA 1613B	2,3,4,6,7,8-HxCDF	3.73	ng/kg	EMPC	J	25
24E0605	LDW24-IT1828	24E0605-11	EPA 1613B	2,3,7,8-TCDF	1	ng/kg	EMPC X	J	23H,25

**Qualified Data Summary Table  
LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0605	LDW24-IT1828	24E0605-11	EPA 1613B	OCDD	18600	ng/kg	E	J	20
24E0605	LDW24-SS1566	24E0605-13	EPA 8082A	Aroclor-1248	11.2	ug/kg	P1	J	3
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	1,2,3,4,6,7,8-HpCDD	595	ng/kg	*	J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	1,2,3,4,6,7,8-HpCDF	39	ng/kg	*	J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	1,2,3,4,7,8,9-HpCDF	3.69	ng/kg	*	J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	1,2,3,4,7,8-HxCDD	2.32	ng/kg	*	J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	1,2,3,6,7,8-HxCDD	11.6	ng/kg	*	J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	1,2,3,7,8,9-HxCDD	5.02	ng/kg	*	J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	1,2,3,7,8,9-HxCDF	2.81	ng/kg	*	J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	2,3,4,6,7,8-HxCDF	0.703	ng/kg	* EMPC J	U	25
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	2,3,7,8-TCDF	0.252	ng/kg	* X J	J	23H
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	OCDD	5550	ng/kg	* E	J	9A,20
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	OCDF	195	ng/kg	*	J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	Total HpCDD	1960	ng/kg		J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	Total HpCDF	174	ng/kg		J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	Total HxCDD	140	ng/kg		J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	Total HxCDF	46.9	ng/kg		J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	Total PeCDD	1.4	ng/kg		J	9A
24E0605	LDW24-SS1828DUP1	BMF0088-DUP1	EPA 1613B	Total PeCDF	4.06	ng/kg		J	9A
24E0608	LDW24-IT1402A	24E0608-03	EPA 1613B	1,2,3,7,8,9-HxCDF	0.795	ng/kg	EMPC J	U	25
24E0608	LDW24-IT1402A	24E0608-03	EPA 1613B	2,3,7,8-TCDD	0.394	ng/kg	EMPC J	U	25
24E0608	LDW24-IT1402A	24E0608-03	EPA 1613B	2,3,7,8-TCDF	0.835	ng/kg	X J	J	23H
24E0608	LDW24-IT1402A	24E0608-03	EPA 6020	Arsenic	9.42	mg/kg		J	9A
24E0608	LDW24-SC1559A	24E0608-04	EPA 6020	Arsenic	11.1	mg/kg		J	9A
24E0608	LDW24-SC1559A	24E0608-04	EPA 6020	Lead	19.7	mg/kg		J	8L,9A
24E0608	LDW24-SC1559A	24E0608-04	EPA 6020	Zinc	100	mg/kg		J	9A
24E0608	LDW24-SC1559A	24E0608-04	EPA 7471B	Mercury	0.127	mg/kg		J	8H
24E0608	LDW24-SC1559A	24E0608-04	EPA 8082A	Aroclor-1248	36.2	ug/kg	P1	J	3
24E0608	LDW24-SC1559B	24E0608-05	EPA 8082A	Aroclor-1248	43.8	ug/kg	P1	J	3
24E0608	LDW24-SC1559C	24E0608-06	EPA 8082A	Aroclor-1248	64.1	ug/kg	P1	J	3
24E0608	LDW24-SC1559C	24E0608-06	EPA 8082A	Aroclor-1254	94.4	ug/kg	P1	J	3
24E0608	LDW24-SC1559E	24E0608-07	EPA 8082A	Aroclor-1248	62.7	ug/kg	P1	J	3
24E0608	LDW24-SC1559E	24E0608-07	EPA 8082A	Aroclor-1254	110	ug/kg	P1	J	3
24E0608	LDW24-SC1559I	24E0608-09	EPA 8082A	Aroclor-1248	20.7	ug/kg	P1	NJ	3
24E0608	LDW24-SC1559I	24E0608-09	EPA 8082A	Aroclor-1254	30.4	ug/kg	P1	NJ	3
24E0608	LDW24-SC1421C	24E0608-10	EPA 7471B	Mercury	0.142	mg/kg		J	8H
24E0608	LDW24-SC1421C	24E0608-10	EPA 8082A	Aroclor-1248	12.8	ug/kg	P1	NJ	3

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0608	LDW24-SC1421C	24E0608-10	EPA 8082A	Aroclor-1254	20.6	ug/kg	P1	NJ	3
24E0608	LDW24-SC1421D	24E0608-11	EPA 7471B	Mercury	0.187	mg/kg		J	8H
24E0608	LDW24-SC1421F	24E0608-12	EPA 7471B	Mercury	0.116	mg/kg		J	8H
24E0608	LDW24-SC1421F	24E0608-12	EPA 8082A	Aroclor-1248	66.1	ug/kg	P1	J	3
24E0608	LDW24-SC1421F	24E0608-12	EPA 8082A	Aroclor-1254	107	ug/kg	P1	J	3
24E0608	LDW24-SC1421H	24E0608-13	EPA 7471B	Mercury	0.114	mg/kg		J	8H
24E0608	LDW24-SC1421J	24E0608-14	EPA 7471B	Mercury	0.374	mg/kg		J	8H
24E0608	LDW24-SC1421L	24E0608-15	EPA 7471B	Mercury	0.322	mg/kg		J	8H
24E0608	LDW24-SC1421L	24E0608-15	EPA 8082A	Aroclor-1260	248	ug/kg	D	J	19
24E0608	LDW24-SS1830	24E0608-16	EPA 1613B	1,2,3,4,7,8,9-HpCDF	3.24	ng/kg	EMPC	J	25
24E0608	LDW24-SS1830	24E0608-16	EPA 1613B	2,3,7,8-TCDD	0.345	ng/kg	EMPC J	U	25
24E0608	LDW24-SC1406B	24E0608-17	EPA 8082A	Aroclor-1248	36.1	ug/kg	P1	J	3
24E0608	LDW24-SC1406B	24E0608-17	EPA 8082A	Aroclor-1254	48.3	ug/kg	P1	J	3
24E0608	LDW24-SC1406C	24E0608-18	EPA 8082A	Aroclor-1254	463	ug/kg	P1 D	J	3
24E0608	LDW24-SC1406C	24E0608-18	EPA 8082A	Aroclor-1260	186	ug/kg	P1 D	J	3
24E0608	LDW24-SS1317	24E0608-23	EPA 8082A	Aroclor-1248	91.5	ug/kg	P1	NJ	3
24E0608	LDW24-SS1315	24E0608-28	EPA 8082A	Aroclor-1248	26.6	ug/kg	P1	J	3
24E0608	LDW24-SS1834	24E0608-31	EPA 1613B	1,2,3,4,7,8-HxCDD	0.924	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1834	24E0608-31	EPA 1613B	1,2,3,7,8,9-HxCDF	0.944	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1834	24E0608-31	EPA 1613B	1,2,3,7,8-PeCDF	0.328	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1834	24E0608-31	EPA 1613B	2,3,4,6,7,8-HxCDF	0.896	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1834	24E0608-31	EPA 1613B	2,3,7,8-TCDF	0.772	ng/kg	X J	J	23H
24E0608	LDW24-SS1833	24E0608-32	EPA 1613B	1,2,3,4,7,8,9-HpCDF	2.56	ng/kg	EMPC	J	25
24E0608	LDW24-SS1833	24E0608-32	EPA 1613B	1,2,3,4,7,8-HxCDD	1.58	ng/kg	EMPC	J	25
24E0608	LDW24-SS1833	24E0608-32	EPA 1613B	2,3,4,6,7,8-HxCDF	0.714	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1833	24E0608-32	EPA 1613B	2,3,7,8-TCDD	0.38	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1833	24E0608-32	EPA 1613B	2,3,7,8-TCDF	1.32	ng/kg	X	J	23H
24E0608	LDW24-SS1833	24E0608-32	EPA 8082A	Aroclor-1248	35.7	ug/kg	P1	NJ	3
24E0608	LDW24-SS1832	24E0608-33	EPA 1613B	1,2,3,4,6,7,8-HpCDF	13.8	ng/kg	EMPC	J	25
24E0608	LDW24-SS1832	24E0608-33	EPA 1613B	1,2,3,6,7,8-HxCDF	0.71	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1832	24E0608-33	EPA 1613B	1,2,3,7,8,9-HxCDD	1.89	ng/kg	EMPC	J	25
24E0608	LDW24-SS1832	24E0608-33	EPA 1613B	1,2,3,7,8,9-HxCDF	0.948	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1832	24E0608-33	EPA 1613B	2,3,7,8-TCDF	0.491	ng/kg	EMPC X J	UJ	23H,25
24E0608	LDW24-SS1831	24E0608-34	EPA 1613B	1,2,3,6,7,8-HxCDF	2.02	ng/kg	EMPC	J	25
24E0608	LDW24-SS1831	24E0608-34	EPA 1613B	1,2,3,7,8,9-HxCDD	7.83	ng/kg	EMPC	J	25
24E0608	LDW24-SS1831	24E0608-34	EPA 1613B	1,2,3,7,8-PeCDF	0.8	ng/kg	EMPC J	U	25
24E0608	LDW24-SS1831	24E0608-34	EPA 1613B	2,3,4,6,7,8-HxCDF	1.55	ng/kg	EMPC	J	25

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0608	LDW24-SS1831	24E0608-34	EPA 1613B	2,3,7,8-TCDF	1.26	ng/kg	X	J	23H
24E0608	LDW24-IT1402ADUP1	BMF0004-DUP1	EPA 6020	Arsenic	11.9	mg/kg	*	J	9A
24E0608	LDW24-SC1421CDUP1	BMF0030-DUP1	EPA 7471B	Mercury	0.137	mg/kg		J	8H
24E0631	LDW24-IT1566A	24E0631-01	EPA 8082A	Aroclor-1248	20.8	ug/kg	P1	J	3
24E0631	LDW24-SC1335D	24E0631-03	EPA 8082A	Aroclor-1254	74.5	ug/kg	P1	J	3
24E0631	LDW24-SC1335G	24E0631-05	EPA 8082A	Aroclor-1254	156	ug/kg	P1 D	J	3
24E0670	LDW24-SC1582B	24E0670-01	EPA 8082A	Aroclor-1260	86.3	ug/kg	P1	J	3,10H
24E0670	LDW24-SC1582C	24E0670-02	EPA 8082A	Aroclor-1260	168	ug/kg	D	J	10H
24E0670	LDW24-SC1582C-FD	24E0670-03	EPA 8082A	Aroclor-1260	132	ug/kg	D	J	10H
24E0670	LDW24-SC1582E	24E0670-04	EPA 8082A	Aroclor-1260	137	ug/kg	D	J	10H
24E0670	LDW24-SC1582G	24E0670-05	EPA 8082A	Aroclor-1260	106	ug/kg	P1	J	3,10H
24E0670	LDW24-SC1356A	24E0670-06	EPA 8082A	Aroclor-1254	86.1	ug/kg	P1	J	3
24E0670	LDW24-SC1356A	24E0670-06	EPA 8082A	Aroclor-1260	46.5	ug/kg	P1	J	10H
24E0716	LDW24-SC1344D	24E0716-01	EPA 7471B	Mercury	0.345	mg/kg		J	8H
24E0716	LDW24-SC1344D	24E0716-01	EPA 8082A	Aroclor-1248	244	ug/kg	P1 D	J	3
24E0716	LDW24-SC1344D	24E0716-01	EPA 8082A	Aroclor-1260	160	ug/kg	D	J	12H
24E0716	LDW24-SC1344E	24E0716-02	EPA 7471B	Mercury	0.395	mg/kg		J	8H
24E0716	LDW24-SC1344E	24E0716-02	EPA 8082A	Aroclor-1248	340	ug/kg	P1 D	J	3
24E0716	LDW24-SC1344E	24E0716-02	EPA 8082A	Aroclor-1260	216	ug/kg	D	J	12H
24E0716	LDW24-SC1344G	24E0716-03	EPA 7471B	Mercury	0.308	mg/kg		J	8H
24E0716	LDW24-SC1344G	24E0716-03	EPA 8082A	Aroclor-1248	78.1	ug/kg	P1	J	3
24E0716	LDW24-SC1344G	24E0716-03	EPA 8082A	Aroclor-1260	119	ug/kg		J	12H,19
24E0716	LDW24-SC1344I	24E0716-04	EPA 7471B	Mercury	0.186	mg/kg		J	8H
24E0716	LDW24-SC1344I	24E0716-04	EPA 8082A	Aroclor-1248	9.9	ug/kg	P1	NJ	3
24E0716	LDW24-SC1344I	24E0716-04	EPA 8082A	Aroclor-1260	41.9	ug/kg		J	12H,19
24E0716	LDW24-SC1344K	24E0716-05	EPA 7471B	Mercury	0.361	mg/kg		J	8H
24E0716	LDW24-SC1344K	24E0716-05	EPA 8082A	Aroclor-1260	175	ug/kg		J	12H
24E0716	LDW24-SC1344M	24E0716-06	EPA 7471B	Mercury	0.278	mg/kg		J	8H
24E0716	LDW24-SC1344M	24E0716-06	EPA 8082A	Aroclor-1248	11.9	ug/kg	P1	J	3
24E0716	LDW24-SC1344M	24E0716-06	EPA 8082A	Aroclor-1254	26.4	ug/kg	P1	J	3
24E0716	LDW24-SC1344M	24E0716-06	EPA 8082A	Aroclor-1260	44.5	ug/kg		J	5BH,12H
24E0716	LDW24-SC1344D-FD	24E0716-07	EPA 7471B	Mercury	0.389	mg/kg		J	8H
24E0716	LDW24-SC1344D-FD	24E0716-07	EPA 8082A	Aroclor-1248	148	ug/kg	P1 D	J	3
24E0716	LDW24-SC1344D-FD	24E0716-07	EPA 8082A	Aroclor-1260	107	ug/kg	D	J	12H
24E0716	LDW24-SC1339D	24E0716-08	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	13L
24E0716	LDW24-SC1339D	24E0716-08	EPA 8082A	Aroclor-1221		ug/kg	U	UJ	13L
24E0716	LDW24-SC1339D	24E0716-08	EPA 8082A	Aroclor-1232		ug/kg	U	UJ	13L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24E0716	LDW24-SC1339D	24E0716-08	EPA 8082A	Aroclor-1242		ug/kg	U	UJ	13L
24E0716	LDW24-SC1339D	24E0716-08	EPA 8082A	Aroclor-1248	138	ug/kg	D	J	13L
24E0716	LDW24-SC1339D	24E0716-08	EPA 8082A	Aroclor-1254	143	ug/kg	P1 D	J	13L
24E0716	LDW24-SC1339D	24E0716-08	EPA 8082A	Aroclor-1260	85.6	ug/kg	D	J	12H,13L
24E0716	LDW24-SC1339D-FD	24E0716-09	EPA 8082A	Aroclor-1260	62	ug/kg	D	J	12H
24E0716	LDW24-SC1339E	24E0716-10	EPA 8082A	Aroclor-1260	89.9	ug/kg	D	J	12H
24E0716	LDW24-SC1339G	24E0716-11	EPA 8082A	Aroclor-1260	71.3	ug/kg	P1 D	J	12H
24E0716	LDW24-SC1336D	24E0716-12	EPA 8082A	Aroclor-1248	73.7	ug/kg	P1	J	3
24E0716	LDW24-SC1336D	24E0716-12	EPA 8082A	Aroclor-1260	83.8	ug/kg		J	12H,19
24E0716	LDW24-SC1336E	24E0716-13	EPA 8082A	Aroclor-1260	105	ug/kg	D	J	12H
24E0716	LDW24-SC1336G	24E0716-14	EPA 8082A	Aroclor-1260	118	ug/kg	D	J	12H
24E0716	LDW24-SC1333	24E0716-15	EPA 8082A	Aroclor-1254	49.6	ug/kg	P1	J	3
24E0716	LDW24-SC1333	24E0716-15	EPA 8082A	Aroclor-1260	39.9	ug/kg		J	12H
24F0006	LDW24-IT1540B	24F0006-01	EPA 8082A	Aroclor-1248	530	ug/kg	P1 D	J	3
24F0006	LDW24-IT1540B	24F0006-01	EPA 8082A	Aroclor-1254	1130	ug/kg	P1 D	J	3
24F0008	LDW24-SC1416C	24F0008-01	EPA 8082A	Aroclor-1254	77	ug/kg	P1	J	3
24F0008	LDW24-IT1546A	24F0008-07	EPA 8082A	Aroclor-1248	52.3	ug/kg	P1	J	3
24F0008	LDW24-IT1546A	24F0008-07	EPA 8082A	Aroclor-1254	107	ug/kg	P1	J	3
24F0008	LDW24-IT1546B	24F0008-08	EPA 6020	Lead	42.5	mg/kg	D	J	9A
24F0008	LDW24-IT1546B	24F0008-08	EPA 6020	Silver	0.33	mg/kg	J	J	9A
24F0008	LDW24-IT1546B-FD	24F0008-09	EPA 6020	Lead	46.6	mg/kg	D	J	9A
24F0008	LDW24-IT1546B-FD	24F0008-09	EPA 6020	Silver	0.35	mg/kg	J	J	9A
24F0008	LDW24-IT1546C	24F0008-10	EPA 6020	Lead	73.9	mg/kg	D	J	9A
24F0008	LDW24-IT1546C	24F0008-10	EPA 6020	Silver	1.28	mg/kg		J	9A
24F0008	LDW24-IT1546C	24F0008-10	EPA 8082A	Aroclor-1248	343	ug/kg	P1 D	J	3,13H
24F0008	LDW24-IT1546C	24F0008-10	EPA 8082A	Aroclor-1254	621	ug/kg	P1 D	J	3,13H
24F0008	LDW24-IT1546C	24F0008-10	EPA 8082A	Aroclor-1260	402	ug/kg	D	J	8L,13H
24F0008	LDW24-IT1546E	24F0008-11	EPA 6020	Lead	108	mg/kg	D	J	9A
24F0008	LDW24-IT1546E	24F0008-11	EPA 6020	Silver	1.37	mg/kg		J	9A
24F0008	LDW24-IT1546E	24F0008-11	EPA 8082A	Aroclor-1248	387	ug/kg	P1 D	J	3
24F0008	LDW24-IT1546G	24F0008-12	EPA 6020	Lead	89.4	mg/kg	D	J	9A
24F0008	LDW24-IT1546G	24F0008-12	EPA 6020	Silver	0.97	mg/kg		J	9A
24F0008	LDW24-IT1546G	24F0008-12	EPA 8082A	Aroclor-1248	392	ug/kg	P1 D	J	3
24F0008	LDW24-IT1547A	24F0008-13	EPA 8082A	Aroclor-1248	37.1	ug/kg	P1	J	3
24F0008	LDW24-SC1353A	24F0008-15	EPA 8082A	Aroclor-1260	64.5	ug/kg		J	19
24F0010	LDW23-SS1273	24F0010-01	EPA 6020	Zinc	84.1	mg/kg		J	9A
24F0010	LDW23-SS1273	24F0010-01	EPA 7471B	Mercury	0.107	mg/kg	H	J	1

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SS1273	24F0010-01	EPA 8082A	Aroclor-1016		ug/kg	H U	UJ	1
24F0010	LDW23-SS1273	24F0010-01	EPA 8082A	Aroclor-1221		ug/kg	H U	UJ	1
24F0010	LDW23-SS1273	24F0010-01	EPA 8082A	Aroclor-1232		ug/kg	H U	UJ	1
24F0010	LDW23-SS1273	24F0010-01	EPA 8082A	Aroclor-1242		ug/kg	H U	UJ	1
24F0010	LDW23-SS1273	24F0010-01	EPA 8082A	Aroclor-1248	28.6	ug/kg	H P1	J	1,3
24F0010	LDW23-SS1273	24F0010-01	EPA 8082A	Aroclor-1254	28.1	ug/kg	H	J	1
24F0010	LDW23-SS1273	24F0010-01	EPA 8082A	Aroclor-1260	50.5	ug/kg	H	J	1
24F0010	LDW23-SS1273	24F0010-01	EPA 9060	Total Organic carbon	1.34	%	H	J	1
24F0010	LDW23-SS1273	24F0010-01	SM 2540-G	Total Solids	55.55	%	H	J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,4,6,7,8-HpCDD	116	ng/kg	H	J	1,12H
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,4,6,7,8-HpCDF	21.9	ng/kg	H	J	1,12H
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,4,7,8,9-HpCDF	2.48	ng/kg	H	J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,4,7,8-HxCDD	1.38	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,4,7,8-HxCDF	3.91	ng/kg	H	J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,6,7,8-HxCDD	4.61	ng/kg	H	J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,6,7,8-HxCDF	1.3	ng/kg	H	J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,7,8,9-HxCDD	3.06	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,7,8,9-HxCDF	0.853	ng/kg	EMPC H J	UJ	1,25
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,7,8-PeCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	1,2,3,7,8-PeCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	2,3,4,6,7,8-HxCDF	1.33	ng/kg	H	J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	2,3,4,7,8-PeCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	2,3,7,8-TCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	2,3,7,8-TCDF		ng/kg	H U	UJ	1,5BL
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	OCDD	835	ng/kg	H	J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	OCDF	55.4	ng/kg	H	J	1,12H
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	Total HpCDD	263	ng/kg		J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	Total HpCDF	79	ng/kg		J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	Total HxCDD	18.8	ng/kg		J	1,9A
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	Total HxCDF	36	ng/kg		J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	Total PeCDD	0.467	ng/kg	H J	J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	Total PeCDF	2.94	ng/kg		J	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	Total TCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1221A	24F0010-02	EPA 1613B	Total TCDF	1.82	ng/kg		J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,4,6,7,8-HpCDD	130	ng/kg	H	J	1,12H
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,4,6,7,8-HpCDF	23.2	ng/kg	H	J	1,12H
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,4,7,8,9-HpCDF	1.6	ng/kg	H	J	1

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,4,7,8-HxCDD	1.29	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,4,7,8-HxCDF	3.56	ng/kg	H	J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,6,7,8-HxCDD	4.51	ng/kg	H	J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,6,7,8-HxCDF	1.66	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,7,8,9-HxCDD	3.37	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,7,8,9-HxCDF	0.97	ng/kg	H J	J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,7,8-PeCDD	0.892	ng/kg	EMPC H J	UJ	1,25
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	1,2,3,7,8-PeCDF	1.06	ng/kg	H	J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	2,3,4,6,7,8-HxCDF	1.2	ng/kg	H	J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	2,3,4,7,8-PeCDF	1.58	ng/kg	H	J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	2,3,7,8-TCDD	0.329	ng/kg	EMPC H J B	UJ	1,7,25
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	2,3,7,8-TCDF	1.82	ng/kg	EMPC H	J	1,5BL,25
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	OCDD	915	ng/kg	H	J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	OCDF	58.9	ng/kg	H	J	1,12H
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	Total HpCDD	274	ng/kg		J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	Total HpCDF	76.4	ng/kg		J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	Total HxCDD	33.2	ng/kg		J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	Total HxCDF	35.5	ng/kg		J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	Total PeCDD	2	ng/kg		J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	Total PeCDF	9.51	ng/kg		J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	Total TCDD	2.16	ng/kg		J	1
24F0010	LDW23-SC1221B	24F0010-03	EPA 1613B	Total TCDF	8.43	ng/kg		J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,4,6,7,8-HpCDD	1520	ng/kg	H	J	1,12H
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,4,6,7,8-HpCDF	165	ng/kg	H	J	1,12H
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,4,7,8,9-HpCDF	16.3	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,4,7,8-HxCDD	14.8	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,4,7,8-HxCDF	26	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,6,7,8-HxCDD	55.3	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,6,7,8-HxCDF	10.9	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,7,8,9-HxCDD	42.3	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,7,8,9-HxCDF	5.21	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,7,8-PeCDD	11.1	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	1,2,3,7,8-PeCDF	3.9	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	2,3,4,6,7,8-HxCDF	6.18	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	2,3,4,7,8-PeCDF	10.5	ng/kg	H	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	2,3,7,8-TCDD	2.7	ng/kg	H B	J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	2,3,7,8-TCDF	6.08	ng/kg	H	J	1,5BL

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	OCDD	10700	ng/kg	E H	J	1,20
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	OCDF	360	ng/kg	H	J	1,12H
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	Total HpCDD	2890	ng/kg		J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	Total HpCDF	529	ng/kg		J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	Total HxCDD	253	ng/kg		J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	Total HxCDF	292	ng/kg		J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	Total PeCDD	23.5	ng/kg		J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	Total PeCDF	121	ng/kg		J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	Total TCDD	17.3	ng/kg		J	1
24F0010	LDW23-IT1210	24F0010-04	EPA 1613B	Total TCDF	87.4	ng/kg		J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 6020	Zinc	76.2	mg/kg		J	9A
24F0010	LDW23-SS1196	24F0010-05	EPA 7471B	Mercury	0.0585	mg/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8082A	Aroclor-1016		ug/kg	H U	UJ	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8082A	Aroclor-1221		ug/kg	H U	UJ	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8082A	Aroclor-1232		ug/kg	H U	UJ	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8082A	Aroclor-1242		ug/kg	H U	UJ	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8082A	Aroclor-1248	18.1	ug/kg	H P1	J	1,3
24F0010	LDW23-SS1196	24F0010-05	EPA 8082A	Aroclor-1254	36.8	ug/kg	H P1	J	1,3
24F0010	LDW23-SS1196	24F0010-05	EPA 8082A	Aroclor-1260	25.8	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	2-Methylnaphthalene		ug/kg	H U	UJ	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Acenaphthene	30.3	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Acenaphthylene	19.2	ug/kg	H J	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Anthracene	117	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Benzo(a)anthracene	591	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Benzo(a)pyrene	337	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Benzo(g,h,i)perylene	106	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Chrysene	767	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Dibenzo(a,h)anthracene	42.7	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Dibenzofuran		ug/kg	H U	UJ	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Fluoranthene	1060	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Fluorene		ug/kg	H U	UJ	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Indeno(1,2,3-cd)pyrene	110	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Naphthalene	10.7	ug/kg	H J	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Phenanthrene	99.6	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Pyrene	2160	ug/kg	H E	DNR	20
24F0010	LDW23-SS1196	24F0010-05	EPA 8270E	Total benzofluoranthenes	989	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05	EPA 9060	Total Organic carbon	0.41	%	H	J	1

**Qualified Data Summary Table  
LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SS1196	24F0010-05	SM 2540-G	Total Solids	70.61	%	H	J	1
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	2-Methylnaphthalene		ug/kg	H U	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Acenaphthene	26.1	ug/kg	H	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Acenaphthylene	14.3	ug/kg	H J	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Anthracene	89	ug/kg	H	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Benzo(a)anthracene	546	ug/kg	H	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Benzo(a)pyrene	317	ug/kg	H	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Benzo(g,h,i)perylene	98.1	ug/kg	H	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Chrysene	654	ug/kg	H	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Dibenzo(a,h)anthracene	33.6	ug/kg	H Q	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Dibenzofuran		ug/kg	H U	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Fluoranthene	1070	ug/kg	H	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Fluorene		ug/kg	H U	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Indeno(1,2,3-cd)pyrene	98.5	ug/kg	H Q	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Naphthalene		ug/kg	H U	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Phenanthrene	85.2	ug/kg	H	DNR	11
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Pyrene	2790	ug/kg	H	J	1
24F0010	LDW23-SS1196	24F0010-05RE1	EPA 8270E	Total benzofluoranthenes	907	ug/kg	H	DNR	11
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,4,6,7,8-HpCDD	1.54	ng/kg	EMPC H J	UJ	1,12H,25
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,4,6,7,8-HpCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,4,7,8,9-HpCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,4,7,8-HxCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,4,7,8-HxCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,6,7,8-HxCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,6,7,8-HxCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,7,8,9-HxCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,7,8,9-HxCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,7,8-PeCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	1,2,3,7,8-PeCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	2,3,4,6,7,8-HxCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	2,3,4,7,8-PeCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	2,3,7,8-TCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	2,3,7,8-TCDF		ng/kg	H U	UJ	1,5BL
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	OCDD	15.3	ng/kg	H	J	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	OCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	Total HpCDD	2.42	ng/kg		J	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	Total HpCDF		ng/kg	H U	UJ	1

**Qualified Data Summary Table  
LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	Total HxCDD	0.739	ng/kg	H J	J	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	Total HxCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	Total PeCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	Total PeCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	Total TCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1206	24F0010-06	EPA 1613B	Total TCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,4,6,7,8-HpCDD	309	ng/kg	H	J	1,12H
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,4,6,7,8-HpCDF	36.1	ng/kg	H	J	1,12H
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,4,7,8,9-HpCDF	3.81	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,4,7,8-HxCDD	2.44	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,4,7,8-HxCDF	6.21	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,6,7,8-HxCDD	9.5	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,6,7,8-HxCDF	2.13	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,7,8,9-HxCDD	6.81	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,7,8,9-HxCDF	1.27	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,7,8-PeCDD	2.41	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	1,2,3,7,8-PeCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	2,3,4,6,7,8-HxCDF	2	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	2,3,4,7,8-PeCDF		ng/kg	H U	UJ	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	2,3,7,8-TCDD	0.488	ng/kg	H J B	UJ	1,7
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	2,3,7,8-TCDF		ng/kg	H U	UJ	1,5BL
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	OCDD	2630	ng/kg	H	J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	OCDF	99	ng/kg	H	J	1,12H
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	Total HpCDD	995	ng/kg		J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	Total HpCDF	130	ng/kg		J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	Total HxCDD	95.9	ng/kg		J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	Total HxCDF	61.5	ng/kg		J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	Total PeCDD	2.9	ng/kg		J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	Total PeCDF	11.3	ng/kg		J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	Total TCDD	4.95	ng/kg		J	1
24F0010	LDW23-SC1213	24F0010-07	EPA 1613B	Total TCDF	2.58	ng/kg		J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 6020	Zinc	119	mg/kg		J	9A
24F0010	LDW23-SC1139	24F0010-08	EPA 7471B	Mercury	0.226	mg/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8081B	Hexachlorobenzene		ug/kg	H U	UJ	1,5C
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	2-Methylnaphthalene	11.7	ug/kg	H J	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	4-Methylphenol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Acenaphthene		ug/kg	H U	UJ	1

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Acenaphthylene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Anthracene	17.9	ug/kg	H J	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Benzo(a)anthracene	47.8	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Benzo(a)pyrene	64.1	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Benzo(g,h,i)perylene	36.7	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Bis(2-ethylhexyl)phthalate	93.7	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Butyl benzyl phthalate	13.6	ug/kg	H J	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Chrysene	68.7	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Dibenzo(a,h)anthracene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Dibenzofuran		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Dimethyl phthalate		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Fluoranthene	106	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Fluorene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Indeno(1,2,3-cd)pyrene	34	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Naphthalene	11.6	ug/kg	H J	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Phenanthrene	63.5	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Phenol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Pyrene	217	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E	Total benzofluoranthenes	164	ug/kg	H	J	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E-SIM	1,2,4-Trichlorobenzene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E-SIM	1,2-Dichlorobenzene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E-SIM	1,4-Dichlorobenzene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E-SIM	2,4-Dimethylphenol		ug/kg	H U	DNR	10L
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E-SIM	Benzoic acid		ug/kg	H U	UJ	1,13L
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E-SIM	Benzyl alcohol		ug/kg	H U	UJ	1,13L
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E-SIM	n-Nitrosodiphenylamine		ug/kg	H U	UJ	1
24F0010	LDW23-SC1139	24F0010-08	EPA 8270E-SIM	Pentachlorophenol		ug/kg	H U	UJ	1,5BL,13L
24F0010	LDW23-SC1139	24F0010-08RE1	EPA 8270E-SIM	2,4-Dimethylphenol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 6020	Zinc	110	mg/kg		J	9A
24F0010	LDW23-SC1145	24F0010-09	EPA 7471B	Mercury	0.146	mg/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8081B	Hexachlorobenzene		ug/kg	H U	UJ	1,5C
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	2-Methylnaphthalene	16.3	ug/kg	H J	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	4-Methylphenol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Acenaphthene	14.4	ug/kg	H J	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Acenaphthylene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Anthracene	36	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Benzo(a)anthracene	107	ug/kg	H	J	1

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Benzo(a)pyrene	154	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Benzo(g,h,i)perylene	82.6	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Bis(2-ethylhexyl)phthalate	292	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Butyl benzyl phthalate	30.4	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Chrysene	153	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Dibenzo(a,h)anthracene	24.2	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Dibenzofuran		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Dimethyl phthalate		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Fluoranthene	264	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Fluorene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Indeno(1,2,3-cd)pyrene	76.9	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Naphthalene	14.6	ug/kg	H J	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Phenanthrene	119	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Phenol	89.9	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Pyrene	653	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E	Total benzofluoranthenes	358	ug/kg	H	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E-SIM	1,2,4-Trichlorobenzene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E-SIM	1,2-Dichlorobenzene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E-SIM	1,4-Dichlorobenzene	3.3	ug/kg	H J	J	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E-SIM	2,4-Dimethylphenol		ug/kg	H U	DNR	10L
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E-SIM	Benzoic acid		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E-SIM	Benzyl alcohol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E-SIM	n-Nitrosodiphenylamine		ug/kg	H U	UJ	1
24F0010	LDW23-SC1145	24F0010-09	EPA 8270E-SIM	Pentachlorophenol		ug/kg	H U	UJ	1,5BL
24F0010	LDW23-SC1145	24F0010-09RE1	EPA 8270E-SIM	2,4-Dimethylphenol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1125	24F0010-10	EPA 6020	Zinc	120	mg/kg		J	9A
24F0010	LDW23-SC1125	24F0010-10	EPA 7471B	Mercury	0.255	mg/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10	EPA 8081B	Hexachlorobenzene		ug/kg	H U	UJ	1,5C
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	2-Methylnaphthalene	27	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	4-Methylphenol	420	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Acenaphthene	13.5	ug/kg	H J	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Acenaphthylene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Anthracene	45.8	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Benzo(a)anthracene	77.9	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Benzo(a)pyrene	110	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Benzo(g,h,i)perylene	41.2	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Bis(2-ethylhexyl)phthalate	110	ug/kg	H	J	1,5BL

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Butyl benzyl phthalate	13.6	ug/kg	H J	J	1,5BL
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Chrysene	102	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Dibenzo(a,h)anthracene		ug/kg	H U	UJ	1,5BL
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Dibenzofuran		ug/kg	H U	UJ	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Dimethyl phthalate		ug/kg	H U	UJ	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Fluoranthene	162	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Fluorene	21.8	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Indeno(1,2,3-cd)pyrene	38.6	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Naphthalene	33.4	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Phenanthrene	93.9	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Phenol	144	ug/kg	H Q	J	1,5BH
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Pyrene	251	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E	Total benzofluoranthenes	257	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E-SIM	1,2,4-Trichlorobenzene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E-SIM	1,2-Dichlorobenzene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E-SIM	1,4-Dichlorobenzene	5.8	ug/kg	H	J	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E-SIM	2,4-Dimethylphenol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E-SIM	Benzyl alcohol	165	ug/kg	H Q	J	1,5BL
24F0010	LDW23-SC1125	24F0010-10RE1	EPA 8270E-SIM	n-Nitrosodiphenylamine	14	ug/kg	H	J	1,8L
24F0010	LDW23-SC1125	24F0010-10RE2	EPA 8270E-SIM	Benzoic acid	369	ug/kg	H	J	1,5A,5BL,5C,9A
24F0010	LDW23-SC1125	24F0010-10RE2	EPA 8270E-SIM	Pentachlorophenol		ug/kg	H U	DNR	5A,5BL
24F0010	LDW23-SC1125	24F0010-10RE3	EPA 8270E-SIM	Pentachlorophenol		ug/kg	H U	UJ	1,5BL
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,4,6,7,8-HpCDD	558	ng/kg	H	J	1,12H
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,4,6,7,8-HpCDF	161	ng/kg	H	J	1,12H
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,4,7,8,9-HpCDF	19.6	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,4,7,8-HxCDD	2.79	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,4,7,8-HxCDF	35.9	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,6,7,8-HxCDD	17.7	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,6,7,8-HxCDF	8.03	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,7,8,9-HxCDD	8.23	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,7,8,9-HxCDF	5.74	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,7,8-PeCDD	2.06	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	1,2,3,7,8-PeCDF	1.8	ng/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	2,3,4,6,7,8-HxCDF	5.16	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	2,3,4,7,8-PeCDF	5.98	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	2,3,7,8-TCDD	0.802	ng/kg	EMPC H J B	UJ	1,7,25
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	2,3,7,8-TCDF	2.38	ng/kg	EMPC H	J	1,5BL,25

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	OCDD	4140	ng/kg	E H	J	1,20
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	OCDF	649	ng/kg	H	J	1,12H
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	Total HpCDD	985	ng/kg		J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	Total HpCDF	680	ng/kg		J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	Total HxCDD	128	ng/kg		J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	Total HxCDF	262	ng/kg		J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	Total PeCDD	7.22	ng/kg		J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	Total PeCDF	33.2	ng/kg		J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	Total TCDD	4.94	ng/kg		J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 1613B	Total TCDF	24	ng/kg		J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 6020	Zinc	117	mg/kg		J	9A
24F0010	LDW23-SC1132	24F0010-11	EPA 7471B	Mercury	0.296	mg/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8081B	Hexachlorobenzene		ug/kg	H U	UJ	1,5C
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	2-Methylnaphthalene	22	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	4-Methylphenol	95.6	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Acenaphthene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Acenaphthylene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Anthracene	22.6	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Benzo(a)anthracene	76.9	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Benzo(a)pyrene	67.2	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Benzo(g,h,i)perylene	34.8	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Bis(2-ethylhexyl)phthalate	63	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Butyl benzyl phthalate	14.5	ug/kg	H J	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Chrysene	69.7	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Dibenzo(a,h)anthracene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Dibenzofuran		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Dimethyl phthalate		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Fluoranthene	127	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Fluorene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Indeno(1,2,3-cd)pyrene	32.5	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Naphthalene	15.5	ug/kg	H J	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Phenanthrene	52.9	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Phenol	11.5	ug/kg	H J	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Pyrene	190	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E	Total benzofluoranthenes	158	ug/kg	H	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E-SIM	1,2,4-Trichlorobenzene		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E-SIM	1,2-Dichlorobenzene		ug/kg	H U	UJ	1

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E-SIM	1,4-Dichlorobenzene	4	ug/kg	H J	J	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E-SIM	2,4-Dimethylphenol		ug/kg	H U	DNR	10L
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E-SIM	Benzoic acid		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E-SIM	Benzyl alcohol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E-SIM	n-Nitrosodiphenylamine		ug/kg	H U	UJ	1
24F0010	LDW23-SC1132	24F0010-11	EPA 8270E-SIM	Pentachlorophenol		ug/kg	H U	UJ	1,5BL
24F0010	LDW23-SC1132	24F0010-11RE1	EPA 8270E-SIM	2,4-Dimethylphenol		ug/kg	H U	UJ	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,4,6,7,8-HpCDD	177	ng/kg	H	J	1,12H
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,4,6,7,8-HpCDF	32.9	ng/kg	H	J	1,12H
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,4,7,8,9-HpCDF	2.37	ng/kg	H	J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,4,7,8-HxCDD	1.43	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,4,7,8-HxCDF	5.29	ng/kg	H	J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,6,7,8-HxCDD	6.21	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,6,7,8-HxCDF	1.63	ng/kg	H	J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,7,8,9-HxCDD	3.79	ng/kg	H	J	1,5BH
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,7,8,9-HxCDF	1.1	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,7,8-PeCDD		ng/kg	H U	UJ	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	1,2,3,7,8-PeCDF	0.604	ng/kg	EMPC H J	UJ	1,25
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	2,3,4,6,7,8-HxCDF	1.27	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	2,3,4,7,8-PeCDF	1.03	ng/kg	EMPC H	J	1,25
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	2,3,7,8-TCDD	0.377	ng/kg	EMPC H J B	UJ	1,7,25
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	2,3,7,8-TCDF	0.636	ng/kg	EMPC H J	UJ	1,5BL,25
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	OCDD	1250	ng/kg	H	J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	OCDF	93.1	ng/kg	H	J	1,12H
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	Total HpCDD	420	ng/kg		J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	Total HpCDF	129	ng/kg		J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	Total HxCDD	41.5	ng/kg		J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	Total HxCDF	54.5	ng/kg		J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	Total PeCDD	0.684	ng/kg	H J	J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	Total PeCDF	8.99	ng/kg		J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	Total TCDD	1.15	ng/kg		J	1
24F0010	LDW23-SC1165	24F0010-12	EPA 1613B	Total TCDF	1.03	ng/kg		J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,4,6,7,8-HpCDD	7270	ng/kg	H	J	1,12H
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,4,6,7,8-HpCDF	574	ng/kg	H	J	1,12H
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,4,7,8,9-HpCDF	37.4	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,4,7,8-HxCDD	56.5	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,4,7,8-HxCDF	236	ng/kg	H	J	1

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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,6,7,8-HxCDD	256	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,6,7,8-HxCDF	57.9	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,7,8,9-HxCDD	151	ng/kg	H	J	1,5BH
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,7,8,9-HxCDF	24.8	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,7,8-PeCDD	50.5	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	1,2,3,7,8-PeCDF	45.1	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	2,3,4,6,7,8-HxCDF	59.3	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	2,3,4,7,8-PeCDF	272	ng/kg	H	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	2,3,7,8-TCDD	5.87	ng/kg	H B	J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	2,3,7,8-TCDF	75.4	ng/kg	H	J	1,5BL
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	OCDD	51300	ng/kg	E H	J	1,20
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	OCDF	1250	ng/kg	H	J	1,12H
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	Total HpCDD	14800	ng/kg		J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	Total HpCDF	1730	ng/kg		J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	Total HxCDD	1950	ng/kg		J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	Total HxCDF	1420	ng/kg		J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	Total PeCDD	274	ng/kg		J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	Total PeCDF	3300	ng/kg		J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	Total TCDD	84.7	ng/kg		J	1
24F0010	LDW23-IT1067	24F0010-13	EPA 1613B	Total TCDF	5350	ng/kg		J	1
24F0010	LDW23-SS1196DUP1	BMF0176-DUP1	EPA 7471B	Mercury	0.0393	mg/kg	L	J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,4,6,7,8-HpCDD	129	ng/kg		J	1,12H
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,4,6,7,8-HpCDF	23	ng/kg		J	1,12H
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,4,7,8,9-HpCDF	2.18	ng/kg	EMPC	J	1,25
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,4,7,8-HxCDD		ng/kg	U	UJ	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,4,7,8-HxCDF	3.42	ng/kg	EMPC	J	1,25
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,6,7,8-HxCDD	3.58	ng/kg	*	J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,6,7,8-HxCDF	1.24	ng/kg		J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,7,8,9-HxCDD	3.06	ng/kg		J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,7,8,9-HxCDF	0.888	ng/kg	EMPC J	UJ	1,25
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,7,8-PeCDD	0.936	ng/kg	EMPC J	UJ	1,25
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	1,2,3,7,8-PeCDF		ng/kg	U	UJ	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	2,3,4,6,7,8-HxCDF	1.2	ng/kg	EMPC	J	1,25
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	2,3,4,7,8-PeCDF		ng/kg	U	UJ	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	2,3,7,8-TCDD		ng/kg	U	UJ	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	2,3,7,8-TCDF	0.612	ng/kg	EMPC J	UJ	1,5BL,25
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	OCDD	884	ng/kg		J	1

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	OCDF	67.5	ng/kg		J	1,12H
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	Total HpCDD	284	ng/kg		J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	Total HpCDF	85.4	ng/kg		J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	Total HxCDD	35.4	ng/kg		J	1,9A
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	Total HxCDF	30.6	ng/kg		J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	Total PeCDD	0.657	ng/kg	J	J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	Total PeCDF	2.89	ng/kg		J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	Total TCDD	0.892	ng/kg	J	J	1
24F0010	LDW23-SC1221ADUP2	BMF0331-DUP2	EPA 1613B	Total TCDF	1.74	ng/kg		J	1
24F0050	LDW24-SS1537	24F0050-01	EPA 6020	Lead	18.6	mg/kg	D	J	9A
24F0050	LDW24-SS1537	24F0050-01	EPA 6020	Silver	0.1	mg/kg	J	J	9A
24F0050	LDW24-SS1537	24F0050-01	EPA 8082A	Aroclor-1254	4.1	ug/kg	P1	J	3
24F0050	LDW24-SS1537	24F0050-01	EPA 8082A	Aroclor-1260	6.8	ug/kg		J	19
24F0050	LDW24-SS1523	24F0050-02	EPA 6020	Lead	16.8	mg/kg	D	J	9A
24F0050	LDW24-SS1523	24F0050-02	EPA 6020	Silver	0.06	mg/kg	J	J	9A
24F0050	LDW24-SS1523	24F0050-02	EPA 8082A	Aroclor-1254	24.8	ug/kg	P1	J	3
24F0050	LDW24-SS1523-FD	24F0050-03	EPA 6020	Lead	16.5	mg/kg	D	J	9A
24F0050	LDW24-SS1523-FD	24F0050-03	EPA 6020	Silver	0.06	mg/kg	J	J	9A
24F0050	LDW24-SS1514	24F0050-04	EPA 6020	Lead	19.8	mg/kg	D	J	9A
24F0050	LDW24-SS1514	24F0050-04	EPA 6020	Silver	0.07	mg/kg	J	J	9A
24F0050	LDW24-SS1512	24F0050-06	EPA 6020	Lead	16.7	mg/kg	D	J	9A
24F0050	LDW24-SS1512	24F0050-06	EPA 6020	Silver	0.04	mg/kg	J	J	9A
24F0050	LDW24-SS1512	24F0050-06	EPA 8082A	Aroclor-1260	7.5	ug/kg		J	9A
24F0050	LDW24-SS1512	24F0050-06	EPA 9060	Total Organic carbon	0.21	%		J	9A,12L
24F0050	LDW24-SS1427	24F0050-07	EPA 6020	Lead	5.7	mg/kg	D	J	9A
24F0050	LDW24-SS1427	24F0050-07	EPA 6020	Silver	0.05	mg/kg	J	J	9A
24F0050	LDW24-SS1427	24F0050-07	EPA 9060	Total Organic carbon	0.14	%		J	9A,12L
24F0050	LDW24-IT1427A	24F0050-08	EPA 9060	Total Organic carbon	0.18	%		J	9A,12L
24F0050	LDW24-IT1317A	24F0050-09	EPA 9060	Total Organic carbon	0.36	%		J	9A,12L
24F0109	LDW24-SS1377	24F0109-01	EPA 9060	Total Organic carbon	0.3	%		J	9A
24F0109	LDW24-SS1374	24F0109-02	EPA 9060	Total Organic carbon	0.88	%		J	9A
24F0109	LDW24-IT1367A	24F0109-03	EPA 8082A	Aroclor-1248	463	ug/kg	P1 D	J	3
24F0109	LDW24-IT1367A	24F0109-03	EPA 8082A	Aroclor-1254	317	ug/kg	P1 D	NJ	3
24F0109	LDW24-IT1367A	24F0109-03	EPA 9060	Total Organic carbon	4.43	%		J	9A
24F0109	LDW24-SS1402	24F0109-04	EPA 6020	Arsenic	47.1	mg/kg		J	9A
24F0109	LDW24-SS1402	24F0109-04	EPA 6020	Lead	88.3	mg/kg	D	J	9A
24F0109	LDW24-SS1402	24F0109-04	EPA 6020	Silver	0.14	mg/kg	J	J	9A

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0109	LDW24-SS1402	24F0109-04	EPA 8082A	Aroclor-1254	11.5	ug/kg	P1	J	3
24F0109	LDW24-SS1402	24F0109-04	EPA 9060	Total Organic carbon	1.1	%		J	9A
24F0109	LDW24-SS1402-FD	24F0109-05	EPA 6020	Arsenic	56	mg/kg		J	9A
24F0109	LDW24-SS1402-FD	24F0109-05	EPA 6020	Lead	98.7	mg/kg	D	J	9A
24F0109	LDW24-SS1402-FD	24F0109-05	EPA 6020	Silver	0.12	mg/kg	J	J	9A
24F0109	LDW24-SS1402-FD	24F0109-05	EPA 9060	Total Organic carbon	1.01	%		J	9A
24F0109	LDW24-SS1367	24F0109-06	EPA 9060	Total Organic carbon	6.06	%		J	9A
24F0109	LDW24-SS1369	24F0109-07	EPA 9060	Total Organic carbon	5.81	%		J	9A
24F0109	LDW24-SS1363	24F0109-08	EPA 9060	Total Organic carbon	4.47	%		J	9A
24F0109	LDW24-SS1360	24F0109-09	EPA 9060	Total Organic carbon	6.2	%		J	9A
24F0109	LDW24-SS1358	24F0109-10	EPA 9060	Total Organic carbon	5.43	%		J	9A
24F0109	LDW24-SS1355	24F0109-11	EPA 9060	Total Organic carbon	2.88	%		J	9A
24F0109	LDW24-SS1352	24F0109-12	EPA 9060	Total Organic carbon	3.26	%		J	9A
24F0109	LDW24-SS1370	24F0109-13	EPA 9060	Total Organic carbon	1.9	%		J	9A
24F0109	LDW24-SS1359	24F0109-14	EPA 8082A	Aroclor-1248	464	ug/kg	P1 D	J	3
24F0109	LDW24-SS1359	24F0109-14	EPA 8082A	Aroclor-1254	469	ug/kg	P1 D	NJ	3
24F0109	LDW24-SS1359	24F0109-14	EPA 9060	Total Organic carbon	4.62	%		J	9A
24F0109	LDW24-SS1362	24F0109-15	EPA 8082A	Aroclor-1254	1400	ug/kg	P1 D	J	3
24F0109	LDW24-SS1362	24F0109-15	EPA 9060	Total Organic carbon	1.31	%		J	9A
24F0109	LDW24-SS1377DUP1	BMF0609-DUP1	EPA 9060	Total Organic carbon	0.31	%		J	9A
24F0109	LDW24-SS1377DUP2LT	BMF0609-DUP2	EPA 9060	Total Organic carbon	0.21	%	*	J	9A
24F0134	LDW24-SC1382B	24F0134-01	EPA 7471B	Mercury	0.4	mg/kg		J	1
24F0134	LDW24-SC1382B	24F0134-01	EPA 9060	Total Organic carbon	2.58	%		J	1,9A
24F0134	LDW24-SC1382B	24F0134-01	SM 2540-G	Total Solids	57.34	%		J	1
24F0134	LDW24-SC1382C	24F0134-02	EPA 7471B	Mercury	0.407	mg/kg		J	1
24F0134	LDW24-SC1382C	24F0134-02	EPA 9060	Total Organic carbon	2.05	%		J	1
24F0134	LDW24-SC1382C	24F0134-02	SM 2540-G	Total Solids	58.5	%		J	1
24F0134	LDW24-SC1382E	24F0134-03	EPA 7471B	Mercury	0.336	mg/kg		J	1
24F0134	LDW24-SC1382E	24F0134-03	EPA 8082A	Aroclor-1248	214	ug/kg	P1 D	J	3
24F0134	LDW24-SC1382E	24F0134-03	EPA 9060	Total Organic carbon	2.13	%		J	1
24F0134	LDW24-SC1382E	24F0134-03	SM 2540-G	Total Solids	56.1	%		J	1
24F0134	LDW24-SC1387A	24F0134-04	EPA 6020	Arsenic	9.46	mg/kg		J	1
24F0134	LDW24-SC1387A	24F0134-04	EPA 6020	Cadmium	0.42	mg/kg		J	1
24F0134	LDW24-SC1387A	24F0134-04	EPA 6020	Chromium	22.8	mg/kg	D	J	1
24F0134	LDW24-SC1387A	24F0134-04	EPA 6020	Copper	35.5	mg/kg		J	1
24F0134	LDW24-SC1387A	24F0134-04	EPA 6020	Lead	18.3	mg/kg	D	J	1,9A
24F0134	LDW24-SC1387A	24F0134-04	EPA 6020	Silver	0.39	mg/kg		J	1,9A

**Qualified Data Summary Table  
LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0134	LDW24-SC1387A	24F0134-04	EPA 6020	Zinc	75.6	mg/kg		J	1
24F0134	LDW24-SC1387A	24F0134-04	EPA 7471B	Mercury	0.201	mg/kg		J	1
24F0134	LDW24-SC1387A	24F0134-04	EPA 8082A	Aroclor-1248	98.3	ug/kg	P1	NJ	3
24F0134	LDW24-SC1387A	24F0134-04	EPA 9060	Total Organic carbon	1.96	%		J	1
24F0134	LDW24-SC1387A	24F0134-04	SM 2540-G	Total Solids	59.59	%		J	1
24F0134	LDW24-IT1355A	24F0134-05	EPA 8082A	Aroclor-1254	286	ug/kg	P1 D	J	3
24F0134	LDW24-IT1352A	24F0134-06	EPA 8082A	Aroclor-1248	193	ug/kg	P1	J	3
24F0134	LDW24-SC1573	24F0134-07	EPA 8082A	Aroclor-1248	57.1	ug/kg	P1	J	3
24F0134	LDW24-IT1351A	24F0134-08	EPA 8082A	Aroclor-1254	379	ug/kg	P1 D	J	3
24F0134	LDW24-SC1586B	24F0134-09	EPA 8082A	Aroclor-1248	64.2	ug/kg	P1	J	3
24F0134	LDW24-SC1586C	24F0134-10	EPA 8082A	Aroclor-1248	15.7	ug/kg	P1	J	3
24F0134	LDW24-SC1586C	24F0134-10	EPA 8082A	Aroclor-1254	24	ug/kg	P1	J	3
24F0134	LDW24-SC1586E	24F0134-11	EPA 8082A	Aroclor-1260	4.6	ug/kg		J	10H
24F0134	LDW24-IT1361B	24F0134-13	EPA 8082A	Aroclor-1260	22400	ug/kg	D	J	10H
24F0134	LDW24-IT1359A	24F0134-14	EPA 8082A	Aroclor-1260	2130	ug/kg	D	J	10H
24F0134	LDW24-SS1351	24F0134-15	EPA 8082A	Aroclor-1260	1020	ug/kg	D	J	10H
24F0134	LDW24-SS1364	24F0134-16	EPA 8082A	Aroclor-1260	65.4	ug/kg		J	10H
24F0134	LDW24-SS1368	24F0134-17	EPA 8082A	Aroclor-1260	243	ug/kg	D	J	10H
24F0134	LDW24-SS1373	24F0134-18	EPA 8082A	Aroclor-1260	263	ug/kg	D	J	10H
24F0134	LDW24-SS1376	24F0134-19	EPA 8082A	Aroclor-1260	26.6	ug/kg		J	10H
24F0134	LDW24-SS1411	24F0134-20	EPA 8082A	Aroclor-1248	66.1	ug/kg	P1	J	3
24F0134	LDW24-SS1411	24F0134-20	EPA 8082A	Aroclor-1260	57.1	ug/kg		J	10H
24F0134	LDW24-SS1411-FD	24F0134-21	EPA 8082A	Aroclor-1260	55	ug/kg		J	10H
24F0134	LDW24-SC1382CDUP1	BMF0610-DUP1	EPA 9060	Total Organic carbon	2.05	%		J	1
24F0134	LDW24-SC1382CDUP2LT	BMF0610-DUP2	EPA 9060	Total Organic carbon	2.02	%		J	1
24F0134	LDW24-SC1382BDUP1	BMG0046-DUP1	SM 2540-G	Total Solids	57.99	%		J	1
24F0134	LDW24-SC1382BDUP2LT	BMG0046-DUP2	SM 2540-G	Total Solids	58	%		J	1
24F0222	LDW24-SC1460C	24F0222-01	EPA 8082A	Aroclor-1248	31.5	ug/kg	P1	J	3
24F0222	LDW24-SC1460J	24F0222-05	EPA 8082A	Aroclor-1248	178	ug/kg	P1	J	3
24F0222	LDW24-SC1460L	24F0222-06	EPA 8082A	Aroclor-1248	35.8	ug/kg	P1 D	J	3
24F0222	LDW24-SC1440A	24F0222-07	EPA 8082A	Aroclor-1254	106	ug/kg	P1	J	3
24F0223	LDW24-IT1434A	24F0223-02	EPA 8082A	Aroclor-1254	60.5	ug/kg	P1	J	3
24F0223	LDW24-IT1434B	24F0223-03	EPA 8082A	Aroclor-1254	21.7	ug/kg	P1	J	3
24F0223	LDW24-SC1433C	24F0223-05	EPA 8082A	Aroclor-1254	688	ug/kg	P1 D	J	3
24F0223	LDW24-SC1433E	24F0223-06	EPA 8082A	Aroclor-1248	25.9	ug/kg	P1	J	3
24F0223	LDW24-SC1433E	24F0223-06	EPA 8082A	Aroclor-1254	51.6	ug/kg	P1	J	3
24F0223	LDW24-SC1433G	24F0223-07	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0223	LDW24-SC1433I	24F0223-08	EPA 8082A	Aroclor-1260	5.1	ug/kg		J	3
24F0223	LDW24-SC1425B	24F0223-09	EPA 8082A	Aroclor-1248	269	ug/kg	P1 D	J	3
24F0223	LDW24-SC1425C	24F0223-10	EPA 8082A	Aroclor-1248	179	ug/kg	P1 D	J	3
24F0223	LDW24-SC1425G	24F0223-12	EPA 8082A	Aroclor-1248	78.4	ug/kg	P1	J	3
24F0223	LDW24-SC1425G	24F0223-12	EPA 8082A	Aroclor-1254	125	ug/kg	P1	J	3
24F0223	LDW24-SC1425I	24F0223-13	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	8L
24F0223	LDW24-SC1425I	24F0223-13	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	8L,19
24F0260	LDW24-IT1363A	24F0260-01	EPA 8082A	Aroclor-1248	309	ug/kg	P1 D	J	3
24F0260	LDW24-IT1363A	24F0260-01	EPA 8082A	Aroclor-1260	142	ug/kg	D	J	9A
24F0260	LDW24-SC1466B	24F0260-03	EPA 8082A	Aroclor-1248	25.9	ug/kg	P1	J	3
24F0260	LDW24-SC1441C	24F0260-06	EPA 8082A	Aroclor-1248	108	ug/kg	P1 D	J	3
24F0260	LDW24-SC1441E	24F0260-07	EPA 8082A	Aroclor-1248	70.1	ug/kg	P1	J	3
24F0260	LDW24-SC1441E-FD	24F0260-10	EPA 8082A	Aroclor-1248	69	ug/kg	P1	J	3
24F0260	LDW24-IT1370A	24F0260-11	EPA 8082A	Aroclor-1260	3000	ug/kg	D	J	19
24F0260	LDW24-IT1369A	24F0260-12	EPA 8082A	Aroclor-1242	438	ug/kg	P1 D	J	3
24F0260	LDW24-IT1369A	24F0260-12	EPA 8082A	Aroclor-1254	148	ug/kg	P1 D	J	3
24F0260	LDW24-SC1442B	24F0260-14	EPA 8082A	Aroclor-1248	802	ug/kg	P1 D	J	3
24F0260	LDW24-SC1442C	24F0260-15	EPA 8082A	Aroclor-1248	130	ug/kg	P1	J	3
24F0260	LDW24-SC1442E	24F0260-16	EPA 8082A	Aroclor-1248	91.9	ug/kg	P1	J	3
24F0260	LDW24-SC1442E	24F0260-16	EPA 8082A	Aroclor-1260	119	ug/kg		J	19
24F0260	LDW24-SC1442G	24F0260-17	EPA 8082A	Aroclor-1248	61.8	ug/kg	P1	J	3
24F0260	LDW24-SC1442G	24F0260-17	EPA 8082A	Aroclor-1260	137	ug/kg		J	19
24F0260	LDW24-SC1366A	24F0260-18	EPA 8082A	Aroclor-1248	254	ug/kg	P1 D	J	3
24F0260	LDW24-SC1366A	24F0260-18	EPA 8082A	Aroclor-1254	172	ug/kg	P1 D	J	3
24F0260	LDW24-SS1526	24F0260-20	EPA 8082A	Aroclor-1248	23.9	ug/kg	P1	J	3
24F0260	LDW24-SS1526	24F0260-20	EPA 8082A	Aroclor-1254	23.5	ug/kg	P1	J	3
24F0260	LDW24-SS1526	24F0260-20	EPA 8082A	Aroclor-1260	40	ug/kg		J	19
24F0260	LDW24-IT1362A	24F0260-21	EPA 9060	Total Organic carbon	4.19	%		J	12L
24F0261	LDW24-SC1365A	24F0261-01	EPA 8082A	Aroclor-1248	66.6	ug/kg	P1	J	3
24F0261	LDW24-SC1365A	24F0261-01	EPA 8082A	Aroclor-1254	64.7	ug/kg	P1	J	3
24F0261	LDW24-SC1365A	24F0261-01	EPA 9060	Total Organic carbon	2.51	%		J	12L
24F0261	LDW24-IT1330A	24F0261-02	EPA 6020	Zinc	26	mg/kg		J	9A
24F0261	LDW24-IT1330A	24F0261-02	EPA 9060	Total Organic carbon	0.13	%		J	12L
24F0261	LDW24-IT1437B	24F0261-03	EPA 9060	Total Organic carbon	0.06	%		J	12L
24F0261	LDW24-IT1437C	24F0261-04	EPA 9060	Total Organic carbon	0.07	%		J	12L
24F0261	LDW24-IT1443A	24F0261-05	EPA 9060	Total Organic carbon	1	%		J	12L
24F0261	LDW24-IT1443A-FD	24F0261-06	EPA 9060	Total Organic carbon	0.97	%		J	12L

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0288	LDW24-SC1371A	24F0288-01	EPA 9060	Total Organic carbon	2.53	%		J	12L
24F0288	LDW24-SC1388A	24F0288-02	EPA 6020	Zinc	93.7	mg/kg		J	9A
24F0288	LDW24-SC1388A	24F0288-02	EPA 7471B	Mercury	0.248	mg/kg		J	9A
24F0288	LDW24-SC1388A	24F0288-02	EPA 9060	Total Organic carbon	2.03	%		J	12L
24F0288	LDW24-IT1498	24F0288-03	EPA 9060	Total Organic carbon	1.13	%		J	12L
24F0288	LDW24-SC1407	24F0288-04	EPA 6020	Zinc	86.8	mg/kg		J	9A
24F0288	LDW24-SC1407	24F0288-04	EPA 7471B	Mercury	0.238	mg/kg		J	9A
24F0288	LDW24-SC1407	24F0288-04	EPA 9060	Total Organic carbon	1.98	%		J	12L
24F0288	LDW24-SC1383B	24F0288-05	EPA 7471B	Mercury	0.243	mg/kg		J	9A
24F0288	LDW24-SC1383B	24F0288-05	EPA 9060	Total Organic carbon	1.85	%		J	12L
24F0288	LDW24-SC1383C	24F0288-06	EPA 7471B	Mercury	0.191	mg/kg		J	9A
24F0288	LDW24-SC1383C	24F0288-06	EPA 9060	Total Organic carbon	1.97	%		J	12L
24F0288	LDW24-SC1383C-FD	24F0288-07	EPA 7471B	Mercury	0.209	mg/kg		J	9A
24F0288	LDW24-SC1383C-FD	24F0288-07	EPA 9060	Total Organic carbon	2.04	%		J	12L
24F0288	LDW24-SC1383E	24F0288-08	EPA 7471B	Mercury	0.165	mg/kg		J	9A
24F0288	LDW24-SC1383E	24F0288-08	EPA 9060	Total Organic carbon	1.41	%		J	12L
24F0288	LDW24-SC1424B	24F0288-09	EPA 9060	Total Organic carbon	1.52	%		J	12L
24F0288	LDW24-SC1424C	24F0288-10	EPA 9060	Total Organic carbon	1.74	%		J	12L
24F0288	LDW24-SC1424E	24F0288-11	EPA 9060	Total Organic carbon	2.23	%		J	12L
24F0288	LDW24-SC1301A	24F0288-12	EPA 9060	Total Organic carbon	2.93	%		J	12L
24F0288	LDW24-SC1303	24F0288-13	EPA 9060	Total Organic carbon	2.54	%		J	12L
24F0288	LDW24-SC1388ADUP1	BMF0401-DUP1	EPA 7471B	Mercury	0.49	mg/kg	*	J	9A
24F0288	LDW24-SC1371ADUP1	BMF0687-DUP1	EPA 9060	Total Organic carbon	2.33	%		J	12L
24F0288	LDW24-SC1371ADUP2LT	BMF0687-DUP2	EPA 9060	Total Organic carbon	2.39	%		J	12L
24F0332	LDW24-IT1508A	24F0332-06	EPA 7471B	Mercury	0.0395	mg/kg		J	9A
24F0332	LDW24-SC1452G	24F0332-12	EPA 8082A	Aroclor-1248	34.3	ug/kg	P1	J	3
24F0332	LDW24-SC1431C	24F0332-15	EPA 7471B	Mercury	0.123	mg/kg		J	9A
24F0332	LDW24-SC1431C-FD	24F0332-16	EPA 7471B	Mercury	0.156	mg/kg		J	9A
24F0332	LDW24-SC1431F	24F0332-17	EPA 7471B	Mercury	0.11	mg/kg		J	9A
24F0332	LDW24-SC1431D	24F0332-18	EPA 7471B	Mercury	0.182	mg/kg		J	9A
24F0366	LDW24-SC1343E-FD	24F0366-08	EPA 8082A	Aroclor-1260	126	ug/kg	D	J	9A
24F0424	LDW24-SS1469	24F0424-03	EPA 6020	Lead	53.2	mg/kg		J	9A
24F0424	LDW24-SS1469	24F0424-03	EPA 6020	Zinc	729	mg/kg	D	J	9A
24F0424	LDW24-SS1469	24F0424-03	EPA 8082A	Aroclor-1254	85	ug/kg	P1	J	3
24F0424	LDW24-SS1494	24F0424-04	SM 4500-CN-I	Sulfide	268	mg/kg	MS	J	8L
24F0424	LDW24-SS1518	24F0424-06	SM 4500-CN-I	Sulfide	75.0	mg/kg	MS	J	8L
24F0424	LDW24-SS1497	24F0424-07	EPA 6020	Lead	17.8	mg/kg		J	9A

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0424	LDW24-SS1497	24F0424-07	EPA 6020	Zinc	81.2	mg/kg		J	9A
24F0424	LDW24-SS1497	24F0424-07	EPA 8082A	Aroclor-1248	30.8	ug/kg	P1	J	3
24F0424	LDW24-SS1497	24F0424-07	SM 4500-CN-I	Sulfide	43.6	mg/kg	MS	J	8L
24F0424	LDW24-SS1498	24F0424-08	EPA 6020	Lead	24.2	mg/kg		J	9A
24F0424	LDW24-SS1498	24F0424-08	EPA 6020	Zinc	109	mg/kg		J	9A
24F0424	LDW24-SS1498	24F0424-08	EPA 8082A	Aroclor-1248	39.6	ug/kg	P1	J	3
24F0424	LDW24-SS1498	24F0424-08	EPA 8082A	Aroclor-1254	66.2	ug/kg	P1	J	3
24F0424	LDW24-SS1392	24F0424-09	SM 4500-CN-I	Sulfide	77.1	mg/kg	MS	J	8L
24F0424	LDW24-SS1393	24F0424-10	SM 4500-CN-I	Sulfide	471	mg/kg	MS	J	8L
24F0424	LDW24-SS1396	24F0424-11	SM 4500-CN-I	Sulfide	67.0	mg/kg	MS	J	8L
24F0424	LDW24-SS1398	24F0424-12	SM 4500-CN-I	Sulfide	162	mg/kg	MS	J	8L
24F0424	LDW24-SS1410	24F0424-13	SM 4500-CN-I	Sulfide	56.3	mg/kg	MS	J	8L
24F0424	LDW24-SS1349	24F0424-14	SM 4500-CN-I	Sulfide	87.5	mg/kg	MS	J	8L
24F0424	LDW24-SC1490B	24F0424-16	EPA 8082A	Aroclor-1248	61.2	ug/kg	P1	J	3
24F0424	LDW24-SC1490C	24F0424-17	EPA 8082A	Aroclor-1248	325	ug/kg	P1 D	J	3
24F0424	LDW24-SC1490E	24F0424-18	EPA 8082A	Aroclor-1260	7.9	ug/kg	P1	J	3
24F0424	LDW24-SC1490G	24F0424-19	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24F0424	LDW24-SC1495A	24F0424-20	SM 4500-CN-I	Sulfide	878	mg/kg	MS	J	8L
24F0424	LDW24-SC1494A	24F0424-21	SM 4500-CN-I	Sulfide	631	mg/kg	MS	J	8L
24F0424	LDW24-SS1496	24F0424-22	EPA 6020	Lead	23.5	mg/kg		J	9A
24F0424	LDW24-SS1496	24F0424-22	EPA 6020	Zinc	96.8	mg/kg		J	9A
24F0424	LDW24-SS1496	24F0424-22	EPA 8082A	Aroclor-1248	35.3	ug/kg	P1	J	3
24F0424	LDW24-SS1496	24F0424-22	EPA 8082A	Aroclor-1260	65.2	ug/kg		J	8L
24F0424	LDW24-SS1469DUP1	BMF0606-DUP1	EPA 6020	Lead	43.4	mg/kg	*	J	9A
24F0424	LDW24-SS1469DUP2	BMF0606-DUP2	EPA 6020	Zinc	381	mg/kg	* D	J	9A
24F0426	LDW24-SC1384E	24F0426-03	EPA 8082A	Aroclor-1248	104	ug/kg	P1	J	3
24F0459	LDW24-SC1477	24F0459-15	EPA 8082A	Aroclor-1248	52.2	ug/kg	P1	J	3
24F0459	LDW24-IT1467	24F0459-16	EPA 8082A	Aroclor-1248	31.8	ug/kg	P1	J	3
24F0459	LDW24-IT1467	24F0459-16	EPA 8082A	Aroclor-1254	47.8	ug/kg	P1	J	3
24F0459	LDW24-IT1557	24F0459-18	EPA 8082A	Aroclor-1260	31.7	ug/kg		J	19
24F0459	LDW24-IT1504	24F0459-19	EPA 8082A	Aroclor-1248	22.1	ug/kg	P1	J	3
24F0459	LDW24-IT1504	24F0459-19	EPA 8082A	Aroclor-1260	83	ug/kg		J	19
24F0459	LDW24-SS1572	24F0459-20	SM 4500-CN-I	Sulfide		mg/kg	U	UJ	1
24F0459	LDW24-SS1305	24F0459-21	SM 4500-CN-I	Sulfide	4.49	mg/kg		J	1
24F0459	LDW24-SS1306	24F0459-22	SM 4500-CN-I	Sulfide	6.17	mg/kg		J	1
24F0459	LDW24-SS1399	24F0459-23	EPA 8082A	Aroclor-1248	45.4	ug/kg	P1	J	3
24F0459	LDW24-SS1371	24F0459-24	EPA 8082A	Aroclor-1248	75.7	ug/kg	P1	J	3

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0459	LDW24-SS1365	24F0459-25	EPA 8082A	Aroclor-1254	74.2	ug/kg	P1	J	3
24F0459	LDW24-SS1356	24F0459-26	EPA 8082A	Aroclor-1254	91.2	ug/kg	P1	J	3
24F0459	LDW24-SS1357	24F0459-27	EPA 8082A	Aroclor-1254	246	ug/kg	P1 D	J	3
24F0459	LDW24-SS1357-FD	24F0459-28	EPA 8082A	Aroclor-1254	106	ug/kg	P1	J	3
24F0459	LDW24-SS1551	24F0459-30	EPA 6020	Lead	73.9	mg/kg		J	9A
24F0459	LDW24-SS1551	24F0459-30	EPA 6020	Zinc	573	mg/kg	D	J	9A
24F0459	LDW24-SS1551	24F0459-30	EPA 8082A	Aroclor-1248	12.5	ug/kg	P1	J	3
24F0459	LDW24-SS1546	24F0459-31	EPA 6020	Lead	27.2	mg/kg		J	9A
24F0459	LDW24-SS1546	24F0459-31	EPA 6020	Zinc	152	mg/kg		J	9A
24F0459	LDW24-SS1546	24F0459-31	EPA 8082A	Aroclor-1248	36.8	ug/kg	P1	J	3
24F0459	LDW24-SS1546	24F0459-31	EPA 8082A	Aroclor-1254	83.7	ug/kg	P1	J	3
24F0459	LDW24-SS1517	24F0459-32	SM 4500-CN-I	Sulfide	9.9	mg/kg		J	1
24F0485	LDW24-IT1585	24F0485-01	EPA 8082A	Aroclor-1248	12	ug/kg	P1	J	3
24F0485	LDW24-IT1585	24F0485-01	EPA 8082A	Aroclor-1254	24.4	ug/kg	P1	J	3
24F0485	LDW24-SS1476	24F0485-02	EPA 8082A	Aroclor-1248	68.7	ug/kg	P1	J	3
24F0485	LDW24-SC1476A	24F0485-03	EPA 8082A	Aroclor-1248	59.7	ug/kg	P1	J	3
24F0485	LDW24-SC1489C	24F0485-04	EPA 8082A	Aroclor-1248	41.6	ug/kg	P1	J	3
24F0485	LDW24-SC1489F	24F0485-06	EPA 8082A	Aroclor-1248	113	ug/kg	P1	J	3
24F0485	LDW24-SC1489H	24F0485-07	EPA 8082A	Aroclor-1248	456	ug/kg	D	J	13H
24F0485	LDW24-SC1489H	24F0485-07	EPA 8082A	Aroclor-1254	368	ug/kg	D	J	13H
24F0485	LDW24-SC1489H	24F0485-07	EPA 8082A	Aroclor-1260	138	ug/kg	D	J	5BH,13H,19
24F0485	LDW24-SS1483	24F0485-10	EPA 8082A	Aroclor-1248	47.3	ug/kg	P1	J	3
24F0485	LDW24-SC1483A	24F0485-11	EPA 8082A	Aroclor-1248	53.4	ug/kg	P1	J	3
24F0485	LDW24-SS1480	24F0485-12	EPA 8082A	Aroclor-1248	62.1	ug/kg	P1	J	3
24F0485	LDW24-SS1480	24F0485-12	EPA 8082A	Aroclor-1260	62.4	ug/kg		J	19
24F0485	LDW24-SS1400	24F0485-13	SM 4500-CN-I	Sulfide	9.08	mg/kg		J	1
24F0485	LDW24-SS1394	24F0485-14	SM 4500-CN-I	Sulfide	7.44	mg/kg		J	1
24F0485	LDW24-SS1401	24F0485-15	EPA 6020	Lead	44.8	mg/kg		J	9A
24F0485	LDW24-SS1401	24F0485-15	EPA 6020	Zinc	133	mg/kg		J	9A
24F0485	LDW24-SS1401	24F0485-15	EPA 8082A	Aroclor-1248	41.4	ug/kg	P1	NJ	3
24F0485	LDW24-SS1401	24F0485-15	EPA 8082A	Aroclor-1254	46.9	ug/kg	P1	J	3
24F0485	LDW24-SS1584	24F0485-16	SM 4500-CN-I	Sulfide	9.83	mg/kg		J	1
24F0485	LDW24-SS1580	24F0485-17	SM 4500-CN-I	Sulfide	5.51	mg/kg		J	1
24F0485	LDW24-SS1574	24F0485-18	SM 4500-CN-I	Sulfide	4.43	mg/kg		J	1
24F0485	LDW24-SS1354	24F0485-21	EPA 8082A	Aroclor-1242	2000	ug/kg	P1 D E	J	3,20
24F0485	LDW24-SS1354	24F0485-21	EPA 8082A	Aroclor-1260	345	ug/kg	D	J	5BH,19
24F0485	LDW24-SS1434	24F0485-22	EPA 6020	Lead	6.17	mg/kg		J	9A

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24F0485	LDW24-SS1434	24F0485-22	EPA 6020	Zinc	26.2	mg/kg		J	9A
24F0485	LDW24-SC1480	24F0485-24	EPA 8082A	Aroclor-1248	60.8	ug/kg	P1	J	3
24F0485	LDW24-SC1480	24F0485-24	EPA 8082A	Aroclor-1260	61.2	ug/kg		J	19
24F0512	LDW24-SC1310B	24F0512-01	EPA 8082A	Aroclor-1248	4.8	ug/kg	P1	J	3
24F0512	LDW24-SC1310E	24F0512-03	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24F0512	LDW24-SC1310G	24F0512-04	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24F0512	LDW24-SC1479B	24F0512-06	EPA 8082A	Aroclor-1248	71.1	ug/kg	P1	J	3
24F0512	LDW24-SC1479B	24F0512-06	EPA 8082A	Aroclor-1260	84.8	ug/kg		J	5BH,19
24F0512	LDW24-SC1479C	24F0512-07	EPA 8082A	Aroclor-1248	85.3	ug/kg	P1	J	3
24F0512	LDW24-SC1479C	24F0512-07	EPA 8082A	Aroclor-1260	115	ug/kg		J	19
24F0512	LDW24-SC1479E	24F0512-08	EPA 8082A	Aroclor-1248	29.5	ug/kg	P1	J	3
24F0512	LDW24-SC1479G	24F0512-09	EPA 8082A	Aroclor-1248	297	ug/kg	P1 D	J	3
24F0512	LDW24-SC1479I	24F0512-10	EPA 8082A	Aroclor-1248	196	ug/kg	P1 D	J	3
24F0512	LDW24-SC1479I	24F0512-10	EPA 8082A	Aroclor-1254	316	ug/kg	P1 D	J	3
24F0512	LDW24-SC1492A	24F0512-14	EPA 8082A	Aroclor-1260	33	ug/kg		J	19
24F0537	LDW24-SC1530	24F0537-01	EPA 8082A	Aroclor-1260	62.2	ug/kg		J	10H
24F0537	LDW24-IT1561A	24F0537-02	EPA 8082A	Aroclor-1260	375	ug/kg	D	J	10H
24F0537	LDW24-IT1564A	24F0537-03	EPA 8082A	Aroclor-1260	6.8	ug/kg		J	10H
24F0557	LDW24-SS1456	24F0557-09	EPA 8082A	Aroclor-1260	542	ug/kg	D	NJ	3
24F0557	LDW24-SS1454	24F0557-12	EPA 8082A	Aroclor-1248	54.6	ug/kg	P1	NJ	3
24F0598	LDW24-IT1448C	24F0598-03	EPA 8082A	Aroclor-1260	2.9	ug/kg	J	J	10H
24F0598	LDW24-IT1457B	24F0598-04	EPA 8082A	Aroclor-1260	153	ug/kg	D	J	10H
24F0598	LDW24-IT1457C	24F0598-05	EPA 8082A	Aroclor-1254	112	ug/kg	P1	J	3
24F0598	LDW24-IT1457C	24F0598-05	EPA 8082A	Aroclor-1260	24.5	ug/kg		J	10H
24F0598	LDW24-IT1457C-FD	24F0598-06	EPA 8082A	Aroclor-1260	29	ug/kg		J	10H
24F0598	LDW24-IT1522B	24F0598-10	EPA 6020	Cadmium	0.05	mg/kg	J	U	7
24F0598	LDW24-IT1522B	24F0598-10	EPA 8082A	Aroclor-1260	47.2	ug/kg		J	10H
24F0598	LDW24-SS1447	24F0598-12	EPA 8082A	Aroclor-1260	93.4	ug/kg		J	10H
24F0598	LDW24-IT1447A	24F0598-13	EPA 8082A	Aroclor-1260	19.9	ug/kg		J	10H
24F0598	LDW24-SS1444	24F0598-14	EPA 8082A	Aroclor-1260	44.3	ug/kg		J	10H
24F0598	LDW24-SS1446	24F0598-15	EPA 8082A	Aroclor-1254	79.3	ug/kg		J	13H
24F0598	LDW24-SS1446	24F0598-15	EPA 8082A	Aroclor-1260	83.5	ug/kg		J	10H,13H
24F0598	LDW24-IT1522BDUP1	BMG0189-DUP1	EPA 6020	Cadmium	0.06	mg/kg	L J	U	7
24G0166	LDW24-SC1409E	24G0166-03	EPA 8082A	Aroclor-1260	88.5	ug/kg		J	9A
24G0224	LDW24-SS1591	24G0224-03	EPA 7471B	Mercury	0.0447	mg/kg		J	9A
24G0224	LDW24-IT1413B	24G0224-11	EPA 8082A	Aroclor-1254	35	ug/kg	P1	J	3
24G0224	LDW24-IT1413B	24G0224-11	EPA 9060	Total Organic carbon	1.46	%		J	1

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24G0224	LDW24-IT1413B	24G0224-11	SM 2540-G	Total Solids	64.58	%		J	1
24G0224	LDW24-IT1413C	24G0224-12	EPA 8082A	Aroclor-1254	32.6	ug/kg	P1	J	3
24G0224	LDW24-IT1413C	24G0224-12	EPA 9060	Total Organic carbon	1.94	%		J	1
24G0224	LDW24-IT1413C	24G0224-12	SM 2540-G	Total Solids	58.47	%		J	1
24G0224	LDW24-IT1413E	24G0224-13	EPA 8082A	Aroclor-1254	29.3	ug/kg	P1 D	J	3
24G0224	LDW24-IT1413E	24G0224-13	EPA 9060	Total Organic carbon	2.45	%		J	1
24G0224	LDW24-IT1413E	24G0224-13	SM 2540-G	Total Solids	59.13	%		J	1
24G0224	LDW24-IT1413G	24G0224-14	EPA 9060	Total Organic carbon	2.3	%		J	1
24G0224	LDW24-IT1413G	24G0224-14	SM 2540-G	Total Solids	57.73	%		J	1
24G0224	LDW24-SS1591DUP1	BMG0526-DUP1	EPA 7471B	Mercury	0.0536	mg/kg		J	9A
24G0227	LDW24-IT1528M	24G0227-33	EPA 8082A	Aroclor-1248	11	ug/kg	P1	J	3
24G0270	LDW24-SC1372M	24G0270-14	EPA 8082A	Aroclor-1248	3080	ug/kg	P1 D	J	3
24G0307	LDW24-IT1590A	24G0307-02	EPA 6020	Chromium	12.1	mg/kg		J	8L
24G0307	LDW24-IT1590ADUP1	BMG0578-DUP1	EPA 6020	Chromium	12.2	mg/kg		J	8L
24G0340	LDW24-IT1594B	24G0340-01	EPA 8082A	Aroclor-1260	26	ug/kg		J	10H
24G0340	LDW24-IT1594B	24G0340-01	EPA 9060	Total Organic carbon	1.94	%		J	12H
24G0340	LDW24-IT1594C	24G0340-02	EPA 8082A	Aroclor-1260	10.2	ug/kg		J	10H
24G0340	LDW24-IT1594C	24G0340-02	EPA 9060	Total Organic carbon	1.79	%		J	12H
24G0340	LDW24-IT1594E	24G0340-03	EPA 8082A	Aroclor-1260	25.5	ug/kg		J	10H
24G0340	LDW24-IT1594E	24G0340-03	EPA 9060	Total Organic carbon	1.76	%		J	12H
24G0340	LDW24-IT1595B	24G0340-04	EPA 8082A	Aroclor-1260	228	ug/kg	D	J	10H
24G0340	LDW24-IT1595B	24G0340-04	EPA 9060	Total Organic carbon	0.57	%		J	12H
24G0340	LDW24-IT1595C	24G0340-05	EPA 8082A	Aroclor-1260	381	ug/kg	D	J	10H
24G0340	LDW24-IT1595C	24G0340-05	EPA 9060	Total Organic carbon	0.88	%		J	12H
24G0340	LDW24-IT1595E	24G0340-06	EPA 8082A	Aroclor-1260	5.9	ug/kg		J	10H
24G0340	LDW24-IT1595E	24G0340-06	EPA 9060	Total Organic carbon	1.46	%		J	12H
24G0340	LDW24-IT1596B	24G0340-07	EPA 8082A	Aroclor-1260	5640	ug/kg	D	J	10H
24G0340	LDW24-IT1596B	24G0340-07	EPA 9060	Total Organic carbon	3.13	%		J	12H
24G0340	LDW24-IT1596C	24G0340-08	EPA 8082A	Aroclor-1260	180	ug/kg	D	J	10H
24G0340	LDW24-IT1596C	24G0340-08	EPA 9060	Total Organic carbon	1.09	%		J	12H
24G0340	LDW24-IT1594BDUP1	BMH0313-DUP1	EPA 9060	Total Organic carbon	2.06	%		J	12H
24G0340	LDW24-IT1594BDUP2LT	BMH0313-DUP2	EPA 9060	Total Organic carbon	1.93	%		J	12H
24G0390	LDW24-IT1601B	24G0390-01	EPA 7471B	Mercury	0.267	mg/kg		J	8H
24G0390	LDW24-IT1601B	24G0390-01	EPA 8082A	Aroclor-1260	593	ug/kg	D	J	12H
24G0390	LDW24-IT1601B	24G0390-01	EPA 9060	Total Organic carbon	2.61	%		J	9A
24G0390	LDW24-IT1601C	24G0390-02	EPA 7471B	Mercury	7.79	mg/kg	D	J	8H
24G0390	LDW24-IT1601C	24G0390-02	EPA 8082A	Aroclor-1260	4010	ug/kg	D	J	12H

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24G0390	LDW24-IT1601C	24G0390-02	EPA 9060	Total Organic carbon	7.88	%		J	9A
24G0390	LDW24-IT1601E	24G0390-03	EPA 7471B	Mercury	0.891	mg/kg		J	8H
24G0390	LDW24-IT1601E	24G0390-03	EPA 8082A	Aroclor-1260	342	ug/kg	D	J	12H
24G0390	LDW24-IT1601E	24G0390-03	EPA 9060	Total Organic carbon	1.28	%		J	9A
24G0390	LDW24-IT1601G	24G0390-04	EPA 7471B	Mercury	0.549	mg/kg		J	8H
24G0390	LDW24-IT1601G	24G0390-04	EPA 8082A	Aroclor-1260	102	ug/kg		J	12H
24G0390	LDW24-IT1601G	24G0390-04	EPA 9060	Total Organic carbon	2.27	%		J	9A
24G0390	LDW24-IT1601I	24G0390-05	EPA 7471B	Mercury	0.255	mg/kg		J	8H
24G0390	LDW24-IT1601I	24G0390-05	EPA 9060	Total Organic carbon	2.98	%		J	9A
24G0390	LDW24-IT1601I	24G0390-05RE1	EPA 8082A	Aroclor-1260	20.3	ug/kg		J	5CH
24G0390	LDW24-IT1593B	24G0390-06	EPA 7471B	Mercury	0.171	mg/kg		J	8H
24G0390	LDW24-IT1593B	24G0390-06	EPA 9060	Total Organic carbon	1.53	%		J	9A
24G0390	LDW24-IT1593B	24G0390-06RE1	EPA 8082A	Aroclor-1260	22.4	ug/kg		J	5CH
24G0390	LDW24-IT1593C	24G0390-07	EPA 7471B	Mercury	0.0803	mg/kg		J	8H
24G0390	LDW24-IT1593C	24G0390-07	EPA 9060	Total Organic carbon	1.33	%		J	9A
24G0390	LDW24-IT1593C	24G0390-07RE1	EPA 8082A	Aroclor-1260	3	ug/kg	J	J	5CH
24G0390	LDW24-IT1601BDUP1	BMG0672-DUP1	EPA 7471B	Mercury	0.31	mg/kg		J	8H
24G0390	LDW24-IT1601BDUP3	BMH0426-DUP3	EPA 9060	Total Organic carbon	2.13	%	*	J	9A
24G0390	LDW24-IT1601BDUP4	BMH0426-DUP4	EPA 9060	Total Organic carbon	1.94	%	*	J	9A
24G0402	LDW24-IT1599B	24G0402-01	EPA 8082A	Aroclor-1260	1220	ug/kg	D	J	12H
24G0402	LDW24-IT1599B	24G0402-01	EPA 9060	Total Organic carbon	0.59	%		J	9A
24G0402	LDW24-IT1599C	24G0402-02	EPA 8082A	Aroclor-1248	400	ug/kg	P1 D	J	3
24G0402	LDW24-IT1599C	24G0402-02	EPA 8082A	Aroclor-1260	418	ug/kg	D	J	12H
24G0402	LDW24-IT1599C	24G0402-02	EPA 9060	Total Organic carbon	0.32	%		J	9A
24G0402	LDW24-IT1599E	24G0402-03	EPA 9060	Total Organic carbon	4.65	%		J	9A
24G0402	LDW24-IT1599E	24G0402-03RE1	EPA 8082A	Aroclor-1260	9.9	ug/kg		J	5CH
24G0402	LDW24-IT1599G	24G0402-04	EPA 8082A	Aroclor-1260	179	ug/kg	D	J	12H
24G0402	LDW24-IT1599G	24G0402-04	EPA 9060	Total Organic carbon	1.03	%		J	9A
24G0402	LDW24-IT1598B	24G0402-05	EPA 8082A	Aroclor-1260	6660	ug/kg	D	J	5CH,12H
24G0402	LDW24-IT1598B	24G0402-05	EPA 9060	Total Organic carbon	2.74	%		J	9A
24G0402	LDW24-IT1600B	24G0402-06	EPA 8082A	Aroclor-1248	128	ug/kg		J	5BL
24G0402	LDW24-IT1600B	24G0402-06	EPA 8082A	Aroclor-1260	89.3	ug/kg		J	12H
24G0402	LDW24-IT1600B	24G0402-06	EPA 9060	Total Organic carbon	2.03	%		J	9A
24G0402	LDW24-IT1600C	24G0402-07	EPA 9060	Total Organic carbon	2.08	%		J	9A
24G0402	LDW24-IT1600C	24G0402-07RE1	EPA 8082A	Aroclor-1260	3	ug/kg	J	J	5CH
24G0402	LDW24-IT1600E	24G0402-08	EPA 9060	Total Organic carbon	1.96	%		J	9A
24G0464	LDW24-IT1597B	24G0464-01RE1	EPA 8082A	Aroclor-1248	13.7	ug/kg	P1	NJ	3

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24G0464	LDW24-IT1597B	24G0464-01RE1	EPA 8082A	Aroclor-1254	19.7	ug/kg	P1	NJ	3
24G0464	LDW24-IT1597B	24G0464-01RE1	EPA 8082A	Aroclor-1260	25.7	ug/kg		J	5CH
24G0464	LDW24-IT1602B	24G0464-02RE2	EPA 8082A	Aroclor-1260	514	ug/kg	P1 D	J	3
24G0464	LDW24-IT1377A	24G0464-04RE1	EPA 8082A	Aroclor-1254	21.3	ug/kg	P1	J	3
24G0471	LDW24-IT1607B	24G0471-01	EPA 7471B	Mercury	0.118	mg/kg		J	8H,9A
24G0471	LDW24-IT1607B	24G0471-01RE1	EPA 8082A	Aroclor-1260	772	ug/kg	P1 D	J	3
24G0471	LDW24-IT1607C	24G0471-02	EPA 7471B	Mercury	4.02	mg/kg	D	J	8H,9A
24G0471	LDW24-IT1607C	24G0471-02RE1	EPA 8082A	Aroclor-1260	23400	ug/kg	P1 D	J	9A
24G0471	LDW24-IT1607E	24G0471-03	EPA 7471B	Mercury	0.584	mg/kg		J	8H,9A
24G0471	LDW24-IT1607E	24G0471-03RE1	EPA 8082A	Aroclor-1248	224	ug/kg	P1 D	J	3
24G0471	LDW24-IT1607G	24G0471-04	EPA 7471B	Mercury	0.0528	mg/kg		UJ	7,9A
24G0471	LDW24-IT1607G	24G0471-04RE1	EPA 8082A	Aroclor-1254	8.3	ug/kg		U	7
24G0471	LDW24-IT1603B	24G0471-05	EPA 7471B	Mercury	156	mg/kg	D	J	8H,9A
24G0471	LDW24-IT1603B	24G0471-05RE1	EPA 8082A	Aroclor-1260	27400	ug/kg	P1 D	J	3
24G0471	LDW24-IT1603C	24G0471-06	EPA 7471B	Mercury	22.7	mg/kg	D	J	8H,9A
24G0471	LDW24-IT1603C	24G0471-06RE1	EPA 8082A	Aroclor-1260	29100	ug/kg	D	J	5CH
24G0471	LDW24-IT1606B	24G0471-07	EPA 7471B	Mercury	0.0631	mg/kg		J	8H,9A
24G0471	LDW24-IT1606B	24G0471-07RE1	EPA 8082A	Aroclor-1254	14.3	ug/kg		U	7
24G0471	LDW24-IT1606C	24G0471-08	EPA 7471B	Mercury	0.138	mg/kg		J	8H,9A
24G0471	LDW24-IT1606E	24G0471-09	EPA 7471B	Mercury	0.17	mg/kg		J	8H,9A
24G0471	LDW24-IT1606E	24G0471-09RE1	EPA 8082A	Aroclor-1248	8.3	ug/kg	P1	J	3
24G0471	LDW24-IT1605B	24G0471-10	EPA 7471B	Mercury	0.189	mg/kg		J	8H,9A
24G0471	LDW24-IT1605C	24G0471-11	EPA 7471B	Mercury	0.192	mg/kg		J	8H,9A
24G0471	LDW24-IT1605E	24G0471-12	EPA 7471B	Mercury	0.184	mg/kg		J	8H,9A
24G0471	LDW24-IT1605E	24G0471-12RE1	EPA 8082A	Aroclor-1260	5	ug/kg		J	5BL
24G0471	LDW24-IT1605E	24G0471-12RE2	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24G0471	LDW24-IT1605E	24G0471-12RE2	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24G0471	LDW24-IT1605E	24G0471-12RE2	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24G0471	LDW24-IT1605E	24G0471-12RE2	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24G0471	LDW24-IT1605E	24G0471-12RE2	EPA 8082A	Aroclor-1248		ug/kg	U	DNR	11
24G0471	LDW24-IT1605E	24G0471-12RE2	EPA 8082A	Aroclor-1254		ug/kg	U	DNR	11
24G0471	LDW24-IT1605E	24G0471-12RE2	EPA 8082A	Aroclor-1260		ug/kg	U	DNR	11
24G0471	LDW24-IT1605G	24G0471-13	EPA 7471B	Mercury	0.113	mg/kg		J	8H,9A
24G0471	LDW24-IT1605G	24G0471-13RE1	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24G0471	LDW24-IT1605GDUP1	BMG0673-DUP1	EPA 7471B	Mercury	0.189	mg/kg	*	J	8H,9A
24G0556	LDW24-SS1445	24G0556-01	EPA 9060	Total Organic carbon	1.8	%		J	12H
24G0556	LDW24-SS1445	24G0556-01RE1	EPA 8082A	Aroclor-1248	34.1	ug/kg	P1	J	3

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24G0556	LDW24-SS1445	24G0556-01RE1	EPA 8082A	Aroclor-1254	52.5	ug/kg	P1	J	3
24G0556	LDW24-SS1472	24G0556-02	SM 4500-CN-I	Sulfide	731	mg/kg		J	1
24G0556	LDW24-SS1472	24G0556-02	sm4500-NH3	Ammonia	16.3	mg/kg		J	1
24G0556	LDW24-SS1472DUP1	BMG0762-DUP1	sm4500-NH3	Ammonia	17.4	mg/kg		J	1
24G0631	LDW24-IT1555A	24G0631-01	EPA 8082A	Aroclor-1260	401	ug/kg	D	J	5CH
24G0631	LDW24-IT1555A	24G0631-01	EPA 9060	Total Organic carbon	1.56	%		J	9A
24G0631	LDW24-IT1553B	24G0631-03	EPA 6020	Arsenic	12.8	mg/kg		J	8L,9A
24G0631	LDW24-IT1553B	24G0631-03	EPA 6020	Copper	41.1	mg/kg		J	8L
24G0631	LDW24-IT1553B	24G0631-03	EPA 6020	Lead	43.6	mg/kg		J	8L
24G0631	LDW24-IT1553B	24G0631-03	EPA 6020	Zinc	130	mg/kg		J	8L,9A
24G0631	LDW24-IT1553C	24G0631-04	EPA 7471B	Mercury	0.0229	mg/kg	J	U	7
24G0631	LDW24-IT1553C	24G0631-04	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	5BL,19
24G0631	LDW24-IT1553BDUP1	BMH0636-DUP1	EPA 6020	Arsenic	8.1	mg/kg	*	J	8L,9A
24G0631	LDW24-IT1553BDUP1	BMH0636-DUP1	EPA 6020	Copper	46.7	mg/kg		J	8L
24G0631	LDW24-IT1553BDUP1	BMH0636-DUP1	EPA 6020	Lead	39.6	mg/kg		J	8L
24G0631	LDW24-IT1553BDUP1	BMH0636-DUP1	EPA 6020	Zinc	99.5	mg/kg	*	J	8L,9A
24G0631	LDW24-IT1555ADUP8	BMI0168-DUP8	EPA 9060	Total Organic carbon	1.23	%	*	J	9A
24G0634	LDW24-IT1552B	24G0634-01	EPA 8082A	Aroclor-1260	31	ug/kg	P1	J	10H
24G0634	LDW24-IT1552C	24G0634-02	EPA 8082A	Aroclor-1254	54.2	ug/kg	P1	J	3
24G0634	LDW24-IT1552C	24G0634-02	EPA 8082A	Aroclor-1260	34.2	ug/kg	P1	J	10H
24G0634	LDW24-IT1551A	24G0634-07	EPA 8082A	Aroclor-1254	85.4	ug/kg	P1	J	3
24G0634	LDW24-IT1551A	24G0634-07	EPA 8082A	Aroclor-1260	46.9	ug/kg		J	10H
24G0634	LDW24-IT1556B	24G0634-08	EPA 8082A	Aroclor-1260	99	ug/kg		J	10H
24G0634	LDW24-IT1556C	24G0634-09	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	13
24G0634	LDW24-IT1556C	24G0634-09	EPA 8082A	Aroclor-1221		ug/kg	U	UJ	13
24G0634	LDW24-IT1556C	24G0634-09	EPA 8082A	Aroclor-1232		ug/kg	U	UJ	13
24G0634	LDW24-IT1556C	24G0634-09	EPA 8082A	Aroclor-1242		ug/kg	U	UJ	13
24G0634	LDW24-IT1556C	24G0634-09	EPA 8082A	Aroclor-1248	94.3	ug/kg	P1	NJ	3,13
24G0634	LDW24-IT1556C	24G0634-09	EPA 8082A	Aroclor-1254	169	ug/kg	P1	NJ	3,13
24G0634	LDW24-IT1556C	24G0634-09	EPA 8082A	Aroclor-1260	84.6	ug/kg		J	10H,13
24G0634	LDW24-IT1556E	24G0634-10	EPA 8082A	Aroclor-1254	31.9	ug/kg	P1	J	3
24G0634	LDW24-IT1556E	24G0634-10	EPA 8082A	Aroclor-1260	65.2	ug/kg		J	8L,10H
24G0634	LDW24-SC1451D	24G0634-11	EPA 8082A	Aroclor-1248	23	ug/kg		DNR	11
24G0634	LDW24-SC1451D	24G0634-11	EPA 8082A	Aroclor-1254	28.6	ug/kg		DNR	11
24G0634	LDW24-SC1451D	24G0634-11	EPA 8082A	Aroclor-1260	50.8	ug/kg		DNR	11
24G0634	LDW24-SC1451D	24G0634-11RE1	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24G0634	LDW24-SC1451D	24G0634-11RE1	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24G0634	LDW24-SC1451D	24G0634-11RE1	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24G0634	LDW24-SC1451D	24G0634-11RE1	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24G0634	LDW24-SC1451D	24G0634-11RE1	EPA 8082A	Aroclor-1260	37.3	ug/kg	J D	J	10H
24G0634	LDW24-SC1451E	24G0634-12	EPA 8082A	Aroclor-1260	75.4	ug/kg		J	10H
24G0634	LDW24-SC1451G	24G0634-13	EPA 8082A	Aroclor-1248	39.1	ug/kg		DNR	11
24G0634	LDW24-SC1451G	24G0634-13	EPA 8082A	Aroclor-1254	52.6	ug/kg		DNR	11
24G0634	LDW24-SC1451G	24G0634-13	EPA 8082A	Aroclor-1260	66.5	ug/kg		DNR	11
24G0634	LDW24-SC1451G	24G0634-13RE1	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24G0634	LDW24-SC1451G	24G0634-13RE1	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24G0634	LDW24-SC1451G	24G0634-13RE1	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24G0634	LDW24-SC1451G	24G0634-13RE1	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24G0634	LDW24-SC1451G	24G0634-13RE1	EPA 8082A	Aroclor-1260	37.3	ug/kg	J D	J	10H
24G0634	LDW24-SC1451I	24G0634-14	EPA 8082A	Aroclor-1254	102	ug/kg	P1 D	J	3
24G0634	LDW24-SC1451I	24G0634-14	EPA 8082A	Aroclor-1260	76.8	ug/kg	P1 D	J	3,10H
24G0634	LDW24-SC1451K	24G0634-15	EPA 8082A	Aroclor-1248	247	ug/kg	P1 D	J	13H
24G0634	LDW24-SC1451K	24G0634-15	EPA 8082A	Aroclor-1254	236	ug/kg	D	J	13H
24G0634	LDW24-SC1451K	24G0634-15	EPA 8082A	Aroclor-1260	186	ug/kg	D	J	10H,13H,19
24G0634	LDW24-SC1451M	24G0634-16	EPA 8082A	Aroclor-1260	199	ug/kg	D	J	10H,19
24H0071	LDW24-SS1450	24H0071-01	EPA 8082A	Aroclor-1248	122	ug/kg	P1	J	3
24H0071	LDW24-SS1450	24H0071-01	EPA 8082A	Aroclor-1254	180	ug/kg	P1	NJ	3
24H0071	LDW24-SS1450	24H0071-01	EPA 8082A	Aroclor-1260	54.6	ug/kg	P1	J	3
24H0071	LDW24-SS1450	24H0071-01	EPA 9060	Total Organic carbon	1.09	%		J	12H
24H0071	LDW24-SS1331	24H0071-02	EPA 8082A	Aroclor-1254	57.5	ug/kg	P1	J	3
24I0537	LDW24-SC1501C-FD	24I0537-04	EPA 8082A	Aroclor-1260	145	ug/kg		J	8,9A
24I0539	LDW24-SC1387B	24I0539-11	EPA 7471B	Mercury	0.194	mg/kg		J	1
24I0539	LDW24-SC1387B	24I0539-11	EPA 9060	Total Organic carbon	1.76	%		J	1
24I0539	LDW24-SC1387B	24I0539-11	SM 2540-G	Total Solids	63.86	%		J	1
24I0539	LDW24-SC1387C	24I0539-12	EPA 7471B	Mercury	0.218	mg/kg		J	1
24I0539	LDW24-SC1387C	24I0539-12	EPA 9060	Total Organic carbon	1.71	%		J	1
24I0539	LDW24-SC1387C	24I0539-12	SM 2540-G	Total Solids	62.91	%		J	1
24I0539	LDW24-SC1388C	24I0539-14RE1	EPA 8082A	Aroclor-1248	394	ug/kg	P1 D	J	3
24I0539	LDW24-SC1388E	24I0539-16	EPA 8082A	Aroclor-1260	385	ug/kg	E	DNR	20
24I0539	LDW24-SC1388E	24I0539-16RE1	EPA 8082A	Aroclor-1260	439	ug/kg	D	J	8L
24I0647	LDW24-SC1323E	24I0647-07	EPA 8082A	Aroclor-1248	44.6	ug/kg	P1	J	3
24I0647	LDW24-SC1323G	24I0647-08	EPA 8082A	Aroclor-1248	287	ug/kg	P1 D	NJ	3
24I0647	LDW24-SC1323G	24I0647-08	EPA 8082A	Aroclor-1254	172	ug/kg	P1 D	NJ	3
24I0647	LDW24-SC1324C	24I0647-11	EPA 8082A	Aroclor-1248	145	ug/kg	P1 D	NJ	3

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24I0647	LDW24-SC1324C	24I0647-11	EPA 8082A	Aroclor-1254	234	ug/kg	P1 D	NJ	3
24I0647	LDW24-SC1324E	24I0647-12	EPA 8082A	Aroclor-1248	3.4	ug/kg	J	NJ	3
24I0647	LDW24-SC1324E	24I0647-12	EPA 8082A	Aroclor-1254	10.8	ug/kg	P1	NJ	3
24I0647	LDW24-SC1326H	24I0647-15	EPA 8082A	Aroclor-1248	13.8	ug/kg	P1	J	3
24I0647	LDW24-SC1337M	24I0647-30	EPA 8082A	Aroclor-1248	136	ug/kg	P1	J	3
24I0647	LDW24-SC1337Q	24I0647-32	EPA 8082A	Aroclor-1248	136	ug/kg	P1	J	3
24I0647	LDW24-SC1350E	24I0647-39	EPA 8082A	Aroclor-1248	165	ug/kg	P1 D	J	3
24I0648	LDW24-IT1351D	24I0648-03	EPA 9060	Total Organic carbon	1.83	%		J	9A
24I0648	LDW24-SC1353S	24I0648-19	EPA 8082A	Aroclor-1248	721	ug/kg	P1 D	J	3
24I0648	LDW24-SC1353S	24I0648-19	EPA 8082A	Aroclor-1260	174	ug/kg	D	J	9A
24I0648	LDW24-SC1354E	24I0648-21RE1	EPA 8082A	Aroclor-1254	1370	ug/kg	P1 D	J	3
24I0648	LDW24-SC1354G	24I0648-22RE1	EPA 8082A	Aroclor-1254	482	ug/kg	P1 D	J	3
24I0648	LDW24-SC1354I	24I0648-23	EPA 8082A	Aroclor-1254	18.4	ug/kg	P1	J	3
24I0648	LDW24-IT1355B	24I0648-28RE1	EPA 8082A	Aroclor-1248	1240	ug/kg	P1 D	J	3
24I0648	LDW24-IT1355B	24I0648-28RE1	EPA 8082A	Aroclor-1254	501	ug/kg	P1 D	J	3
24I0648	LDW24-IT1355C	24I0648-29RE1	EPA 8082A	Aroclor-1248	1520	ug/kg	P1 D	J	3
24I0648	LDW24-IT1355D	24I0648-30	EPA 8082A	Aroclor-1248	5900	ug/kg	P1 D	J	3
24I0648	LDW24-IT1355D	24I0648-30	EPA 8082A	Aroclor-1254	2440	ug/kg	P1 D	J	3
24I0648	LDW24-SC1356C	24I0648-32	EPA 8082A	Aroclor-1248	57.6	ug/kg	P1	NJ	3
24I0648	LDW24-SC1356C	24I0648-32	EPA 8082A	Aroclor-1254	83.2	ug/kg	P1	NJ	3
24I0648	LDW24-SC1356E	24I0648-33	EPA 8082A	Aroclor-1248	72.2	ug/kg	P1	NJ	3
24I0648	LDW24-SC1356E	24I0648-33	EPA 8082A	Aroclor-1254	65.9	ug/kg	P1	J	3
24I0648	LDW24-SC1356G	24I0648-34	EPA 8082A	Aroclor-1248	95.8	ug/kg	P1	J	3
24I0648	LDW24-SC1356G	24I0648-34	EPA 8082A	Aroclor-1254	84.7	ug/kg	P1	J	3
24I0648	LDW24-SC1356I	24I0648-35	EPA 8082A	Aroclor-1248	110	ug/kg	P1	J	3
24I0648	LDW24-SC1356I	24I0648-35	EPA 8082A	Aroclor-1254	91.9	ug/kg	P1	J	3
24I0648	LDW24-SC1356K	24I0648-36	EPA 8082A	Aroclor-1248	131	ug/kg	P1	NJ	3
24I0648	LDW24-SC1356K	24I0648-36	EPA 8082A	Aroclor-1254	102	ug/kg	P1	NJ	3
24I0648	LDW24-SC1356K	24I0648-36	EPA 8082A	Aroclor-1260	129	ug/kg		J	19
24I0648	LDW24-SC1356M	24I0648-37	EPA 8082A	Aroclor-1248	487	ug/kg	P1 D	J	3
24I0648	LDW24-SC1356M	24I0648-37	EPA 8082A	Aroclor-1254	322	ug/kg	P1 D	J	3
24I0648	LDW24-SC1356S	24I0648-40	EPA 8082A	Aroclor-1254	1860	ug/kg	P1 D	J	3
24I0648	LDW24-SC1356S	24I0648-40	EPA 8082A	Aroclor-1260	1180	ug/kg	D	J	19
24I0651	LDW24-SC1357G	24I0651-03	EPA 8082A	Aroclor-1248	533	ug/kg	P1 D	J	3
24I0651	LDW24-SC1365E	24I0651-21	EPA 8082A	Aroclor-1248	303	ug/kg	P1 D B	J	3
24I0651	LDW24-SC1365E	24I0651-21	EPA 8082A	Aroclor-1254	208	ug/kg	P1 D B	J	3
24I0651	LDW24-SC1365G	24I0651-22	EPA 8082A	Aroclor-1248	992	ug/kg	P1 D B	NJ	3

**Qualified Data Summary Table  
LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24I0651	LDW24-SC1365G	24I0651-22	EPA 8082A	Aroclor-1254	465	ug/kg	P1 D B	NJ	3
24I0651	LDW24-SC1366E	24I0651-26RE1	EPA 8082A	Aroclor-1248	33200	ug/kg	P1 D B	J	3
24I0651	LDW24-IT1367B	24I0651-27	EPA 8082A	Aroclor-1248	481	ug/kg	P1 D B	NJ	3
24I0651	LDW24-IT1367B	24I0651-27	EPA 8082A	Aroclor-1254	312	ug/kg	P1 D B	NJ	3
24I0651	LDW24-IT1367C	24I0651-28	EPA 8082A	Aroclor-1248	909	ug/kg	P1 D B	NJ	3
24I0651	LDW24-IT1367C	24I0651-28	EPA 8082A	Aroclor-1254	472	ug/kg	P1 D B	NJ	3
24I0651	LDW24-IT1367D	24I0651-29	EPA 8082A	Aroclor-1248	2000	ug/kg	P1 D B	NJ	3
24I0651	LDW24-IT1367D	24I0651-29	EPA 8082A	Aroclor-1254	781	ug/kg	P1 D B	J	3
24I0651	LDW24-IT1367E	24I0651-30RE1	EPA 8082A	Aroclor-1248	17400	ug/kg	P1 D B	J	3
24I0651	LDW24-IT1369B	24I0651-32	EPA 8082A	Aroclor-1248	813	ug/kg	P1 D B	J	3
24I0651	LDW24-IT1369B	24I0651-32	EPA 8082A	Aroclor-1254	929	ug/kg	P1 D B	NJ	3
24I0651	LDW24-IT1369C	24I0651-33	EPA 8082A	Aroclor-1248	669	ug/kg	P1 D B	NJ	3
24I0651	LDW24-IT1369C	24I0651-33	EPA 8082A	Aroclor-1254	347	ug/kg	P1 D B	NJ	3
24I0655	LDW24-SC1371C	24I0655-01	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	19
24I0655	LDW24-SC1371C	24I0655-01	EPA 8082A	Aroclor-1221		ug/kg	U	UJ	19
24I0655	LDW24-SC1371C	24I0655-01	EPA 8082A	Aroclor-1232		ug/kg	U	UJ	19
24I0655	LDW24-SC1371C	24I0655-01	EPA 8082A	Aroclor-1242		ug/kg	U	UJ	19
24I0655	LDW24-SC1371E	24I0655-02	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	19
24I0655	LDW24-SC1371E	24I0655-02	EPA 8082A	Aroclor-1221		ug/kg	U	UJ	19
24I0655	LDW24-SC1371E	24I0655-02	EPA 8082A	Aroclor-1232		ug/kg	U	UJ	19
24I0655	LDW24-SC1371E	24I0655-02	EPA 8082A	Aroclor-1242		ug/kg	U	UJ	19
24I0655	LDW24-SC1371G	24I0655-03	EPA 8082A	Aroclor-1248	225	ug/kg	P1 D B	J	3
24I0655	LDW24-SC1371G	24I0655-03	EPA 8082A	Aroclor-1254	165	ug/kg	P1 D B	J	3
24I0655	LDW24-SC1371K	24I0655-05	EPA 8082A	Aroclor-1248	6350	ug/kg	P1 D B	J	3
24I0655	LDW24-SC1371M	24I0655-06	EPA 8082A	Aroclor-1248	3960	ug/kg	P1 D B	NJ	3
24I0655	LDW24-SC1371O	24I0655-07	EPA 8082A	Aroclor-1248	291	ug/kg	P1 D B	J	3
24I0655	LDW24-SC1371O	24I0655-07	EPA 8082A	Aroclor-1254	471	ug/kg	P1 D B	J	3
24I0655	LDW24-SC1371Q	24I0655-08	EPA 8082A	Aroclor-1254	149	ug/kg	P1 D B	J	3
24I0655	LDW24-IT1374A-FD	24I0655-13	EPA 8082A	Aroclor-1248	1100	ug/kg	P1 D B	J	3
24I0655	LDW24-IT1374B	24I0655-14	EPA 8082A	Aroclor-1254	5520	ug/kg	P1 D B	J	3
24I0655	LDW24-SC1382F	24I0655-19	EPA 9060	Total Organic carbon	2.16	%		J	1
24I0655	LDW24-SC1382F	24I0655-19	SM 2540-G	Total Solids	63.84	%		J	1
24I0655	LDW24-SC1405I	24I0655-21RE1	EPA 8082A	Aroclor-1254	152	ug/kg	P1	J	3
24I0655	LDW24-SC1405K	24I0655-22	EPA 8082A	Aroclor-1254	164	ug/kg	P1	J	3
24I0655	LDW24-SC1405M	24I0655-23RE1	EPA 8082A	Aroclor-1248	179	ug/kg	P1 D	J	3
24I0655	LDW24-SC1405M	24I0655-23RE1	EPA 8082A	Aroclor-1254	237	ug/kg	P1 D	J	3
24I0655	LDW24-SC1408F	24I0655-24	EPA 9060	Total Organic carbon	1.38	%		J	1

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24I0655	LDW24-SC1408F	24I0655-24	SM 2540-G	Total Solids	67.24	%		J	1
24I0655	LDW24-SC1408H	24I0655-25	EPA 9060	Total Organic carbon	1.32	%		J	1
24I0655	LDW24-SC1408H	24I0655-25	SM 2540-G	Total Solids	75.89	%		J	1
24I0655	LDW24-SC1408J	24I0655-26	EPA 9060	Total Organic carbon	2.09	%		J	1
24I0655	LDW24-SC1408J	24I0655-26	SM 2540-G	Total Solids	59.9	%		J	1
24I0655	LDW24-SC1408L	24I0655-27	EPA 9060	Total Organic carbon	3.2	%		J	1
24I0655	LDW24-SC1408L	24I0655-27	SM 2540-G	Total Solids	60.03	%		J	1
24I0655	LDW24-IT1413B-FD	24I0655-28	EPA 8082A	Aroclor-1248	47	ug/kg	P1	NJ	3
24I0655	LDW24-IT1413B-FD	24I0655-28	EPA 8082A	Aroclor-1254	49.8	ug/kg	P1	NJ	3
24I0655	LDW24-IT1413B-FD	24I0655-28	EPA 9060	Total Organic carbon	1.39	%		J	1
24I0655	LDW24-IT1413B-FD	24I0655-28	SM 2540-G	Total Solids	65.23	%		J	1
24I0655	LDW24-SC1415E	24I0655-29	EPA 8082A	Aroclor-1248	321	ug/kg	P1 D	J	3
24I0655	LDW24-SC1415G	24I0655-30	EPA 8082A	Aroclor-1248	76.2	ug/kg	P1	J	3
24I0655	LDW24-SC1415G	24I0655-30	EPA 8082A	Aroclor-1254	120	ug/kg	P1	J	3
24I0655	LDW24-SC1415I	24I0655-31	EPA 8082A	Aroclor-1248	117	ug/kg	P1	NJ	3
24I0655	LDW24-SC1415I	24I0655-31	EPA 8082A	Aroclor-1254	77.6	ug/kg	P1	NJ	3
24I0655	LDW24-SC1420M	24I0655-36RE1	EPA 8082A	Aroclor-1248	86.1	ug/kg	P1	J	3
24I0655	LDW24-SC1420M	24I0655-36RE1	EPA 8082A	Aroclor-1254	63.9	ug/kg	P1	J	3
24I0655	LDW24-SC1425G-FD	24I0655-37	EPA 8082A	Aroclor-1248	123	ug/kg	P1 D	NJ	3
24I0655	LDW24-SC1425G-FD	24I0655-37	EPA 8082A	Aroclor-1254	180	ug/kg	P1 D	NJ	3
24I0655	LDW24-SC1408FDUP2LT	BMJ0204-DUP2	SM 2540-G	Total Solids	66.4	%		J	1
24I0655	LDW24-SC1408LDUP1	BMJ0407-DUP1	EPA 9060	Total Organic carbon	3.11	%		J	1
24I0655	LDW24-SC1408LDUP2LT	BMJ0407-DUP2	EPA 9060	Total Organic carbon	3.37	%		J	1
24I0664	LDW24-SC1433G-FD	24I0664-05	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24I0664	LDW24-SC1433G-FD	24I0664-05	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24I0664	LDW24-SC1433G-FD	24I0664-05	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24I0664	LDW24-SC1433G-FD	24I0664-05	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24I0664	LDW24-SC1433G-FD	24I0664-05	EPA 8082A	Aroclor-1248	10	ug/kg	P1 B	DNR	11
24I0664	LDW24-SC1433G-FD	24I0664-05	EPA 8082A	Aroclor-1254	6	ug/kg	P1 B	DNR	11
24I0664	LDW24-SC1433G-FD	24I0664-05	EPA 8082A	Aroclor-1260	6	ug/kg		DNR	11
24I0664	LDW24-SC1453G	24I0664-11	EPA 8082A	Aroclor-1248	46.7	ug/kg	P1 B	U	7
24I0664	LDW24-SC1460F-FD	24I0664-13	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24I0664	LDW24-SC1460F-FD	24I0664-13	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24I0664	LDW24-SC1460F-FD	24I0664-13	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24I0664	LDW24-SC1460F-FD	24I0664-13	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24I0664	LDW24-SC1460F-FD	24I0664-13	EPA 8082A	Aroclor-1248	22.1	ug/kg	B	DNR	11
24I0664	LDW24-SC1460F-FD	24I0664-13	EPA 8082A	Aroclor-1254	34	ug/kg	B	DNR	11

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24I0664	LDW24-SC1460F-FD	24I0664-13	EPA 8082A	Aroclor-1260	19.3	ug/kg		DNR	11
24I0664	LDW24-SC1460F-FD	24I0664-13	EPA 9060	Total Organic carbon	1.52	%		J	1
24I0664	LDW24-SC1460F-FD	24I0664-13	SM 2540-G	Total Solids	55.23	%		J	1
24I0664	LDW24-SC1489D-FD	24I0664-14	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24I0664	LDW24-SC1489D-FD	24I0664-14	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24I0664	LDW24-SC1489D-FD	24I0664-14	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24I0664	LDW24-SC1489D-FD	24I0664-14	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24I0664	LDW24-SC1489D-FD	24I0664-14	EPA 8082A	Aroclor-1248	52.1	ug/kg	B	DNR	11
24I0664	LDW24-SC1489D-FD	24I0664-14	EPA 8082A	Aroclor-1254	63.1	ug/kg	B	DNR	11
24I0664	LDW24-SC1489D-FD	24I0664-14	EPA 8082A	Aroclor-1260	40.1	ug/kg		DNR	11
24I0664	LDW24-SC1503I	24I0664-15	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24I0664	LDW24-SC1503I	24I0664-15	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24I0664	LDW24-SC1503I	24I0664-15	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24I0664	LDW24-SC1503I	24I0664-15	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24I0664	LDW24-SC1503I	24I0664-15	EPA 8082A	Aroclor-1248	9.3	ug/kg	B	DNR	11
24I0664	LDW24-SC1503I	24I0664-15	EPA 8082A	Aroclor-1254	9.1	ug/kg	B	DNR	11
24I0664	LDW24-SC1503I	24I0664-15	EPA 8082A	Aroclor-1260	7	ug/kg		DNR	11
24I0664	LDW24-SC1503K	24I0664-16	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24I0664	LDW24-SC1503K	24I0664-16	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24I0664	LDW24-SC1503K	24I0664-16	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24I0664	LDW24-SC1503K	24I0664-16	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24I0664	LDW24-SC1503K	24I0664-16	EPA 8082A	Aroclor-1248	5.3	ug/kg	B	DNR	11
24I0664	LDW24-SC1503K	24I0664-16	EPA 8082A	Aroclor-1254	5.8	ug/kg	B	DNR	11
24I0664	LDW24-SC1503K	24I0664-16	EPA 8082A	Aroclor-1260	8.1	ug/kg		DNR	11
24I0664	LDW24-SC1507C	24I0664-17	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24I0664	LDW24-SC1507C	24I0664-17	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24I0664	LDW24-SC1507C	24I0664-17	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24I0664	LDW24-SC1507C	24I0664-17	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24I0664	LDW24-SC1507C	24I0664-17	EPA 8082A	Aroclor-1248	5.9	ug/kg	P1 B	DNR	11
24I0664	LDW24-SC1507C	24I0664-17	EPA 8082A	Aroclor-1254		ug/kg	U	DNR	11
24I0664	LDW24-SC1507C	24I0664-17	EPA 8082A	Aroclor-1260	3.9	ug/kg	J	DNR	11
24I0664	LDW24-SC1507D	24I0664-18	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24I0664	LDW24-SC1507E	24I0664-19	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24I0664	LDW24-SC1507E	24I0664-19	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24I0664	LDW24-SC1507E	24I0664-19	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24I0664	LDW24-SC1507E	24I0664-19	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24I0664	LDW24-SC1507E	24I0664-19	EPA 8082A	Aroclor-1248	8.6	ug/kg	P1 B	DNR	11

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24I0664	LDW24-SC1507E	24I0664-19	EPA 8082A	Aroclor-1254		ug/kg	U	DNR	11
24I0664	LDW24-SC1507E	24I0664-19	EPA 8082A	Aroclor-1260	4.9	ug/kg		DNR	11
24I0664	LDW24-SC1509K	24I0664-22	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	19
24I0664	LDW24-SC1509K	24I0664-22	EPA 8082A	Aroclor-1221		ug/kg	U	UJ	19
24I0664	LDW24-SC1509K	24I0664-22	EPA 8082A	Aroclor-1232		ug/kg	U	UJ	19
24I0664	LDW24-SC1509K	24I0664-22	EPA 8082A	Aroclor-1242		ug/kg	U	UJ	19
24I0664	LDW24-SC1510L	24I0664-24	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24I0664	LDW24-SC1511H	24I0664-26	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24I0664	LDW24-SC1515H	24I0664-31	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	19
24I0664	LDW24-SC1515H	24I0664-31	EPA 8082A	Aroclor-1221		ug/kg	U	UJ	19
24I0664	LDW24-SC1515H	24I0664-31	EPA 8082A	Aroclor-1232		ug/kg	U	UJ	19
24I0664	LDW24-SC1515H	24I0664-31	EPA 8082A	Aroclor-1242		ug/kg	U	UJ	19
24I0664	LDW24-SC1515J	24I0664-33	EPA 8082A	Aroclor-1248	6	ug/kg		NJ	3
24I0664	LDW24-SC1515J	24I0664-33	EPA 8082A	Aroclor-1254	4.2	ug/kg		J	3
24I0664	LDW24-SC1529J	24I0664-36	EPA 8082A	Aroclor-1016		ug/kg	U	UJ	19
24I0664	LDW24-SC1529J	24I0664-36	EPA 8082A	Aroclor-1221		ug/kg	U	UJ	19
24I0664	LDW24-SC1529J	24I0664-36	EPA 8082A	Aroclor-1232		ug/kg	U	UJ	19
24I0664	LDW24-SC1529J	24I0664-36	EPA 8082A	Aroclor-1242		ug/kg	U	UJ	19
24I0664	LDW24-SC1534K	24I0664-38	EPA 8082A	Aroclor-1248	17.8	ug/kg	P1	J	3
24I0664	LDW24-SC1534K	24I0664-38	EPA 8082A	Aroclor-1254	20.8	ug/kg	P1	J	3
24I0664	LDW24-SC1534K	24I0664-38	EPA 8082A	Aroclor-1260	11.6	ug/kg	P1	J	3
24I0664	LDW24-SC1535J	24I0664-39	EPA 8082A	Aroclor-1248	15.5	ug/kg	P1	J	3
24I0669	LDW24-SC1538F	24I0669-01	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24I0669	LDW24-SC1538H	24I0669-02	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24I0669	LDW24-IT1540D	24I0669-04	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24I0669	LDW24-IT1543B	24I0669-05	EPA 8082A	Aroclor-1248	99.3	ug/kg	P1	J	3
24I0669	LDW24-IT1543B	24I0669-05RE1	EPA 8082A	Aroclor-1254	261	ug/kg	P1 D	NJ	3
24I0669	LDW24-IT1543C	24I0669-06	EPA 8082A	Aroclor-1248	33.1	ug/kg	P1	NJ	3
24I0669	LDW24-IT1543C	24I0669-06	EPA 8082A	Aroclor-1254	69.4	ug/kg	P1	J	3
24I0669	LDW24-IT1543D	24I0669-07	EPA 8082A	Aroclor-1248	13.4	ug/kg	P1	J	3
24I0669	LDW24-IT1543D	24I0669-07	EPA 8082A	Aroclor-1254	29.9	ug/kg	P1	NJ	3
24I0669	LDW24-SC1544F	24I0669-08	EPA 8082A	Aroclor-1248	33.4	ug/kg	P1	J	3
24I0669	LDW24-SC1544F	24I0669-08	EPA 8082A	Aroclor-1254	80	ug/kg	P1	NJ	3
24I0669	LDW24-SC1544H	24I0669-09	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24I0669	LDW24-SC1563F	24I0669-10	EPA 8082A	Aroclor-1248	85.8	ug/kg	P1	J	3
24I0669	LDW24-SC1563F	24I0669-10	EPA 8082A	Aroclor-1254	147	ug/kg	P1	J	3
24I0669	LDW24-SC1563H	24I0669-11	EPA 8082A	Aroclor-1248	13.5	ug/kg	P1	J	3

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24I0669	LDW24-SC1563H	24I0669-11	EPA 8082A	Aroclor-1254	25.1	ug/kg	P1	NJ	3
24I0669	LDW24-SC1586D	24I0669-12	EPA 8082A	Aroclor-1248	9.8	ug/kg	P1	NJ	3
24I0669	LDW24-SC1586D	24I0669-12	EPA 8082A	Aroclor-1254	9.9	ug/kg	P1	NJ	3
24K0260	LDW24-SC1459A	24K0260-01	EPA 9060	Total Organic carbon	1.11	%	H	J	1
24K0260	LDW24-SC1549A	24K0260-02	EPA 9060	Total Organic carbon	0.9	%	H	J	1
24K0260	LDW24-IT1603A	24K0260-03	EPA 7471B	Mercury	18.5	mg/kg	D	J	9A
24K0260	LDW24-IT1606A	24K0260-05	EPA 8082A	Aroclor-1248	470	ug/kg	D	J	13H
24K0260	LDW24-IT1606A	24K0260-05	EPA 8082A	Aroclor-1254	437	ug/kg	D	J	13H
24K0260	LDW24-IT1606A	24K0260-05	EPA 8082A	Aroclor-1260	306	ug/kg	D	J	13H
24K0260	LDW24-IT1428A	24K0260-06	EPA 7471B	Mercury	0.556	mg/kg		J	9A
24K0260	LDW24-IT1428A	24K0260-06	EPA 9060	Total Organic carbon	2.18	%	H	J	1
24K0260	LDW24-IT1560A	24K0260-07	EPA 9060	Total Organic carbon	1.55	%	H	J	1
24K0260	LDW24-IT1553A	24K0260-10	EPA 8082A	Aroclor-1260	30.1	ug/kg	P1	J	3
24K0260	LDW24-IT1556A	24K0260-11	EPA 6020	Arsenic	32.7	mg/kg		J	9A
24K0260	LDW24-IT1556A	24K0260-11	EPA 8270E	Benzo(a)pyrene	776	ug/kg		J	10H
24K0260	LDW24-IT1556A	24K0260-11	EPA 8270E	Benzo(g,h,i)perylene	416	ug/kg	Q	J	5BH,5CH,10H
24K0260	LDW24-IT1556A	24K0260-11	EPA 8270E	Dibenzo(a,h)anthracene	157	ug/kg	Q	J	5BH,5CH,10H
24K0260	LDW24-IT1556A	24K0260-11	EPA 8270E	Indeno(1,2,3-cd)pyrene	408	ug/kg	Q	J	5BH,5CH,10H
24K0260	LDW24-IT1552A	24K0260-12	EPA 6020	Arsenic	564	mg/kg	D	J	9A
24K0260	LDW24-IT1601A	24K0260-13	EPA 7471B	Mercury	0.158	mg/kg		J	9A
24K0260	LDW24-IT1596A	24K0260-16	EPA 7471B	Mercury	0.433	mg/kg		J	9A
24K0260	LDW24-IT1612A	24K0260-22RE1	EPA 8082A	Aroclor-1254	7400	ug/kg	P1 D	J	3
24K0260	LDW24-SS1516	24K0260-23	EPA 8270E	Benzo(a)pyrene	72.2	ug/kg		J	9A,10H
24K0260	LDW24-SS1516	24K0260-23	EPA 8270E	Benzo(g,h,i)perylene	43.7	ug/kg	Q	J	5BH,5CH,10H
24K0260	LDW24-SS1516	24K0260-23	EPA 8270E	Fluoranthene	134	ug/kg		J	9A
24K0260	LDW24-SS1516	24K0260-23	EPA 8270E	Indeno(1,2,3-cd)pyrene	38.5	ug/kg	Q	J	5BH,5CH,10H
24K0260	LDW24-SS1516	24K0260-23	EPA 8270E	Phenanthrene	79.4	ug/kg		J	9A
24K0260	LDW24-SS1516	24K0260-23	EPA 8270E	Pyrene	119	ug/kg		J	9A
24K0260	LDW24-SS1516	24K0260-23	EPA 8270E	Total benzofluoranthenes	119	ug/kg		J	9A
24K0260	LDW24-IT1599A	24K0260-24	EPA 7471B	Mercury	2.2	mg/kg	D	J	9A
24K0260	LDW24-IT1599A	24K0260-24RE1	EPA 8082A	Aroclor-1254	8070	ug/kg	P1 D	J	3
24K0260	LDW24-IT1610A	24K0260-25	EPA 7471B	Mercury	2.08	mg/kg		J	9A
24K0260	LDW24-SC1479A	24K0260-28RE1	EPA 8082A	Aroclor-1254	104	ug/kg	P1	J	3
24K0260	LDW24-SC1488A	24K0260-30	EPA 8082A	Aroclor-1254	56.5	ug/kg	P1	J	3
24K0260	LDW24-SC1488A	24K0260-30	EPA 9060	Total Organic carbon	2.45	%		J	1
24K0260	LDW24-SC1488B	24K0260-31	EPA 9060	Total Organic carbon	2.29	%		J	1
24K0260	LDW24-SC1488C	24K0260-32	EPA 8082A	Aroclor-1254	68.1	ug/kg	P1	J	3

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24K0260	LDW24-SC1488C	24K0260-32	EPA 9060	Total Organic carbon	2.13	%		J	1
24K0260	LDW24-SC1320A	24K0260-33	EPA 9060	Total Organic carbon	1.06	%	H	J	1
24K0260	LDW24-SC1577	24K0260-34	EPA 9060	Total Organic carbon	1.69	%		J	1
24K0260	LDW24-IT1556ADUP1	BMK0357-DUP1	EPA 6020	Arsenic	28.7	mg/kg		J	9A
24K0260	LDW24-IT1603ADUP1	BMK0363-DUP1	EPA 7471B	Mercury	39.8	mg/kg	* D	J	9A
24K0393	LDW24-SC1342K	24K0393-01	EPA 8082A	Aroclor-1254	9.1	ug/kg		NJ	3
24K0393	LDW24-SC1342K	24K0393-01	EPA 9060	Total Organic carbon	0.92	%		J	1
24K0393	LDW24-SC1342M	24K0393-02	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24K0393	LDW24-SC1342M	24K0393-02	EPA 9060	Total Organic carbon	1.46	%		J	1
24K0393	LDW24-SC1559A-FD	24K0393-03	EPA 8082A	Aroclor-1254	105	ug/kg	P1	J	3
24K0393	LDW24-SC1559A-FD	24K0393-03	EPA 9060	Total Organic carbon	2.01	%	H	J	1
24K0393	LDW24-SC1559A-FD	24K0393-03	SM 2540-G	Total Solids	53.68	%	H	J	1
24K0393	LDW24-IT1607F	24K0393-04	EPA 8082A	Aroclor-1254	7.1	ug/kg		NJ	3
24K0393	LDW24-IT1402A-FD	24K0393-05	EPA 8082A	Aroclor-1254	19.3	ug/kg	P1	NJ	3
24K0393	LDW24-IT1402A-FD	24K0393-05	EPA 8270E	Benzo(a)pyrene	235	ug/kg		J	5BH,5CH,10H
24K0393	LDW24-IT1402A-FD	24K0393-05	EPA 8270E	Benzo(g,h,i)perylene	136	ug/kg	Q	J	5BH,5CH,10H
24K0393	LDW24-IT1402A-FD	24K0393-05	EPA 8270E	Dibenzo(a,h)anthracene	42.4	ug/kg	Q	J	5BH,5CH,10H
24K0393	LDW24-IT1402A-FD	24K0393-05	EPA 8270E	Indeno(1,2,3-cd)pyrene	137	ug/kg	Q	J	5BH,5CH,10H
24K0393	LDW24-IT1402A-FD	24K0393-05	EPA 9060	Total Organic carbon	0.51	%	H	J	1
24K0393	LDW24-IT1402A-FD	24K0393-05	SM 2540-G	Total Solids	70.41	%	H	J	1
24K0393	LDW24-IT1555B	24K0393-06	EPA 8270E	Benzo(a)pyrene	524	ug/kg		J	5BH,5CH,10H
24K0393	LDW24-IT1555B	24K0393-06	EPA 8270E	Benzo(g,h,i)perylene	146	ug/kg	Q	J	5BH,5CH,10H
24K0393	LDW24-IT1555B	24K0393-06	EPA 8270E	Dibenzo(a,h)anthracene	61.5	ug/kg	Q	J	5BH,5CH,10H
24K0393	LDW24-IT1555B	24K0393-06	EPA 8270E	Indeno(1,2,3-cd)pyrene	156	ug/kg	Q	J	5BH,5CH,10H
24K0393	LDW24-IT1555B	24K0393-06RE1	EPA 8082A	Aroclor-1254	193	ug/kg	P1 D	NJ	3
24K0393	LDW24-IT1556D	24K0393-07	EPA 8082A	Aroclor-1254	27.8	ug/kg	P1	J	3
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Anthracene	147	ug/kg	D	J	13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Benzo(a)anthracene	743	ug/kg	D	J	13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Benzo(a)pyrene	521	ug/kg	D	J	BH,5CH,10H,13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Benzo(g,h,i)perylene	377	ug/kg	Q D	J	BH,5CH,10H,13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Chrysene	827	ug/kg	D	J	13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Dibenzo(a,h)anthracene	154	ug/kg	Q D	J	BH,5CH,10H,13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Fluoranthene	1400	ug/kg	D	J	13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Indeno(1,2,3-cd)pyrene	325	ug/kg	Q D	J	BH,5CH,10H,13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Phenanthrene	265	ug/kg	D	J	13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Pyrene	1230	ug/kg	D	J	13H
24K0393	LDW24-IT1556D	24K0393-07	EPA 8270E	Total benzofluoranthenes	861	ug/kg	D	J	13H

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24K0393	LDW24-IT1551B	24K0393-08	EPA 8082A	Aroclor-1254	562	ug/kg	P1 D	J	3
24K0393	LDW24-IT1551B	24K0393-08	EPA 8082A	Aroclor-1260	191	ug/kg	P1 D	J	3,8L
24K0393	LDW24-IT1551C	24K0393-09	EPA 8082A	Aroclor-1248	144	ug/kg	D	J	5BL
24K0393	LDW24-IT1551D	24K0393-10	EPA 8082A	Aroclor-1248	216	ug/kg	P1 D	J	3,5BL
24K0393	LDW24-IT1552D	24K0393-11	EPA 8082A	Aroclor-1248		ug/kg	U	UJ	5BL
24K0393	LDW24-SC1345L	24K0393-12	EPA 8082A	Aroclor-1248	91.7	ug/kg		J	5BL
24K0393	LDW24-SC1345L	24K0393-12	EPA 8082A	Aroclor-1254	159	ug/kg	P1	J	3
24K0393	LDW24-IT1601F	24K0393-14RE1	EPA 8082A	Aroclor-1254	1590	ug/kg	P1 D	NJ	3
24K0393	LDW24-SC1345P	24K0393-18RE1	EPA 8082A	Aroclor-1254	363	ug/kg	P1 D	J	3
24K0393	LDW24-IT1599D	24K0393-19	EPA 8082A	Aroclor-1248		ug/kg	U	UJ	5BL
24K0393	LDW24-IT1599D	24K0393-19	EPA 8082A	Aroclor-1254	98.2	ug/kg	P1	NJ	3
24K0393	LDW24-IT1599F	24K0393-20	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24K0393	LDW24-IT1376A-FD	24K0393-21	EPA 8082A	Aroclor-1248	12200	ug/kg	D	J	5BL
24K0393	LDW24-SC1347E-FD	24K0393-22	EPA 8082A	Aroclor-1248	260	ug/kg	D	J	5BL
24K0393	LDW24-SC1347E-FD	24K0393-22	EPA 8082A	Aroclor-1254	557	ug/kg	P1 D	J	3
24K0393	LDW24-IT1378A-FD	24K0393-23	EPA 8082A	Aroclor-1248	46.2	ug/kg	P1	J	5BL
24K0393	LDW24-IT1378A-FD	24K0393-23	EPA 8082A	Aroclor-1254	50.1	ug/kg	P1	J	3
24K0393	LDW24-IT1402A-FDDUPI	BML0078-DUP1	EPA 9060	Total Organic carbon	0.67	%	*	J	9A
24K0562	LDW24-SC1405B	24K0562-01	EPA 9060	Total Organic carbon	1.9	%	H	J	1,9A
24K0562	LDW24-SC1405B	24K0562-01	SM 2540-G	Total Solids	54.71	%		J	1
24K0562	LDW24-SC1405D	24K0562-02	EPA 9060	Total Organic carbon	1.94	%	H	J	1
24K0562	LDW24-SC1405D	24K0562-02	SM 2540-G	Total Solids	55.9	%		J	1
24K0562	LDW24-SC1420B	24K0562-03	EPA 9060	Total Organic carbon	2.8	%	H	J	1
24K0562	LDW24-SC1420B	24K0562-03	SM 2540-G	Total Solids	47.73	%		J	1
24K0562	LDW24-SC1420D	24K0562-04	EPA 9060	Total Organic carbon	1.82	%	H	J	1
24K0562	LDW24-SC1420D	24K0562-04	SM 2540-G	Total Solids	55.07	%		J	1
24K0562	LDW24-SC1491J	24K0562-05	EPA 9060	Total Organic carbon	2.38	%	H	J	1
24K0562	LDW24-SC1491J	24K0562-05	SM 2540-G	Total Solids	51.33	%		J	1
24K0562	LDW24-SC1501D	24K0562-06	EPA 9060	Total Organic carbon	1.84	%	H	J	1
24K0562	LDW24-SC1501D	24K0562-06	SM 2540-G	Total Solids	60.22	%		J	1
24K0562	LDW24-SC1408B	24K0562-07	EPA 9060	Total Organic carbon	2.3	%	H	J	1
24K0562	LDW24-SC1408D	24K0562-08	EPA 9060	Total Organic carbon	2.08	%	H	J	1
24K0562	LDW24-SC1529D	24K0562-09	EPA 9060	Total Organic carbon	1.58	%	H	J	1
24K0562	LDW24-SC1529D	24K0562-09	SM 2540-G	Total Solids	63.24	%		J	1
24K0562	LDW24-IT1560E	24K0562-10	EPA 8082A	Aroclor-1260	209	ug/kg	D	J	8,9A
24K0562	LDW24-IT1560E	24K0562-10	EPA 9060	Total Organic carbon	0.17	%	H	J	1
24K0562	LDW24-IT1560E	24K0562-10	SM 2540-G	Total Solids	87.63	%		J	1

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24K0562	LDW24-SC1460E	24K0562-11	EPA 9060	Total Organic carbon	1.8	%	H	J	1
24K0562	LDW24-SC1460G	24K0562-12	EPA 9060	Total Organic carbon	2.08	%	H	J	1
24K0562	LDW24-IT1605D	24K0562-13	EPA 8082A	Aroclor-1248	9.7	ug/kg	P1	NJ	3
24K0562	LDW24-IT1606D	24K0562-16	EPA 8082A	Aroclor-1254	7.6	ug/kg		NJ	3
24K0562	LDW24-IT1418F	24K0562-17	EPA 8082A	Aroclor-1248	27.1	ug/kg	D	J	3
24K0562	LDW24-IT1418F	24K0562-17	SM 2540-G	Total Solids	57.43	%		J	1
24K0562	LDW24-IT1418H	24K0562-18	EPA 9060	Total Organic carbon	2.77	%	H	J	1
24K0562	LDW24-IT1418H	24K0562-18	SM 2540-G	Total Solids	56.97	%		J	1
24K0562	LDW24-IT1426D	24K0562-19	EPA 9060	Total Organic carbon	3.04	%	H	J	1
24K0562	LDW24-IT1426D	24K0562-19	SM 2540-G	Total Solids	59.2	%		J	1
24K0562	LDW24-IT1426F	24K0562-20	EPA 9060	Total Organic carbon	2.5	%	H	J	1
24K0562	LDW24-IT1426F	24K0562-20	SM 2540-G	Total Solids	57.35	%		J	1
24K0562	LDW24-IT1560D	24K0562-21	EPA 8082A	Aroclor-1248	129	ug/kg	P1 D	NJ	3
24K0562	LDW24-IT1560D	24K0562-21	EPA 8082A	Aroclor-1260	145	ug/kg	P1 D	J	3
24K0562	LDW24-IT1560D	24K0562-21	EPA 9060	Total Organic carbon	0.12	%	H	J	1
24K0562	LDW24-IT1560D	24K0562-21	SM 2540-G	Total Solids	86.04	%		J	1
24K0562	LDW24-SC1466C	24K0562-22	EPA 9060	Total Organic carbon	2.7	%	H	J	1
24K0562	LDW24-SC1466D	24K0562-23	EPA 9060	Total Organic carbon	3.58	%	H	J	1
24K0562	LDW24-SC1549C	24K0562-24	EPA 8082A	Aroclor-1254	3.9	ug/kg	J	NJ	3
24K0562	LDW24-SC1549C	24K0562-24	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24K0562	LDW24-SC1549C	24K0562-24	EPA 9060	Total Organic carbon	1.02	%	H	J	1
24K0562	LDW24-SC1549C	24K0562-24	SM 2540-G	Total Solids	65.72	%		J	1
24K0562	LDW24-SC1415B	24K0562-25	EPA 8082A	Aroclor-1254	72	ug/kg	P1	J	3
24K0562	LDW24-SC1415B	24K0562-25	EPA 9060	Total Organic carbon	3.67	%	H	J	1
24K0562	LDW24-SC1415B	24K0562-25	SM 2540-G	Total Solids	49.1	%		J	1
24K0562	LDW24-SC1415C	24K0562-26	EPA 8082A	Aroclor-1254	149	ug/kg	P1	J	3
24K0562	LDW24-SC1415C	24K0562-26	EPA 9060	Total Organic carbon	2.31	%	H	J	1
24K0562	LDW24-SC1415C	24K0562-26	SM 2540-G	Total Solids	53.67	%		J	1
24K0562	LDW24-SC1334B	24K0562-27	EPA 9060	Total Organic carbon	1.96	%	H	J	1
24K0562	LDW24-SC1334B	24K0562-27	SM 2540-G	Total Solids	55.53	%		J	1
24K0562	LDW24-SC1334D	24K0562-28	EPA 8082A	Aroclor-1254	60.2	ug/kg	P1	J	3
24K0562	LDW24-SC1334D	24K0562-28	EPA 9060	Total Organic carbon	2.19	%	H	J	1
24K0562	LDW24-SC1334D	24K0562-28	SM 2540-G	Total Solids	54.08	%		J	1
24K0562	LDW24-SC1334F	24K0562-29	EPA 9060	Total Organic carbon	2.33	%	H	J	1
24K0562	LDW24-SC1334F	24K0562-29	SM 2540-G	Total Solids	52.53	%		J	1
24K0562	LDW24-SS1317-FD	24K0562-30	EPA 8082A	Aroclor-1248	55.8	ug/kg	P1	J	3
24K0562	LDW24-SS1317-FD	24K0562-30	EPA 9060	Total Organic carbon	0.15	%	H	J	1

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24K0562	LDW24-SS1317-FD	24K0562-30	SM 2540-G	Total Solids	79.8	%		J	1
24K0562	LDW24-IT1560B	24K0562-31	EPA 8082A	Aroclor-1248	52.8	ug/kg	P1	NJ	3
24K0562	LDW24-IT1560B	24K0562-31	EPA 9060	Total Organic carbon	0.73	%	H	J	1
24K0562	LDW24-IT1560B	24K0562-31	SM 2540-G	Total Solids	63.17	%		J	1
24K0562	LDW24-IT1560C	24K0562-32	EPA 8082A	Aroclor-1260	291	ug/kg	P1 D	J	3
24K0562	LDW24-IT1560C	24K0562-32	EPA 9060	Total Organic carbon	0.84	%	H	J	1
24K0562	LDW24-IT1560C	24K0562-32	SM 2540-G	Total Solids	67.76	%		J	1
24K0562	LDW24-SC1502D	24K0562-33	EPA 9060	Total Organic carbon	1.73	%	H	J	1
24K0562	LDW24-SC1489E	24K0562-34	EPA 9060	Total Organic carbon	1.92	%		J	1
24K0562	LDW24-SC1489G	24K0562-35	EPA 9060	Total Organic carbon	2.22	%		J	1
24K0562	LDW24-SC1326D	24K0562-38	EPA 9060	Total Organic carbon	2.09	%	H	J	1
24K0562	LDW24-SC1405BDUP2LT	BML0379-DUP2	EPA 9060	Total Organic carbon	2.39	%	*	J	9A
24K0644	LDW24-SC1329E	24K0644-01	EPA 9060	Total Organic carbon	1.69	%		J	9A
24K0644	LDW24-SC1554C	24K0644-02	EPA 9060	Total Organic carbon	1.19	%	H	J	9A
24K0644	LDW24-SC1337I	24K0644-03	EPA 9060	Total Organic carbon	2.04	%		J	9A
24K0644	LDW24-SC1337K	24K0644-04	EPA 9060	Total Organic carbon	2.03	%		J	9A
24K0644	LDW24-IT1404C	24K0644-05	EPA 9060	Total Organic carbon	1.77	%	H	J	9A
24K0644	LDW24-IT1404D	24K0644-06	EPA 8082A	Aroclor-1254	26.4	ug/kg	P1	J	3
24K0644	LDW24-IT1404D	24K0644-06	EPA 9060	Total Organic carbon	1.79	%	H	J	9A
24K0644	LDW24-IT1404E	24K0644-07	EPA 8082A	Aroclor-1260	8.3	ug/kg		NJ	3
24K0644	LDW24-IT1404E	24K0644-07	EPA 9060	Total Organic carbon	1.27	%	H	J	9A
24K0644	LDW24-SC1554E	24K0644-08	EPA 9060	Total Organic carbon	0.95	%	H	J	9A
24K0644	LDW24-SC1531D	24K0644-09	EPA 9060	Total Organic carbon	1.88	%	H	J	1,9A
24K0644	LDW24-SC1531E	24K0644-10	EPA 9060	Total Organic carbon	1.42	%	H	J	1,9A
24K0644	LDW24-SC1531E	24K0644-10RE1	EPA 8082A	Aroclor-1260	93.1	ug/kg	D	J	8L
24K0644	LDW24-SC1531F	24K0644-11	EPA 9060	Total Organic carbon	2.15	%	H	J	1,9A
24K0644	LDW24-SC1326B	24K0644-12	EPA 9060	Total Organic carbon	2.91	%	H	J	1,9A
24K0644	LDW24-SC1482C	24K0644-13	EPA 9060	Total Organic carbon	1.96	%	H	J	1,9A
24K0644	LDW24-SC1482D	24K0644-14	EPA 9060	Total Organic carbon	2.25	%	H	J	1,9A
24K0644	LDW24-SC1482F	24K0644-15	EPA 8082A	Aroclor-1254	167	ug/kg	P1	NJ	3
24K0644	LDW24-SC1482F	24K0644-15	EPA 9060	Total Organic carbon	2.72	%	H	J	1,9A
24K0644	LDW24-SC1490D	24K0644-16	EPA 9060	Total Organic carbon	1.33	%	H	J	1,9A
24K0644	LDW24-SC1490F	24K0644-17	EPA 9060	Total Organic carbon	1.11	%	H	J	1,9A
24K0644	LDW24-IT1411B	24K0644-18	EPA 9060	Total Organic carbon	1.62	%		J	9A
24K0644	LDW24-IT1411C	24K0644-19	EPA 8082A	Aroclor-1260	11.6	ug/kg	P1	J	3
24K0644	LDW24-IT1411C	24K0644-19	EPA 9060	Total Organic carbon	1.16	%		J	9A
24K0644	LDW24-IT1411E	24K0644-20	EPA 9060	Total Organic carbon	1.59	%		J	9A

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24K0644	LDW24-IT1411G	24K0644-21	EPA 8082A	Aroclor-1260		ug/kg	U	UJ	19
24K0644	LDW24-SC1312C	24K0644-22	EPA 8082A	Aroclor-1260	68.6	ug/kg	P1	DNR	11
24K0644	LDW24-SC1312C	24K0644-22RE1	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24K0644	LDW24-SC1312C	24K0644-22RE1	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24K0644	LDW24-SC1312C	24K0644-22RE1	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24K0644	LDW24-SC1312C	24K0644-22RE1	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24K0644	LDW24-SC1312D	24K0644-23	EPA 8082A	Aroclor-1248	48	ug/kg	P1	J	3
24K0644	LDW24-SC1312D	24K0644-23	EPA 8082A	Aroclor-1254	46.6	ug/kg	P1	J	3
24K0644	LDW24-SC1312E	24K0644-24	EPA 8082A	Aroclor-1254	81.3	ug/kg	P1	DNR	11
24K0644	LDW24-SC1312E	24K0644-24	EPA 8082A	Aroclor-1260	54.4	ug/kg		DNR	11
24K0644	LDW24-SC1312E	24K0644-24RE1	EPA 8082A	Aroclor-1016		ug/kg	U	DNR	11
24K0644	LDW24-SC1312E	24K0644-24RE1	EPA 8082A	Aroclor-1221		ug/kg	U	DNR	11
24K0644	LDW24-SC1312E	24K0644-24RE1	EPA 8082A	Aroclor-1232		ug/kg	U	DNR	11
24K0644	LDW24-SC1312E	24K0644-24RE1	EPA 8082A	Aroclor-1242		ug/kg	U	DNR	11
24K0644	LDW24-SC1312F	24K0644-25	EPA 8082A	Aroclor-1248	62.2	ug/kg	P1	J	3
24K0644	LDW24-SC1312F	24K0644-25	EPA 8082A	Aroclor-1254	45.6	ug/kg	P1	J	3
24K0644	LDW24-SC1493B	24K0644-26	EPA 9060	Total Organic carbon	3.56	%	H	J	1
24K0644	LDW24-SC1493C	24K0644-27	EPA 8082A	Aroclor-1248	24.1	ug/kg	P1	J	3
24K0644	LDW24-SC1493C	24K0644-27	EPA 8082A	Aroclor-1254	41.4	ug/kg	P1	NJ	3
24K0644	LDW24-SC1493C	24K0644-27	EPA 9060	Total Organic carbon	2.52	%	H	J	1
24K0644	LDW24-SC1493E	24K0644-28	EPA 9060	Total Organic carbon	1.76	%	H	J	1
24K0644	LDW24-SC1438B	24K0644-29	EPA 9060	Total Organic carbon	1.69	%	H	J	1
24K0644	LDW24-SC1438D	24K0644-30	EPA 9060	Total Organic carbon	1.61	%	H	J	1
24K0644	LDW24-SC1438F	24K0644-31	EPA 9060	Total Organic carbon	1.37	%	H	J	1
24K0644	LDW24-SC1493G	24K0644-32	EPA 9060	Total Organic carbon	2.65	%	H	J	1
24K0644	LDW24-IT1595D	24K0644-33	EPA 8082A	Aroclor-1248	83.5	ug/kg	P1	J	3
24K0644	LDW24-IT1595D	24K0644-33	EPA 8082A	Aroclor-1254	66	ug/kg	P1	J	3
24K0644	LDW24-IT1595F	24K0644-34	EPA 8082A	Aroclor-1248	16.8	ug/kg	P1	J	3
24K0644	LDW24-IT1611F	24K0644-39	EPA 8082A	Aroclor-1248	124	ug/kg	P1	J	3
24K0644	LDW24-SC1329EDUP1	BNA0021-DUP1	EPA 9060	Total Organic carbon	2.74	%	*	J	9A
24K0644	LDW24-SC1329EDUP2LT	BNA0021-DUP2	EPA 9060	Total Organic carbon	1.59	%		J	9A
24K0648	LDW24-SC1492B	24K0648-07	EPA 9060	Total Organic carbon	1.61	%		J	1
24K0648	LDW24-SC1492C	24K0648-08	EPA 9060	Total Organic carbon	2.47	%		J	1
24K0648	LDW24-SC1492E	24K0648-09	EPA 9060	Total Organic carbon	2.89	%		J	1
24K0648	LDW24-SC1341F-FD	24K0648-10	EPA 9060	Total Organic carbon	2.75	%		J	1
24K0648	LDW24-SC1302B	24K0648-12	EPA 9060	Total Organic carbon	3.15	%	H	J	1
24K0648	LDW24-SC1302C	24K0648-13	EPA 9060	Total Organic carbon	2.9	%	H	J	1

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
24K0648	LDW24-SC1549E	24K0648-14	EPA 9060	Total Organic carbon	1.93	%	H	J	1
24K0648	LDW24-SC1549E	24K0648-14	SM 2540-G	Total Solids	69.53	%		J	1
24K0648	LDW24-SC1430B	24K0648-15	EPA 9060	Total Organic carbon	2.13	%	H	J	1
24K0648	LDW24-SC1430B	24K0648-15	SM 2540-G	Total Solids	54.7	%		J	1
24K0648	LDW24-IT1528B-FD	24K0648-16	EPA 9060	Total Organic carbon	1.73	%		J	1
24K0648	LDW24-SC1488D	24K0648-17	EPA 8082A	Aroclor-1254	74.7	ug/kg	P1	J	3
24K0648	LDW24-SC1488D	24K0648-17	EPA 9060	Total Organic carbon	1.92	%		J	1
24K0648	LDW24-SC1488E	24K0648-18	EPA 9060	Total Organic carbon	2.49	%		J	1
24K0648	LDW24-SC1488G	24K0648-19	EPA 9060	Total Organic carbon	2.36	%		J	1
24K0648	LDW24-SC1430C	24K0648-20	EPA 9060	Total Organic carbon	1.91	%	H	J	1
24K0648	LDW24-SC1430C	24K0648-20	SM 2540-G	Total Solids	55.29	%		J	1
24K0648	LDW24-SC1549B	24K0648-21	EPA 9060	Total Organic carbon	1.78	%	H	J	1,9A
24K0648	LDW24-SC1549B	24K0648-21	SM 2540-G	Total Solids	60.45	%		J	1
24K0648	LDW24-SC1549G	24K0648-22	EPA 9060	Total Organic carbon	0.43	%	H	J	1
24K0648	LDW24-SC1549G	24K0648-22	SM 2540-G	Total Solids	79.44	%		J	1
24K0648	LDW24-SC1549BDUP2	BMK0782-DUP2	SM 2540-G	Total Solids	61.01	%		J	1
24K0648	LDW24-SC1549BDUP7	BNA0051-DUP7	EPA 9060	Total Organic carbon	1.44	%	*	J	1,9A
24K0648	LDW24-SC1549BDUP8	BNA0051-DUP8	EPA 9060	Total Organic carbon	1.51	%		J	1
24L0182	LDW24-SC1350C	24L0182-01	EPA 9060	Total Organic carbon	4.78	%	H	J	1
24L0182	LDW24-SC1350C	24L0182-01	SM 2540-G	Total Solids	27.57	%		J	1
24L0182	LDW24-SC1350CDUP3	BML0233-DUP3	SM 2540-G	Total Solids	28.91	%		J	1
K2405555	LDW24-IT1513A	K2405555-006	EPA 8270D-SIM	Acenaphthylene	4.6	ug/kg	J	J	10H
K2405555	LDW24-IT1513A	K2405555-006	EPA 8270D-SIM	Benzo(a)anthracene	12	ug/kg		J	10H
K2405555	LDW24-IT1513A	K2405555-006	EPA 8270D-SIM	Benzo(a)pyrene	13	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1513A	K2405555-006	EPA 8270D-SIM	Dibenzofuran	3.1	ug/kg	J	J	10H
K2405555	LDW24-IT1513A	K2405555-006	EPA 8270D-SIM	Fluorene	3.3	ug/kg	J	J	12L
K2405555	LDW24-IT1513A	K2405555-006	EPA 8270D-SIM	Naphthalene	8.2	ug/kg		J	12L
K2405555	LDW24-IT1513A	K2405555-006	EPA 8270D-SIM	Pyrene	37	ug/kg		J	10H,12L
K2405555	LDW24-IT1513A-FD	K2405555-007	EPA 8270D-SIM	Acenaphthylene	4.5	ug/kg	J	J	10H
K2405555	LDW24-IT1513A-FD	K2405555-007	EPA 8270D-SIM	Benzo(a)anthracene	12	ug/kg		J	10H
K2405555	LDW24-IT1513A-FD	K2405555-007	EPA 8270D-SIM	Benzo(a)pyrene	13	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1513A-FD	K2405555-007	EPA 8270D-SIM	Dibenzofuran	3.3	ug/kg	J	J	10H
K2405555	LDW24-IT1513A-FD	K2405555-007	EPA 8270D-SIM	Fluorene	3.6	ug/kg	J	J	12L
K2405555	LDW24-IT1513A-FD	K2405555-007	EPA 8270D-SIM	Naphthalene	8.4	ug/kg		J	12L
K2405555	LDW24-IT1513A-FD	K2405555-007	EPA 8270D-SIM	Pyrene	40	ug/kg		J	10H,12L
K2405555	LDW24-IT1545A	K2405555-008	EPA 8270D-SIM	Acenaphthylene	14	ug/kg		J	10H
K2405555	LDW24-IT1545A	K2405555-008	EPA 8270D-SIM	Benzo(a)anthracene	360	ug/kg		J	10H

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2405555	LDW24-IT1545A	K2405555-008	EPA 8270D-SIM	Benzo(a)pyrene	460	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1545A	K2405555-008	EPA 8270D-SIM	Dibenzofuran	14	ug/kg		J	10H
K2405555	LDW24-IT1545A	K2405555-008	EPA 8270D-SIM	Fluorene	22	ug/kg		J	12L
K2405555	LDW24-IT1545A	K2405555-008	EPA 8270D-SIM	Naphthalene	15	ug/kg		J	12L
K2405555	LDW24-IT1545A	K2405555-008	EPA 8270D-SIM	Pyrene	1100	ug/kg		J	10H,12L
K2405555	LDW24-IT1567	K2405555-009	EPA 8270D-SIM	Acenaphthylene	0.51	ug/kg	J	J	10H
K2405555	LDW24-IT1567	K2405555-009	EPA 8270D-SIM	Benzo(a)anthracene	3	ug/kg	J	J	10H
K2405555	LDW24-IT1567	K2405555-009	EPA 8270D-SIM	Benzo(a)pyrene	3.4	ug/kg	J	J	5BH,10H,12L
K2405555	LDW24-IT1567	K2405555-009	EPA 8270D-SIM	Fluorene		ug/kg	U	UJ	12L
K2405555	LDW24-IT1567	K2405555-009	EPA 8270D-SIM	Naphthalene	1.1	ug/kg	J	J	12L
K2405555	LDW24-IT1567	K2405555-009	EPA 8270D-SIM	Pyrene	4.2	ug/kg	J	J	10H,12L
K2405555	LDW24-IT1550A	K2405555-010	EPA 8270D-SIM	Acenaphthylene	8.8	ug/kg		J	10H
K2405555	LDW24-IT1550A	K2405555-010	EPA 8270D-SIM	Benzo(a)anthracene	11	ug/kg		J	10H,12L
K2405555	LDW24-IT1550A	K2405555-010	EPA 8270D-SIM	Benzo(a)pyrene	7.7	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1550A	K2405555-010	EPA 8270D-SIM	Dibenzofuran	5.1	ug/kg	J	J	10H
K2405555	LDW24-IT1550A	K2405555-010	EPA 8270D-SIM	Fluorene	5.6	ug/kg	J	J	12L
K2405555	LDW24-IT1550A	K2405555-010	EPA 8270D-SIM	Naphthalene	20	ug/kg		J	12L
K2405555	LDW24-IT1550A	K2405555-010	EPA 8270D-SIM	Pyrene	37	ug/kg		J	10H,12L
K2405555	LDW24-IT1550B	K2405555-011	EPA 8270D-SIM	Acenaphthylene	6.8	ug/kg	J	J	10H
K2405555	LDW24-IT1550B	K2405555-011	EPA 8270D-SIM	Benzo(a)anthracene	18	ug/kg		J	10H,12L
K2405555	LDW24-IT1550B	K2405555-011	EPA 8270D-SIM	Benzo(a)pyrene	16	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1550B	K2405555-011	EPA 8270D-SIM	Dibenzofuran	7	ug/kg	J	J	10H
K2405555	LDW24-IT1550B	K2405555-011	EPA 8270D-SIM	Fluorene	6.8	ug/kg	J	J	12L
K2405555	LDW24-IT1550B	K2405555-011	EPA 8270D-SIM	Naphthalene	9.9	ug/kg		J	12L
K2405555	LDW24-IT1550B	K2405555-011	EPA 8270D-SIM	Pyrene	60	ug/kg		J	10H,12L
K2405555	LDW24-IT1550C	K2405555-012	EPA 8270D-SIM	Acenaphthylene	3	ug/kg	J	J	10H
K2405555	LDW24-IT1550C	K2405555-012	EPA 8270D-SIM	Benzo(a)anthracene	13	ug/kg		J	10H,12L
K2405555	LDW24-IT1550C	K2405555-012	EPA 8270D-SIM	Benzo(a)pyrene	11	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1550C	K2405555-012	EPA 8270D-SIM	Dibenzofuran	5.6	ug/kg	J	J	10H
K2405555	LDW24-IT1550C	K2405555-012	EPA 8270D-SIM	Fluorene	4.9	ug/kg	J	J	12L
K2405555	LDW24-IT1550C	K2405555-012	EPA 8270D-SIM	Naphthalene	5.8	ug/kg	J	J	12L
K2405555	LDW24-IT1550C	K2405555-012	EPA 8270D-SIM	Pyrene	38	ug/kg		J	10H,12L
K2405555	LDW24-IT1550E	K2405555-013	EPA 8270D-SIM	Acenaphthylene	31	ug/kg		J	10H
K2405555	LDW24-IT1550E	K2405555-013	EPA 8270D-SIM	Benzo(a)anthracene	66	ug/kg		J	10H,12L
K2405555	LDW24-IT1550E	K2405555-013	EPA 8270D-SIM	Benzo(a)pyrene	52	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1550E	K2405555-013	EPA 8270D-SIM	Dibenzofuran	24	ug/kg		J	10H
K2405555	LDW24-IT1550E	K2405555-013	EPA 8270D-SIM	Fluorene	27	ug/kg		J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2405555	LDW24-IT1550E	K2405555-013	EPA 8270D-SIM	Naphthalene	47	ug/kg		J	12L
K2405555	LDW24-IT1550E	K2405555-013	EPA 8270D-SIM	Pyrene	200	ug/kg		J	10H,12L
K2405555	LDW24-IT1550G	K2405555-014	EPA 8270D-SIM	Acenaphthylene	4.1	ug/kg	J	J	10H
K2405555	LDW24-IT1550G	K2405555-014	EPA 8270D-SIM	Benzo(a)anthracene	25	ug/kg		J	10H,12L
K2405555	LDW24-IT1550G	K2405555-014	EPA 8270D-SIM	Benzo(a)pyrene	18	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1550G	K2405555-014	EPA 8270D-SIM	Dibenzofuran	20	ug/kg		J	10H
K2405555	LDW24-IT1550G	K2405555-014	EPA 8270D-SIM	Fluorene	26	ug/kg		J	12L
K2405555	LDW24-IT1550G	K2405555-014	EPA 8270D-SIM	Naphthalene	13	ug/kg		J	12L
K2405555	LDW24-IT1550G	K2405555-014	EPA 8270D-SIM	Pyrene	79	ug/kg		J	10H,12L
K2405555	LDW24-IT1543A	K2405555-015	EPA 8270D-SIM	Acenaphthylene	110	ug/kg		J	10H
K2405555	LDW24-IT1543A	K2405555-015	EPA 8270D-SIM	Benzo(a)anthracene	2800	ug/kg		J	10H,12L
K2405555	LDW24-IT1543A	K2405555-015	EPA 8270D-SIM	Benzo(a)pyrene	1800	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1543A	K2405555-015	EPA 8270D-SIM	Dibenzofuran	540	ug/kg		J	10H
K2405555	LDW24-IT1543A	K2405555-015	EPA 8270D-SIM	Fluorene	1100	ug/kg		J	12L
K2405555	LDW24-IT1543A	K2405555-015	EPA 8270D-SIM	Naphthalene	77	ug/kg		J	12L
K2405555	LDW24-IT1543A	K2405555-015	EPA 8270D-SIM	Pyrene	14000	ug/kg		J	10H,12L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D	2,4-Dimethylphenol		ug/kg	U	UJ	13L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D	4-Methylphenol (p-Cresol)		ug/kg	U	UJ	13L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D	Benzoic acid		ug/kg	U	UJ	13L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL,13L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D	Pentachlorophenol		ug/kg	U	UJ	13L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D	Phenol	7	ug/kg	J	J	13L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D-SIM	Acenaphthylene	22	ug/kg		J	10H
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D-SIM	Benzo(a)anthracene	49	ug/kg		J	10H,12L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D-SIM	Benzo(a)pyrene	57	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D-SIM	Dibenzofuran	5.6	ug/kg	J	J	10H
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D-SIM	Fluorene	9.9	ug/kg		J	12L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D-SIM	Naphthalene	31	ug/kg		J	12L
K2405555	LDW24-IT1562B	K2405555-016	EPA 8270D-SIM	Pyrene	150	ug/kg		J	10H,12L
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D-SIM	Acenaphthylene	6.3	ug/kg		J	10H
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D-SIM	Benzo(a)anthracene	11	ug/kg		J	10H,12L
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D-SIM	Benzo(a)pyrene	11	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D-SIM	Dibenzofuran	4.1	ug/kg	J	J	10H
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D-SIM	Fluorene	4.5	ug/kg	J	J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D-SIM	Naphthalene	10	ug/kg		J	12L
K2405555	LDW24-IT1562C	K2405555-017	EPA 8270D-SIM	Pyrene	40	ug/kg		J	10H,12L
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D-SIM	Acenaphthylene	8.2	ug/kg		J	10H
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D-SIM	Benzo(a)anthracene	24	ug/kg		J	10H,12L
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D-SIM	Benzo(a)pyrene	26	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D-SIM	Dibenzofuran	3.9	ug/kg	J	J	10H
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D-SIM	Fluorene	5.1	ug/kg	J	J	12L
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D-SIM	Naphthalene	14	ug/kg		J	12L
K2405555	LDW24-IT1562E	K2405555-018	EPA 8270D-SIM	Pyrene	76	ug/kg		J	10H,12L
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D	Dibenzofuran	8.6	ug/kg	J	DNR	11
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D-SIM	Acenaphthylene	28	ug/kg		J	10H
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D-SIM	Benzo(a)anthracene	470	ug/kg		J	10H,12L
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D-SIM	Benzo(a)pyrene	360	ug/kg		J	5BH,10H,12L
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D-SIM	Dibenzofuran	25	ug/kg		J	10H
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D-SIM	Fluorene	29	ug/kg		J	12L
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D-SIM	Naphthalene	19	ug/kg		J	12L
K2405555	LDW24-SC1533	K2405555-019	EPA 8270D-SIM	Pyrene	2000	ug/kg		J	10H,12L
K2405555	LDW24-IT1516A	K2405555-020	EPA 8270D-SIM	Acenaphthylene	27	ug/kg	J	J	10H
K2405555	LDW24-IT1516A	K2405555-020	EPA 8270D-SIM	Benzo(a)anthracene	250	ug/kg		J	10H,12L
K2405555	LDW24-IT1516A	K2405555-020	EPA 8270D-SIM	Benzo(a)pyrene	390	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1516A	K2405555-020	EPA 8270D-SIM	Dibenzofuran	20	ug/kg	J	J	10H
K2405555	LDW24-IT1516A	K2405555-020	EPA 8270D-SIM	Fluorene	32	ug/kg	J	J	12L
K2405555	LDW24-IT1516A	K2405555-020	EPA 8270D-SIM	Naphthalene	17	ug/kg	J	J	12L
K2405555	LDW24-IT1516A	K2405555-020	EPA 8270D-SIM	Pyrene	1400	ug/kg		J	10H,12L
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Acenaphthylene	25	ug/kg		J	10H
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Benzo(a)anthracene	160	ug/kg		J	10H,12L
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Benzo(a)pyrene	270	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Benzo(b)fluoranthene	560	ug/kg	X	J	23H
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Benzo(k)fluoranthene		ug/kg	UX	UJ	23L
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Dibenzofuran	25	ug/kg		J	10H
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Fluorene	35	ug/kg		J	12L
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	290	ug/kg		J	5BH
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Naphthalene	23	ug/kg		J	12L
K2405555	LDW24-IT1402A	K2405555-021	EPA 8270D-SIM	Pyrene	290	ug/kg		J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Acenaphthylene	6.2	ug/kg	J	J	10H
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Benzo(a)anthracene	160	ug/kg		J	10H,12L
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Benzo(a)pyrene	160	ug/kg		J	5BH,10H,12L
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Benzo(b)fluoranthene	340	ug/kg	X	J	23H
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Benzo(k)fluoranthene		ug/kg	UX	UJ	23L
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Dibenzofuran	9.9	ug/kg		J	10H
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Fluorene	10	ug/kg		J	12L
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	110	ug/kg		J	5BH
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Naphthalene	8.8	ug/kg	J	J	12L
K2405555	LDW24-SC1559A	K2405555-023	EPA 8270D-SIM	Pyrene	370	ug/kg		J	12L
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D	Dibenzofuran	5.9	ug/kg	J	DNR	11
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D-SIM	Acenaphthylene	110	ug/kg		J	10H
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D-SIM	Benzo(a)anthracene	310	ug/kg		J	10H,12L
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D-SIM	Benzo(a)pyrene	660	ug/kg		J	5BH,10H,12L
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D-SIM	Dibenzofuran	8.2	ug/kg		J	10H
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D-SIM	Fluorene	13	ug/kg		J	12L
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	560	ug/kg		J	5BH
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D-SIM	Naphthalene	8.9	ug/kg		J	12L
K2405555	LDW24-SS1561	K2405555-028	EPA 8270D-SIM	Pyrene	860	ug/kg		J	12L
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D	Dibenzofuran	37	ug/kg		DNR	11
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D-SIM	Acenaphthylene	74	ug/kg		J	10H
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D-SIM	Benzo(a)anthracene	4100	ug/kg		J	10H,12L
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D-SIM	Benzo(a)pyrene	2500	ug/kg		J	5BH,10H,12L
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D-SIM	Dibenzofuran	140	ug/kg		J	10H
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D-SIM	Fluorene	410	ug/kg		J	12L
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	1100	ug/kg		J	5BH
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D-SIM	Naphthalene	120	ug/kg		J	12L
K2405555	LDW24-SS1564	K2405555-029	EPA 8270D-SIM	Pyrene	6800	ug/kg		J	12L
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D	Dibenzofuran	35	ug/kg		DNR	11
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D-SIM	Acenaphthylene	88	ug/kg		J	10H
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D-SIM	Benzo(a)anthracene	1200	ug/kg		J	10H,12L
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D-SIM	Benzo(a)pyrene	1300	ug/kg		J	5BH,10H,12L
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D-SIM	Dibenzofuran	82	ug/kg		J	10H
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D-SIM	Fluorene	160	ug/kg		J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	810	ug/kg		J	5BH
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D-SIM	Naphthalene	60	ug/kg		J	12L
K2405555	LDW24-SS1829	K2405555-030	EPA 8270D-SIM	Pyrene	2300	ug/kg		J	12L
K2405555	LDW24-IT1829	K2405555-031	EPA 8270D-SIM	Acenaphthylene	130	ug/kg		J	10H
K2405555	LDW24-IT1829	K2405555-031	EPA 8270D-SIM	Benzo(a)anthracene	1800	ug/kg		J	10H,12L
K2405555	LDW24-IT1829	K2405555-031	EPA 8270D-SIM	Benzo(a)pyrene	1800	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1829	K2405555-031	EPA 8270D-SIM	Dibenzofuran	82	ug/kg		J	10H
K2405555	LDW24-IT1829	K2405555-031	EPA 8270D-SIM	Fluorene	250	ug/kg		J	12L
K2405555	LDW24-IT1829	K2405555-031	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	1300	ug/kg		J	5BH
K2405555	LDW24-IT1829	K2405555-031	EPA 8270D-SIM	Naphthalene	47	ug/kg		J	12L
K2405555	LDW24-IT1829	K2405555-031	EPA 8270D-SIM	Pyrene	4500	ug/kg		J	12L
K2405555	LDW24-SS1828	K2405555-032	EPA 8270D-SIM	Acenaphthylene	27	ug/kg		J	10H
K2405555	LDW24-SS1828	K2405555-032	EPA 8270D-SIM	Benzo(a)anthracene	160	ug/kg		J	10H,12L
K2405555	LDW24-SS1828	K2405555-032	EPA 8270D-SIM	Benzo(a)pyrene	220	ug/kg		J	5BH,10H,12L
K2405555	LDW24-SS1828	K2405555-032	EPA 8270D-SIM	Dibenzofuran	12	ug/kg		J	10H
K2405555	LDW24-SS1828	K2405555-032	EPA 8270D-SIM	Fluorene	17	ug/kg		J	12L
K2405555	LDW24-SS1828	K2405555-032	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	190	ug/kg		J	5BH
K2405555	LDW24-SS1828	K2405555-032	EPA 8270D-SIM	Naphthalene	16	ug/kg		J	12L
K2405555	LDW24-SS1828	K2405555-032	EPA 8270D-SIM	Pyrene	310	ug/kg		J	12L
K2405555	LDW24-IT1828	K2405555-033	EPA 8270D-SIM	Acenaphthylene	130	ug/kg		J	10H
K2405555	LDW24-IT1828	K2405555-033	EPA 8270D-SIM	Benzo(a)anthracene	560	ug/kg		J	10H,12L
K2405555	LDW24-IT1828	K2405555-033	EPA 8270D-SIM	Benzo(a)pyrene	1500	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1828	K2405555-033	EPA 8270D-SIM	Dibenzofuran	22	ug/kg		J	10H
K2405555	LDW24-IT1828	K2405555-033	EPA 8270D-SIM	Fluorene	54	ug/kg		J	12L
K2405555	LDW24-IT1828	K2405555-033	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	870	ug/kg		J	5BH
K2405555	LDW24-IT1828	K2405555-033	EPA 8270D-SIM	Naphthalene	19	ug/kg		J	12L
K2405555	LDW24-IT1828	K2405555-033	EPA 8270D-SIM	Pyrene	2800	ug/kg		J	12L
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D-SIM	Acenaphthylene	1.3	ug/kg	J	J	10H
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D-SIM	Benzo(a)anthracene	32	ug/kg		J	10H,12L
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D-SIM	Benzo(a)pyrene	48	ug/kg		J	5BH,10H,12L
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D-SIM	Dibenzofuran	1.8	ug/kg	J	J	10H
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D-SIM	Fluorene	2.5	ug/kg	J	J	12L
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	25	ug/kg		J	5BH
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D-SIM	Naphthalene	1.1	ug/kg	J	J	12L
K2405555	LDW24-SS1568	K2405555-034	EPA 8270D-SIM	Pyrene	35	ug/kg		J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D-SIM	Acenaphthylene	3.1	ug/kg	J	J	10H
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D-SIM	Benzo(a)anthracene	12	ug/kg		J	10H,12L
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D-SIM	Benzo(a)pyrene	35	ug/kg		J	5BH,10H,12L
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D-SIM	Dibenzofuran	1.1	ug/kg	J	J	10H
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D-SIM	Fluorene	1.5	ug/kg	J	J	12L
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	27	ug/kg		J	5BH
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D-SIM	Naphthalene	1.8	ug/kg	J	J	12L
K2405555	LDW24-SS1566	K2405555-035	EPA 8270D-SIM	Pyrene	36	ug/kg		J	12L
K2405555	LDW24-IT1566A	K2405555-036	EPA 8270D-SIM	Acenaphthylene	1.6	ug/kg	J	J	10H
K2405555	LDW24-IT1566A	K2405555-036	EPA 8270D-SIM	Benzo(a)anthracene	12	ug/kg		J	10H,12L
K2405555	LDW24-IT1566A	K2405555-036	EPA 8270D-SIM	Benzo(a)pyrene	19	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1566A	K2405555-036	EPA 8270D-SIM	Dibenzofuran	1.2	ug/kg	J	J	10H
K2405555	LDW24-IT1566A	K2405555-036	EPA 8270D-SIM	Fluorene	1.2	ug/kg	J	J	12L
K2405555	LDW24-IT1566A	K2405555-036	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	19	ug/kg		J	5BH
K2405555	LDW24-IT1566A	K2405555-036	EPA 8270D-SIM	Naphthalene	1.6	ug/kg	J	J	12L
K2405555	LDW24-IT1566A	K2405555-036	EPA 8270D-SIM	Pyrene	51	ug/kg		J	12L
K2405555	LDW24-IT1565A	K2405555-037	EPA 8270D-SIM	Acenaphthylene	2.3	ug/kg	J	J	10H
K2405555	LDW24-IT1565A	K2405555-037	EPA 8270D-SIM	Benzo(a)anthracene	40	ug/kg		J	10H,12L
K2405555	LDW24-IT1565A	K2405555-037	EPA 8270D-SIM	Benzo(a)pyrene	42	ug/kg		J	5BH,10H,12L
K2405555	LDW24-IT1565A	K2405555-037	EPA 8270D-SIM	Dibenzofuran	3.6	ug/kg	J	J	10H
K2405555	LDW24-IT1565A	K2405555-037	EPA 8270D-SIM	Fluorene	4.3	ug/kg	J	J	12L
K2405555	LDW24-IT1565A	K2405555-037	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	27	ug/kg		J	5BH
K2405555	LDW24-IT1565A	K2405555-037	EPA 8270D-SIM	Naphthalene	2.3	ug/kg	J	J	12L
K2405555	LDW24-IT1565A	K2405555-037	EPA 8270D-SIM	Pyrene	120	ug/kg		J	12L
K2405555	439371-LB	KQ2408363-04	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2406559	LDW24-SS1497	K2406559-001	EPA 8270D	Benzoic acid	320	ug/kg	J	J	5BL,8L
K2406559	LDW24-SS1497	K2406559-001	EPA 8270D	Dibenzofuran	7.6	ug/kg	J	DNR	11
K2406559	LDW24-SS1497	K2406559-001	EPA 8270D-SIM	Dibenzo(a,h)anthracene	14	ug/kg		J	5BH
K2406559	LDW24-SS1497	K2406559-001	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	63	ug/kg		J	5BH
K2406559	LDW24-SS1394	K2406559-003	EPA 8270D	Phenol	62	ug/kg	J	J	13L
K2406559	LDW24-SS1580	K2406559-004	EPA 8270D	Phenol	86	ug/kg		J	13L
K2406559	LDW24-SS1494	K2406559-006	EPA 8270D	Phenol	48	ug/kg	J	J	13L
K2406559	LDW24-SS1392	K2406559-008	EPA 8270D	Phenol	240	ug/kg		J	13L
K2406559	LDW24-SS1393	K2406559-009	EPA 8270D	Phenol	35	ug/kg	J	UJ	7,13L
K2406559	LDW24-SS1398	K2406559-010	EPA 8270D	Phenol	41	ug/kg	J	J	13L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2406559	LDW24-SS1410	K2406559-011	EPA 8270D	Phenol	160	ug/kg		J	13L
K2406559	LDW24-SS1349	K2406559-012	EPA 8270D	Phenol	200	ug/kg		J	13L
K2406578	LDW24-SC1333	K2406578-001	EPA 8270D-SIM	Dibenzo(a,h)anthracene	9.6	ug/kg		J	5BH
K2406578	LDW24-SC1333	K2406578-001	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	45	ug/kg		J	5BH
K2406578	LDW24-IT1546A	K2406578-002	EPA 8270D-SIM	Dibenzo(a,h)anthracene	74	ug/kg		J	5BH
K2406578	LDW24-IT1546A	K2406578-002	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	290	ug/kg		J	5BH
K2406578	LDW24-IT1546B	K2406578-003	EPA 8270D-SIM	Dibenzo(a,h)anthracene	37	ug/kg		J	5BH
K2406578	LDW24-IT1546B	K2406578-003	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	170	ug/kg		J	5BH
K2406578	LDW24-IT1546B-FD	K2406578-004	EPA 8270D-SIM	Dibenzo(a,h)anthracene	98	ug/kg		J	5BH
K2406578	LDW24-IT1546B-FD	K2406578-004	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	430	ug/kg		J	5BH
K2406578	LDW24-IT1546E	K2406578-005	EPA 8270D-SIM	Dibenzo(a,h)anthracene	180	ug/kg		J	5BH
K2406578	LDW24-IT1546E	K2406578-005	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	720	ug/kg		J	5BH
K2406578	LDW24-IT1546G	K2406578-006	EPA 8270D-SIM	Dibenzo(a,h)anthracene	44	ug/kg		J	5BH
K2406578	LDW24-IT1546G	K2406578-006	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	180	ug/kg		J	5BH
K2406578	LDW24-IT1547A	K2406578-007	EPA 8270D-SIM	Dibenzo(a,h)anthracene	42	ug/kg		J	5BH
K2406578	LDW24-IT1547A	K2406578-007	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	180	ug/kg		J	5BH
K2406578	LDW24-IT1546C	K2406578-008	EPA 8270D-SIM	Dibenzo(a,h)anthracene	200	ug/kg		J	5BH
K2406578	LDW24-IT1546C	K2406578-008	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	820	ug/kg		J	5BH
K2406578	LDW24-SS1537	K2406578-009	EPA 8270D-SIM	Dibenzo(a,h)anthracene	6.9	ug/kg		J	5BH
K2406578	LDW24-SS1537	K2406578-009	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	31	ug/kg		J	5BH
K2406578	LDW24-SS1523	K2406578-010	EPA 8270D-SIM	Dibenzo(a,h)anthracene	19	ug/kg		J	5BH
K2406578	LDW24-SS1523	K2406578-010	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	74	ug/kg		J	5BH
K2406578	LDW24-SS1523-FD	K2406578-011	EPA 8270D-SIM	Dibenzo(a,h)anthracene	3.9	ug/kg	J	J	5BH
K2406578	LDW24-SS1523-FD	K2406578-011	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	23	ug/kg		J	5BH
K2406578	LDW24-SS1514	K2406578-012	EPA 8270D-SIM	Dibenzo(a,h)anthracene	2.3	ug/kg	J	J	5BH
K2406578	LDW24-SS1514	K2406578-012	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	10	ug/kg		J	5BH
K2406578	LDW24-IT1499	K2406578-013	EPA 8270D-SIM	Dibenzo(a,h)anthracene	7	ug/kg		J	5BH
K2406578	LDW24-IT1499	K2406578-013	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	29	ug/kg		J	5BH
K2406578	LDW24-SS1512	K2406578-014	EPA 8270D-SIM	Dibenzo(a,h)anthracene	2.5	ug/kg	J	J	5BH
K2406578	LDW24-SS1512	K2406578-014	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	12	ug/kg		J	5BH
K2406578	LDW24-SS1402	K2406578-015	EPA 8270D	Benzoic acid	190	ug/kg	J	J	9A
K2406578	LDW24-SS1402	K2406578-015	EPA 8270D	Pentachlorophenol	96	ug/kg	J	J	5BH
K2406578	LDW24-SS1402	K2406578-015	EPA 8270D	Phenol	14	ug/kg	J	U	7
K2406578	LDW24-SS1402	K2406578-015	EPA 8270D-SIM	Dibenzo(a,h)anthracene	66	ug/kg		J	5BH
K2406578	LDW24-SS1402	K2406578-015	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	350	ug/kg		J	5BH
K2406578	LDW24-SS1402-FD	K2406578-016	EPA 8270D	Benzoic acid	170	ug/kg	J	J	9A
K2406578	LDW24-SS1402-FD	K2406578-016	EPA 8270D	Dibenzofuran	9.1	ug/kg	J	DNR	11

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2406578	LDW24-SS1402-FD	K2406578-016	EPA 8270D	Pentachlorophenol	100	ug/kg	J	J	5BH
K2406578	LDW24-SS1402-FD	K2406578-016	EPA 8270D	Phenol	9.2	ug/kg	J	U	7
K2406578	LDW24-SS1402-FD	K2406578-016	EPA 8270D-SIM	Dibenzo(a,h)anthracene	98	ug/kg		J	5BH
K2406578	LDW24-SS1402-FD	K2406578-016	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	500	ug/kg		J	5BH
K2406578	LDW24-SS1526	K2406578-021	EPA 8270D-SIM	Benzo(a)pyrene	7400	ug/kg		J	5BH
K2406578	LDW24-SS1526	K2406578-021	EPA 8270D-SIM	Dibenzo(a,h)anthracene	830	ug/kg		J	5BH
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Anthracene	33	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Benzo(a)anthracene	56	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Benzo(a)pyrene	88	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Benzo(g,h,i)perylene	44	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Benzo(k)fluoranthene	43	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Fluoranthene	150	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Fluorene	13	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	55	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Naphthalene	16	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Phenanthrene	92	ug/kg		J	12L
K2406588	LDW24-IT1443A	K2406588-001	EPA 8270D-SIM	Pyrene	200	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Anthracene	18	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Benzo(a)anthracene	48	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Benzo(a)pyrene	70	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Benzo(g,h,i)perylene	42	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Benzo(k)fluoranthene	34	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Fluoranthene	110	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Fluorene	11	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	49	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Naphthalene	27	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Phenanthrene	53	ug/kg		J	12L
K2406588	LDW24-IT1443A-FD	K2406588-002	EPA 8270D-SIM	Pyrene	150	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Anthracene	120	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Benzo(a)anthracene	150	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Benzo(a)pyrene	110	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Benzo(g,h,i)perylene	52	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Benzo(k)fluoranthene	52	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Fluoranthene	760	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Fluorene	86	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	64	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Naphthalene	7.4	ug/kg	J	J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Phenanthrene	350	ug/kg		J	12L
K2406588	LDW24-IT1498	K2406588-003	EPA 8270D-SIM	Pyrene	500	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Anthracene	50	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Benzo(a)anthracene	130	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Benzo(a)pyrene	160	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Benzo(g,h,i)perylene	83	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Benzo(k)fluoranthene	81	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Fluoranthene	270	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Fluorene	16	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	100	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Naphthalene	13	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Phenanthrene	84	ug/kg		J	12L
K2406588	LDW24-SC1301A	K2406588-004	EPA 8270D-SIM	Pyrene	250	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Anthracene	40	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Benzo(a)anthracene	100	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Benzo(a)pyrene	140	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Benzo(g,h,i)perylene	78	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Benzo(k)fluoranthene	75	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Fluoranthene	180	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Fluorene	12	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	93	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Naphthalene	10	ug/kg	J	J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Phenanthrene	55	ug/kg		J	12L
K2406588	LDW24-SC1303	K2406588-005	EPA 8270D-SIM	Pyrene	240	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Anthracene	53	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Benzo(a)anthracene	120	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Benzo(a)pyrene	94	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Benzo(g,h,i)perylene	24	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Benzo(k)fluoranthene	56	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Fluoranthene	190	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Fluorene	6.6	ug/kg	J	J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	35	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Naphthalene	18	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Phenanthrene	47	ug/kg		J	12L
K2406588	LDW24-IT1508A	K2406588-006	EPA 8270D-SIM	Pyrene	470	ug/kg		J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Anthracene	29	ug/kg		J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Benzo(a)anthracene	80	ug/kg		J	12L

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Benzo(a)pyrene	110	ug/kg		J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Benzo(g,h,i)perylene	61	ug/kg		J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Benzo(k)fluoranthene	60	ug/kg		J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Fluoranthene	230	ug/kg		J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Fluorene	10	ug/kg	J	J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	73	ug/kg		J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Naphthalene	8.1	ug/kg	J	J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Phenanthrene	44	ug/kg		J	12L
K2406588	LDW24-SC1302A	K2406588-007	EPA 8270D-SIM	Pyrene	200	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Anthracene	15	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Benzo(a)anthracene	43	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Benzo(a)pyrene	60	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Benzo(g,h,i)perylene	36	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Benzo(k)fluoranthene	33	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Fluoranthene	98	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Fluorene	4.9	ug/kg	J	J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	44	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Naphthalene	4.4	ug/kg	J	J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Phenanthrene	27	ug/kg		J	12L
K2406588	LDW24-SS1548	K2406588-009	EPA 8270D-SIM	Pyrene	100	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D	Dibenzofuran	20	ug/kg	J	DNR	11
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D	Phenol	16	ug/kg	J	U	7
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Anthracene	58	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Benzo(a)anthracene	250	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Benzo(a)pyrene	270	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Benzo(g,h,i)perylene	110	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Benzo(k)fluoranthene	140	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Fluoranthene	580	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Fluorene	27	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	150	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Naphthalene	24	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Phenanthrene	130	ug/kg		J	12L
K2406588	LDW24-SS1498	K2406588-010	EPA 8270D-SIM	Pyrene	500	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D	Dibenzofuran	11	ug/kg	J	DNR	11
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D	Phenol	12	ug/kg	J	U	7
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Anthracene	44	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Benzo(a)anthracene	170	ug/kg		J	12L

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Benzo(a)pyrene	190	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Benzo(g,h,i)perylene	85	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Benzo(k)fluoranthene	110	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Fluoranthene	780	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Fluorene	17	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	110	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Naphthalene	26	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Phenanthrene	260	ug/kg		J	12L
K2406588	LDW24-SS1496	K2406588-011	EPA 8270D-SIM	Pyrene	730	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Anthracene	25	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Benzo(a)anthracene	96	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Benzo(a)pyrene	98	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Benzo(g,h,i)perylene	41	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Benzo(k)fluoranthene	43	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Fluoranthene	160	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Fluorene	4	ug/kg	J	J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	54	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Naphthalene	0.9	ug/kg	J	J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Phenanthrene	45	ug/kg		J	12L
K2406588	LDW24-SS1551	K2406588-012	EPA 8270D-SIM	Pyrene	160	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Anthracene	60	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Benzo(a)anthracene	240	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Benzo(a)pyrene	290	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Benzo(g,h,i)perylene	140	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Benzo(k)fluoranthene	140	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Fluoranthene	390	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Fluorene	20	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	180	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Naphthalene	17	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Phenanthrene	130	ug/kg		J	12L
K2406588	LDW24-SS1546	K2406588-013	EPA 8270D-SIM	Pyrene	450	ug/kg		J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Anthracene	29	ug/kg		J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Benzo(a)anthracene	190	ug/kg		J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Benzo(a)pyrene	200	ug/kg		J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Benzo(g,h,i)perylene	140	ug/kg		J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Benzo(k)fluoranthene	97	ug/kg		J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Fluoranthene	340	ug/kg		J	12L

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Fluorene	4.7	ug/kg	J	J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	160	ug/kg		J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Naphthalene	1.6	ug/kg	J	J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Phenanthrene	92	ug/kg		J	12L
K2406588	LDW24-IT1557	K2406588-014	EPA 8270D-SIM	Pyrene	320	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D	Benzoic acid	380	ug/kg	J	J	9A
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D	Dibenzofuran	16	ug/kg	J	DNR	11
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D	Phenol	21	ug/kg	J	U	7
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Anthracene	93	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Benzo(a)anthracene	350	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Benzo(a)pyrene	460	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Benzo(g,h,i)perylene	270	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Benzo(k)fluoranthene	240	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Fluoranthene	540	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Fluorene	27	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	340	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Naphthalene	20	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Phenanthrene	190	ug/kg		J	12L
K2406588	LDW24-SS1401	K2406588-015	EPA 8270D-SIM	Pyrene	550	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D	Benzoic acid	280	ug/kg	J	J	9A
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D	Dibenzofuran	19	ug/kg	J	DNR	11
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D	Phenol	15	ug/kg	J	U	7
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Anthracene	55	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Benzo(a)anthracene	180	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Benzo(a)pyrene	210	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Benzo(g,h,i)perylene	110	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Benzo(k)fluoranthene	110	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Fluoranthene	450	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Fluorene	28	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	130	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Naphthalene	18	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Phenanthrene	140	ug/kg		J	12L
K2406588	LDW24-SS1533	K2406588-016	EPA 8270D-SIM	Pyrene	390	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Anthracene	28	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Benzo(a)anthracene	130	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Benzo(a)pyrene	210	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Benzo(g,h,i)perylene	96	ug/kg		J	12L

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Benzo(k)fluoranthene	100	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Fluoranthene	180	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Fluorene	9.9	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	120	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Naphthalene	6.7	ug/kg	J	J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Phenanthrene	68	ug/kg		J	12L
K2406588	LDW24-SC1530	K2406588-017	EPA 8270D-SIM	Pyrene	690	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Anthracene	210	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Benzo(a)anthracene	580	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Benzo(a)pyrene	940	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Benzo(g,h,i)perylene	580	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Benzo(k)fluoranthene	440	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Fluoranthene	1900	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Fluorene	45	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	810	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Naphthalene	18	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Phenanthrene	220	ug/kg		J	12L
K2406588	LDW24-IT1561A	K2406588-018	EPA 8270D-SIM	Pyrene	1700	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Anthracene	47	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Benzo(a)anthracene	61	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Benzo(a)pyrene	45	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Benzo(g,h,i)perylene	32	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Benzo(k)fluoranthene	22	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Fluoranthene	310	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Fluorene	52	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	30	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Naphthalene	47	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Phenanthrene	180	ug/kg		J	12L
K2406588	LDW24-IT1564A	K2406588-019	EPA 8270D-SIM	Pyrene	250	ug/kg		J	12L
K2407252	LDW24-SS1481	K2407252-003	EPA 8270D	Phenol	57	ug/kg		U	7
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D	Benzoic acid	540	ug/kg	J	J	5BL
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D	Phenol	52	ug/kg		U	7
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	2-Methylnaphthalene	5.5	ug/kg	J	J	13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Acenaphthene	3.3	ug/kg	J	J	13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Acenaphthylene	3.3	ug/kg	J	J	13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Anthracene	14	ug/kg		J	12L,13L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Benzo(a)anthracene	17	ug/kg		J	9A,12L,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Benzo(a)pyrene	19	ug/kg		J	5BH,9A,12L,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Benzo(b)fluoranthene	32	ug/kg		J	9A,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Benzo(g,h,i)perylene	10	ug/kg		J	9A,12L,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Benzo(k)fluoranthene	10	ug/kg		J	9A,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Chrysene	30	ug/kg		J	13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Dibenzo(a,h)anthracene	2.5	ug/kg	J	J	8L,9A,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Dibenzofuran	5	ug/kg	J	J	13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Fluoranthene	48	ug/kg		J	12L,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Fluorene	6.4	ug/kg	J	J	12L,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	12	ug/kg		J	9A,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Naphthalene	9.7	ug/kg		J	12L,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Phenanthrene	20	ug/kg		J	12L,13L
K2407252	LDW24-SS1379	K2407252-004	EPA 8270D-SIM	Pyrene	47	ug/kg		J	12L,13L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D	Benzoic acid		ug/kg	U	UJ	5BL
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D	Dibenzofuran	6	ug/kg	J	DNR	11
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D	Phenol	14	ug/kg	J	U	7
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Anthracene	14	ug/kg		J	12L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Benzo(a)anthracene	26	ug/kg		J	12L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Benzo(a)pyrene	28	ug/kg		J	5BH,12L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Benzo(g,h,i)perylene	15	ug/kg		J	12L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Fluoranthene	120	ug/kg		J	12L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Fluorene	8.9	ug/kg		J	12L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Naphthalene	11	ug/kg		J	12L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Phenanthrene	44	ug/kg		J	12L
K2407252	LDW24-SS1380	K2407252-005	EPA 8270D-SIM	Pyrene	98	ug/kg		J	12L
K2407252	LDW24-SS1474	K2407252-007	EPA 8270D	Phenol	64	ug/kg		U	7
K2407252	LDW24-SS1474-FD	K2407252-008	EPA 8270D	Phenol	58	ug/kg		U	7
K2407252	LDW24-SS1308	K2407252-009	EPA 8270D	Phenol	56	ug/kg	J	U	7
K2407252	LDW24-SS1300	K2407252-010	EPA 8270D	Phenol	42	ug/kg	J	U	7
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	1,2,4-Trichlorobenzene		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	1,2-Dichlorobenzene		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	1,4-Dichlorobenzene		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	2,4-Dimethylphenol		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	4-Methylphenol (p-Cresol)		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	Benzoic acid	600	ug/kg	J	J	1,9A,10H
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	1,5BL

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	bis(2-ethylhexyl) phthalate	170	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	butylbenzyl phthalate		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	Dibenzofuran	97	ug/kg		DNR	11
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	dimethyl phthalate		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	Hexachlorobenzene		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	n-Nitrosodiphenylamine		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	Pentachlorophenol		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D	Phenol	95	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	2-Methylnaphthalene	20	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Acenaphthene	63	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Acenaphthylene	25	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Anthracene	170	ug/kg		J	1,12L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Benzo(a)anthracene	360	ug/kg		J	1,8H,12L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Benzo(a)pyrene	360	ug/kg		J	1,5BH,12L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Benzo(b)fluoranthene	830	ug/kg	X	J	1,23H
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Benzo(g,h,i)perylene	150	ug/kg		J	1,12L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Benzo(k)fluoranthene		ug/kg	UX	UJ	1,23L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Chrysene	760	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Dibenzo(a,h)anthracene	45	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Dibenzofuran	48	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Fluoranthene	1300	ug/kg		J	1,5BH,8H,12L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Fluorene	87	ug/kg		J	1,12L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	200	ug/kg		J	1
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Naphthalene	50	ug/kg		J	1,12L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Phenanthrene	230	ug/kg		J	1,12L
K2407258	LDW24-SC1532A	K2407258-001	EPA 8270D-SIM	Pyrene	2000	ug/kg		J	1,8H,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	1,2,4-Trichlorobenzene		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	1,2-Dichlorobenzene		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	1,4-Dichlorobenzene		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	2,4-Dimethylphenol		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	4-Methylphenol (p-Cresol)		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	Benzoic acid		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	1,5BL
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	bis(2-ethylhexyl) phthalate	150	ug/kg	J	J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	butylbenzyl phthalate		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	Dibenzofuran	28	ug/kg		DNR	11
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	dimethyl phthalate		ug/kg	U	UJ	1

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	Hexachlorobenzene		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	n-Nitrosodiphenylamine		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	Pentachlorophenol		ug/kg	U	UJ	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D	Phenol	43	ug/kg	J	J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	2-Methylnaphthalene	18	ug/kg		J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Acenaphthene	41	ug/kg		J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Acenaphthylene	19	ug/kg		J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Anthracene	170	ug/kg		J	1,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Benzo(a)anthracene	470	ug/kg		J	1,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Benzo(a)pyrene	370	ug/kg		J	1,5BH,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Benzo(b)fluoranthene	800	ug/kg	X	J	1,23H
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Benzo(g,h,i)perylene	150	ug/kg		J	1,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Benzo(k)fluoranthene		ug/kg	UX	UJ	1,23L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Chrysene	590	ug/kg		J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Dibenzo(a,h)anthracene	44	ug/kg		J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Dibenzofuran	39	ug/kg		J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Fluoranthene	1700	ug/kg		J	1,5BH,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Fluorene	67	ug/kg		J	1,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	190	ug/kg		J	1
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Naphthalene	44	ug/kg		J	1,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Phenanthrene	210	ug/kg		J	1,12L
K2407258	LDW24-SC1532A-FD	K2407258-002	EPA 8270D-SIM	Pyrene	2300	ug/kg		J	1,12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Anthracene	780	ug/kg		J	12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Benzo(a)anthracene	5900	ug/kg		J	12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Benzo(a)pyrene	4400	ug/kg		J	5BH,12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Benzo(g,h,i)perylene	1200	ug/kg		J	12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Fluoranthene	33000	ug/kg		J	12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Fluorene	390	ug/kg		J	12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Naphthalene	83	ug/kg		J	12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Phenanthrene	1200	ug/kg		J	12L
K2407258	LDW24-IT1527A	K2407258-003	EPA 8270D-SIM	Pyrene	42000	ug/kg		J	12L
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Anthracene	1100	ug/kg		J	12L
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Benzo(a)anthracene	7000	ug/kg		J	12L
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Benzo(a)pyrene	5000	ug/kg		J	5BH,12L
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Benzo(g,h,i)perylene	1300	ug/kg		J	12L
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Fluoranthene	38000	ug/kg		J	12L
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Fluorene	480	ug/kg		J	12L

**Qualified Data Summary Table**  
**LDW AOC5 Phase II**

SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Naphthalene	110	ug/kg		J	12L
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Phenanthrene	1600	ug/kg		J	12L
K2407258	LDW24-IT1527A-FD	K2407258-004	EPA 8270D-SIM	Pyrene	44000	ug/kg		J	12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Anthracene	65	ug/kg		J	12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Benzo(a)anthracene	290	ug/kg		J	12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Benzo(a)pyrene	540	ug/kg		J	5BH,12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Benzo(g,h,i)perylene	280	ug/kg		J	12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Fluoranthene	480	ug/kg		J	5BH,12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Fluorene	20	ug/kg		J	12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Naphthalene	22	ug/kg		J	12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Phenanthrene	140	ug/kg		J	12L
K2407258	LDW24-SS1587	K2407258-005	EPA 8270D-SIM	Pyrene	970	ug/kg		J	12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Anthracene	28	ug/kg		J	12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Benzo(a)anthracene	95	ug/kg		J	12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Benzo(a)pyrene	140	ug/kg		J	5BH,12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Benzo(g,h,i)perylene	100	ug/kg		J	12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Fluoranthene	210	ug/kg		J	5BH,12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Fluorene	7.5	ug/kg		J	12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Naphthalene	18	ug/kg		J	12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Phenanthrene	74	ug/kg		J	12L
K2407258	LDW24-SS1588	K2407258-006	EPA 8270D-SIM	Pyrene	190	ug/kg		J	12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Anthracene	580	ug/kg		J	12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Benzo(a)anthracene	5600	ug/kg		J	12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Benzo(a)pyrene	2500	ug/kg		J	5BH,12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Benzo(g,h,i)perylene	790	ug/kg		J	12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Fluoranthene	9400	ug/kg		J	12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Fluorene	86	ug/kg		J	12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Naphthalene	13	ug/kg		J	12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Phenanthrene	1100	ug/kg		J	12L
K2407258	LDW24-SS1557	K2407258-007	EPA 8270D-SIM	Pyrene	7200	ug/kg		J	12L
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Anthracene	12	ug/kg		J	12L
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Benzo(a)anthracene	250	ug/kg		J	12L
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Benzo(a)pyrene	420	ug/kg		J	5BH,12L
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Benzo(g,h,i)perylene	130	ug/kg		J	12L
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Dibenzofuran	3.5	ug/kg	J	U	7
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Fluoranthene	340	ug/kg		J	5BH,12L
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Fluorene	3.7	ug/kg	J	J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Naphthalene	7.4	ug/kg		J	12L
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Phenanthrene	27	ug/kg		J	12L
K2407258	LDW24-IT1568A	K2407258-008	EPA 8270D-SIM	Pyrene	450	ug/kg		J	12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	2-Methylnaphthalene	2.5	ug/kg	J	U	7
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Anthracene	4.4	ug/kg	J	J	12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Benzo(a)anthracene	20	ug/kg		J	12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Benzo(a)pyrene	27	ug/kg		J	5BH,12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Benzo(g,h,i)perylene	19	ug/kg		J	12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Dibenzofuran	3.1	ug/kg	J	U	7
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Fluoranthene	53	ug/kg		J	5BH,12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Fluorene	2.5	ug/kg	J	J	12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Naphthalene	2.8	ug/kg	J	UJ	7,12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Phenanthrene	16	ug/kg		J	12L
K2407258	LDW24-IT1568A-FD	K2407258-009	EPA 8270D-SIM	Pyrene	48	ug/kg		J	12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	2-Methylnaphthalene	1.6	ug/kg	J	U	7
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Anthracene	13	ug/kg		J	12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Benzo(a)anthracene	46	ug/kg		J	12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Benzo(a)pyrene	46	ug/kg		J	5BH,12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Benzo(g,h,i)perylene	15	ug/kg		J	12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Dibenzofuran	1.8	ug/kg	J	U	7
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Fluoranthene	37	ug/kg		J	5BH,12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Fluorene	2.7	ug/kg	J	J	12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Naphthalene	2.1	ug/kg	J	UJ	7,12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Phenanthrene	9.3	ug/kg		UJ	7,12L
K2407258	LDW24-IT1522B	K2407258-010	EPA 8270D-SIM	Pyrene	48	ug/kg		J	12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Anthracene		ug/kg	U	UJ	12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Benzo(a)anthracene	1.4	ug/kg	J	J	12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Benzo(a)pyrene	0.63	ug/kg	J	J	5BH,12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Benzo(g,h,i)perylene		ug/kg	U	UJ	12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Fluoranthene	1.6	ug/kg	J	UJ	7,12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Fluorene		ug/kg	U	UJ	12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Naphthalene	0.88	ug/kg	J	UJ	7,12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Phenanthrene	2.4	ug/kg	J	UJ	7,12L
K2407258	LDW24-IT1522C	K2407258-011	EPA 8270D-SIM	Pyrene	3.2	ug/kg	J	UJ	7,12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D	Phenol	17	ug/kg	J	U	7

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Anthracene	9.5	ug/kg		J	12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Benzo(a)anthracene	51	ug/kg		J	12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Benzo(a)pyrene	65	ug/kg		J	5BH,12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Benzo(g,h,i)perylene	30	ug/kg		J	12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Dibenzofuran	3	ug/kg	J	U	7
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Fluoranthene	73	ug/kg		J	5BH,12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Fluorene	2.7	ug/kg	J	J	12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Naphthalene	6	ug/kg	J	J	12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Phenanthrene	21	ug/kg		J	12L
K2407258	LDW24-SS1591	K2407258-012	EPA 8270D-SIM	Pyrene	80	ug/kg		J	12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D	Phenol	10	ug/kg	J	U	7
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	2-Methylnaphthalene	1.1	ug/kg	J	U	7
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Anthracene	1.1	ug/kg	J	J	12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Benzo(a)anthracene	1.7	ug/kg	J	J	12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Benzo(a)pyrene		ug/kg	U	UJ	12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Benzo(g,h,i)perylene	0.86	ug/kg	J	J	12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Dibenzofuran	1.3	ug/kg	J	U	7
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Fluoranthene	4.9	ug/kg	J	UJ	7,12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Fluorene	1.3	ug/kg	J	J	12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Naphthalene	1.1	ug/kg	J	UJ	7,12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Phenanthrene	8.4	ug/kg		UJ	7,12L
K2407258	LDW24-SS1590	K2407258-013	EPA 8270D-SIM	Pyrene	3.7	ug/kg	J	UJ	7,12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D	Dibenzofuran	4.8	ug/kg	J	DNR	11
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D	Phenol	23	ug/kg	J	U	7
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Anthracene	52	ug/kg		J	12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Benzo(a)anthracene	81	ug/kg		J	12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Benzo(a)pyrene	88	ug/kg		J	5BH,12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Benzo(g,h,i)perylene	44	ug/kg		J	12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Fluoranthene	320	ug/kg		J	5BH,12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Fluorene	23	ug/kg		J	12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Naphthalene	15	ug/kg		J	12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Phenanthrene	190	ug/kg		J	12L
K2407258	LDW24-SS1565	K2407258-014	EPA 8270D-SIM	Pyrene	290	ug/kg		J	12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D	Dibenzofuran	21	ug/kg		DNR	11
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D	Phenol	20	ug/kg	J	U	7
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	2-Methylnaphthalene	2.2	ug/kg	J	U	7
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Anthracene	8.1	ug/kg		J	12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Benzo(a)anthracene	49	ug/kg		J	12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Benzo(a)pyrene	60	ug/kg		J	5BH,12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Benzo(g,h,i)perylene	27	ug/kg		J	12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Dibenzofuran	2.9	ug/kg	J	U	7
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Fluoranthene	75	ug/kg		J	5BH,12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Fluorene	4.7	ug/kg	J	J	12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Naphthalene	4.5	ug/kg	J	UJ	7,12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Phenanthrene	18	ug/kg		J	12L
K2407258	LDW24-SS1565-FD	K2407258-015	EPA 8270D-SIM	Pyrene	150	ug/kg		J	12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D	Dibenzofuran	8.9	ug/kg	J	DNR	11
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D	Phenol	25	ug/kg	J	U	7
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Anthracene	43	ug/kg		J	12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Benzo(a)anthracene	100	ug/kg		J	12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Benzo(a)pyrene	120	ug/kg		J	5BH,12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Benzo(g,h,i)perylene	70	ug/kg		J	12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Fluoranthene	230	ug/kg		J	5BH,12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Fluorene	23	ug/kg		J	12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Naphthalene	16	ug/kg		J	12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Phenanthrene	92	ug/kg		J	12L
K2407258	LDW24-SS1307	K2407258-016	EPA 8270D-SIM	Pyrene	240	ug/kg		J	12L
K2407258	LDW24-SS1391	K2407258-017	EPA 8270D	butylbenzyl phthalate	25	ug/kg		J	5BH
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D	butylbenzyl phthalate	29	ug/kg		J	5BH
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D	Dibenzofuran	8.8	ug/kg	J	DNR	11
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D	Phenol	25	ug/kg	J	U	7
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Anthracene	69	ug/kg		J	12L
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Benzo(a)anthracene	150	ug/kg		J	12L
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Benzo(a)pyrene	170	ug/kg		J	5BH,12L
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Benzo(g,h,i)perylene	91	ug/kg		J	12L
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Fluoranthene	330	ug/kg		J	5BH,12L
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Fluorene	32	ug/kg		J	12L
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Naphthalene	38	ug/kg		J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Phenanthrene	140	ug/kg		J	12L
K2407258	LDW24-SS1304	K2407258-018	EPA 8270D-SIM	Pyrene	350	ug/kg		J	12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D	Dibenzofuran	12	ug/kg	J	DNR	11
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D	Phenol	6.6	ug/kg	J	U	7
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	2-Methylnaphthalene	1.4	ug/kg	J	U	7
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Anthracene	2.9	ug/kg	J	J	12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Benzo(a)anthracene	11	ug/kg		J	12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Benzo(a)pyrene	18	ug/kg		J	5BH,12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Benzo(g,h,i)perylene	13	ug/kg		J	12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Dibenzofuran	1.4	ug/kg	J	U	7
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Fluoranthene	23	ug/kg		J	5BH,12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Fluorene	1.3	ug/kg	J	J	12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Naphthalene	1.8	ug/kg	J	UJ	7,12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Phenanthrene	11	ug/kg		UJ	7,12L
K2407258	LDW24-SS1567	K2407258-019	EPA 8270D-SIM	Pyrene	24	ug/kg		J	12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D	Benzyl alcohol		ug/kg	U	UJ	5BL
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Anthracene		ug/kg	U	UJ	12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Benzo(a)anthracene	1.8	ug/kg	J	J	12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Benzo(a)pyrene	1.8	ug/kg	J	J	5BH,12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Benzo(g,h,i)perylene	1.4	ug/kg	J	J	12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Fluoranthene	2.6	ug/kg	J	UJ	7,12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Fluorene		ug/kg	U	UJ	12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Naphthalene	1	ug/kg	J	UJ	7,12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Phenanthrene	1.6	ug/kg	J	UJ	7,12L
K2407258	LDW24-IT1591	K2407258-020	EPA 8270D-SIM	Pyrene	2.5	ug/kg	J	UJ	7,12L
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	2-Methylnaphthalene	430	ug/kg		J	8L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Acenaphthene	11000	ug/kg		J	13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Acenaphthylene	79	ug/kg		J	13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Anthracene	37000	ug/kg		J	9A,12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Benzo(a)anthracene	74000	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Benzo(a)pyrene	37000	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Benzo(b)fluoranthene	51000	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Benzo(g,h,i)perylene	9000	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Benzo(k)fluoranthene	18000	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Chrysene	62000	ug/kg		J	13H

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Dibenzo(a,h)anthracene	5000	ug/kg		J	13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Dibenzofuran	2100	ug/kg		J	8L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Fluoranthene	210000	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Fluorene	12000	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	14000	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Naphthalene	280	ug/kg		J	12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Phenanthrene	110000	ug/kg		J	9A,12L,13H
K2407908	LDW24-IT1555A	K2407908-001	EPA 8270D-SIM	Pyrene	170000	ug/kg		J	12L,13H
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Anthracene	110	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Benzo(a)anthracene	530	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Benzo(a)pyrene	760	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Benzo(b)fluoranthene	740	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Benzo(g,h,i)perylene	480	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Benzo(k)fluoranthene	230	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Fluoranthene	780	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Fluorene	27	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	610	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Naphthalene	12	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Phenanthrene	350	ug/kg		J	12L
K2407908	LDW24-IT1553B	K2407908-002	EPA 8270D-SIM	Pyrene	750	ug/kg		J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	2-Methylnaphthalene	2	ug/kg	J	U	7
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Anthracene	3.2	ug/kg	J	J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Benzo(a)anthracene	7.2	ug/kg		J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Benzo(a)pyrene	5.3	ug/kg	J	J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Benzo(b)fluoranthene	7	ug/kg		J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Benzo(g,h,i)perylene	2.9	ug/kg	J	J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Benzo(k)fluoranthene	2.4	ug/kg	J	J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Fluoranthene	31	ug/kg		J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Fluorene	1.6	ug/kg	J	J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	3.2	ug/kg	J	J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Naphthalene	3.7	ug/kg	J	UJ	7,12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Phenanthrene	13	ug/kg		J	12L
K2407908	LDW24-IT1553C	K2407908-003	EPA 8270D-SIM	Pyrene	25	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Anthracene	6.4	ug/kg	J	J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Benzo(a)anthracene	32	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Benzo(a)pyrene	27	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Benzo(b)fluoranthene	38	ug/kg		J	12L

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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Benzo(g,h,i)perylene	12	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Benzo(k)fluoranthene	14	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Fluoranthene	74	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Fluorene	6.4	ug/kg	J	J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	16	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Naphthalene	39	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Phenanthrene	150	ug/kg		J	12L
K2407908	LDW24-IT1552B	K2407908-004	EPA 8270D-SIM	Pyrene	64	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Anthracene	13	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Benzo(a)anthracene	24	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Benzo(a)pyrene	22	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Benzo(b)fluoranthene	28	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Benzo(g,h,i)perylene	8.8	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Benzo(k)fluoranthene	9.8	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Fluoranthene	53	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Fluorene	6	ug/kg	J	J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	11	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Naphthalene	65	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Phenanthrene	97	ug/kg		J	12L
K2407908	LDW24-IT1552C	K2407908-005	EPA 8270D-SIM	Pyrene	45	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Anthracene	19	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Benzo(a)anthracene	65	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Benzo(a)pyrene	100	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Benzo(b)fluoranthene	180	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Benzo(g,h,i)perylene	66	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Benzo(k)fluoranthene	39	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Fluoranthene	190	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Fluorene	7.4	ug/kg	J	J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	84	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Naphthalene	9.3	ug/kg	J	J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Phenanthrene	72	ug/kg		J	12L
K2407908	LDW24-IT1589B	K2407908-006	EPA 8270D-SIM	Pyrene	240	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Anthracene	18	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Benzo(a)anthracene	84	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Benzo(a)pyrene	110	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Benzo(b)fluoranthene	190	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Benzo(g,h,i)perylene	73	ug/kg		J	12L

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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Benzo(k)fluoranthene	58	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Fluoranthene	230	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Fluorene	6.1	ug/kg	J	J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	94	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Naphthalene	7.2	ug/kg	J	J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Phenanthrene	49	ug/kg		J	12L
K2407908	LDW24-IT1589C	K2407908-007	EPA 8270D-SIM	Pyrene	250	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	2-Methylnaphthalene	1.6	ug/kg	J	U	7
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Anthracene	2.3	ug/kg	J	J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Benzo(a)anthracene	10	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Benzo(a)pyrene	11	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Benzo(b)fluoranthene	20	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Benzo(g,h,i)perylene	13	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Benzo(k)fluoranthene	7.5	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Fluoranthene	28	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Fluorene	1.6	ug/kg	J	J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	11	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Naphthalene	2.2	ug/kg	J	UJ	7,12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Phenanthrene	9	ug/kg		J	12L
K2407908	LDW24-IT1589E	K2407908-008	EPA 8270D-SIM	Pyrene	28	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	2-Methylnaphthalene	1.9	ug/kg	J	U	7
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Anthracene	7.8	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Benzo(a)anthracene	26	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Benzo(a)pyrene	25	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Benzo(b)fluoranthene	42	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Benzo(g,h,i)perylene	13	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Benzo(k)fluoranthene	16	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Fluoranthene	99	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Fluorene	4	ug/kg	J	J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	18	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Naphthalene	2.6	ug/kg	J	UJ	7,12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Phenanthrene	21	ug/kg		J	12L
K2407908	LDW24-IT1589G	K2407908-009	EPA 8270D-SIM	Pyrene	74	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Anthracene	160	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Benzo(a)anthracene	780	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Benzo(a)pyrene	760	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Benzo(b)fluoranthene	880	ug/kg		J	12L

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Benzo(g,h,i)perylene	300	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Benzo(k)fluoranthene	340	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Fluoranthene	1300	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Fluorene	25	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	400	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Naphthalene	9.2	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Phenanthrene	310	ug/kg		J	12L
K2407908	LDW24-IT1551A	K2407908-010	EPA 8270D-SIM	Pyrene	1100	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Anthracene	420	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Benzo(a)anthracene	1600	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Benzo(a)pyrene	1200	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Benzo(b)fluoranthene	1500	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Benzo(g,h,i)perylene	370	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Benzo(k)fluoranthene	570	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Fluoranthene	4100	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Fluorene	75	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	540	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Naphthalene	7	ug/kg	J	J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Phenanthrene	1200	ug/kg		J	12L
K2407908	LDW24-IT1556B	K2407908-011	EPA 8270D-SIM	Pyrene	3700	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Anthracene	560	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Benzo(a)anthracene	1500	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Benzo(a)pyrene	1500	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Benzo(b)fluoranthene	1800	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Benzo(g,h,i)perylene	590	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Benzo(k)fluoranthene	650	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Fluoranthene	4100	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Fluorene	160	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	800	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Naphthalene	33	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Phenanthrene	1800	ug/kg		J	12L
K2407908	LDW24-IT1556C	K2407908-012	EPA 8270D-SIM	Pyrene	3700	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	2-Methylnaphthalene	2.3	ug/kg	J	U	7
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Anthracene	28	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Benzo(a)anthracene	85	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Benzo(a)pyrene	89	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Benzo(b)fluoranthene	110	ug/kg		J	12L

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Benzo(g,h,i)perylene	43	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Benzo(k)fluoranthene	41	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Fluoranthene	230	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Fluorene	5.8	ug/kg	J	J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene	56	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Naphthalene	2.9	ug/kg	J	UJ	7,12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Phenanthrene	64	ug/kg		J	12L
K2407908	LDW24-IT1556E	K2407908-013	EPA 8270D-SIM	Pyrene	210	ug/kg		J	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	1,2,4-Trichlorobenzene		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	1,2-Dichlorobenzene		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	1,4-Dichlorobenzene		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	2,4-Dimethylphenol		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	4-Methylphenol (p-Cresol)		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	Benzoic acid		ug/kg	U	DNR	10L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	Benzyl alcohol		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	bis(2-ethylhexyl) phthalate		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	butylbenzyl phthalate		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	Dibenzofuran		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	dimethyl phthalate		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	Hexachlorobenzene		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	n-Nitrosodiphenylamine		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	Pentachlorophenol		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D	Phenol		ug/kg	U	DNR	11
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	2-Methylnaphthalene	1.5	ug/kg	J	U	7
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Anthracene		ug/kg	U	UJ	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Benzo(a)anthracene	1	ug/kg	J	UJ	7,12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Benzo(a)pyrene		ug/kg	U	UJ	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Benzo(b)fluoranthene	0.61	ug/kg	J	J	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Benzo(g,h,i)perylene		ug/kg	U	UJ	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Benzo(k)fluoranthene		ug/kg	U	UJ	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Fluoranthene	1.5	ug/kg	J	J	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Fluorene		ug/kg	U	UJ	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Indeno(1,2,3-cd)pyrene		ug/kg	U	UJ	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Naphthalene	1.5	ug/kg	J	UJ	7,12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Phenanthrene	4.2	ug/kg	J	J	12L
K2407908	LDW24-IT1590A	K2407908-014	EPA 8270D-SIM	Pyrene	1.6	ug/kg	J	J	12L
K2408853	LDW24-SC1341E	L2757140-1	EPA 1613B	1,2,3,4,6,7,8-HpCDF	201	ng/kg		J	9A

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2408853	LDW24-SC1341E	L2757140-1	EPA 1613B	1,2,3,7,8-PeCDF	3.1	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SC1341E	L2757140-1	EPA 1613B	OCDF	460	ng/kg		J	9A
K2408853	LDW24-SC1341E	L2757140-1	EPA 1613B	Total HpCDF	571	ng/kg		J	9A
K2408853	LDW24-SC1341E	L2757140-1	EPA 1613B	Total PeCDD	20.8	ng/kg		J	9A
K2408853	LDW24-SC1343I	L2757140-10	EPA 1613B	1,2,3,7,8-PeCDD	0.16	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1343I	L2757140-10	EPA 1613B	1,2,3,7,8-PeCDF	0.18	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1343I	L2757140-10	EPA 1613B	2,3,4,6,7,8-HxCDF	0.077	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1343I	L2757140-10	EPA 1613B	2,3,4,7,8-PeCDF	0.15	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1344D	L2757140-11	EPA 1613B	1,2,3,7,8-PeCDD	1.7	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1344D	L2757140-11	EPA 1613B	1,2,3,7,8-PeCDF	13	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SC1344D	L2757140-11	EPA 1613B	2,3,7,8-TCDF	2.1	ng/kg	"M,R"	J	25
K2408853	LDW24-SC1344D-FD	L2757140-12	EPA 1613B	1,2,3,7,8-PeCDF	6.8	ng/kg	EMPC	J	23H
K2408853	LDW24-SC1344E	L2757140-13	EPA 1613B	1,2,3,7,8-PeCDF	6.7	ng/kg	EMPC	J	23H
K2408853	LDW24-SC1344G	L2757140-14	EPA 1613B	1,2,3,7,8-PeCDF	30	ng/kg	EMPC	J	23H
K2408853	LDW24-SC1344I	L2757140-15	EPA 1613B	1,2,3,4,7,8,9-HpCDF	1.3	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1344I	L2757140-15	EPA 1613B	1,2,3,4,7,8-HxCDD	0.61	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1344I	L2757140-15	EPA 1613B	1,2,3,4,7,8-HxCDF	0.96	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1344I	L2757140-15	EPA 1613B	1,2,3,7,8-PeCDD	0.5	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1344K	L2757140-16	EPA 1613B	1,2,3,7,8-PeCDF	5.3	ng/kg	EMPC	J	23H
K2408853	LDW24-SC1344M	L2757140-17	EPA 1613B	1,2,3,7,8,9-HxCDD	0.62	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1344M	L2757140-17	EPA 1613B	1,2,3,7,8-PeCDF	2.3	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SC1344M	L2757140-17	EPA 1613B	2,3,7,8-TCDD	0.14	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1346C	L2757140-18	EPA 1613B	1,2,3,4,7,8-HxCDD	2.2	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1346C	L2757140-18	EPA 1613B	1,2,3,6,7,8-HxCDF	4.4	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1346C	L2757140-18	EPA 1613B	1,2,3,7,8,9-HxCDD	5.5	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1346C	L2757140-18	EPA 1613B	1,2,3,7,8,9-HxCDF	2.6	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1346C	L2757140-18	EPA 1613B	1,2,3,7,8-PeCDD	1	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1346C	L2757140-18	EPA 1613B	1,2,3,7,8-PeCDF	2.3	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SC1346D	L2757140-19	EPA 1613B	1,2,3,7,8-PeCDD	1.2	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1346D	L2757140-19	EPA 1613B	1,2,3,7,8-PeCDF	7.4	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SC1346D	L2757140-19	EPA 1613B	2,3,7,8-TCDD	0.35	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1341E-FD	L2757140-2	EPA 1613B	1,2,3,7,8-PeCDF	2.1	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SC1346F	L2757140-20	EPA 1613B	1,2,3,7,8-PeCDD	1.4	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1346F	L2757140-20	EPA 1613B	1,2,3,7,8-PeCDF	44	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SC1346F	L2757140-20	EPA 1613B	2,3,7,8-TCDD	0.36	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1346F	L2757140-20	EPA 1613B	Total TCDD	4.73	ng/kg		J	9A
K2408853	LDW24-SC1346H	L2757140-21	EPA 1613B	1,2,3,4,7,8-HxCDD	0.14	ng/kg	"J,R"	U	25

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2408853	LDW24-SC1346H	L2757140-21	EPA 1613B	1,2,3,6,7,8-HxCDF	0.62	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1346H	L2757140-21	EPA 1613B	1,2,3,7,8-PeCDD	0.14	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1346H	L2757140-21	EPA 1613B	1,2,3,7,8-PeCDF	1.5	ng/kg	"M,J,EMPC"	J	23H
K2408853	LDW24-SC1346H	L2757140-21	EPA 1613B	2,3,7,8-TCDD	0.077	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1347E	L2757140-22	EPA 1613B	1,2,3,7,8-PeCDF	23	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SC1347E	L2757140-22	EPA 1613B	2,3,7,8-TCDF	1.6	ng/kg	R	J	25
K2408853	LDW24-SC1347F	L2757140-23	EPA 1613B	1,2,3,7,8-PeCDF	16	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SC1347H	L2757140-24	EPA 1613B	1,2,3,7,8-PeCDF	45	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-IT1352A	L2757140-25	EPA 1613B	1,2,3,7,8-PeCDD	1.7	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1352A	L2757140-25	EPA 1613B	1,2,3,7,8-PeCDF	9.8	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SS1352	L2757140-26	EPA 1613B	"1,2,3,7,8,9-Hexachlorodibenzo	3.3	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1352	L2757140-26	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.73	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1352	L2757140-26	EPA 1613B	1,2,3,7,8-PeCDF	32	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SS1357	L2757140-28	EPA 1613B	1,2,3,7,8-PeCDF	20	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SS1357-FD	L2757140-29	EPA 1613B	1,2,3,7,8-PeCDD	1.7	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1341F	L2757140-3	EPA 1613B	1,2,3,7,8-PeCDF	8.8	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-IT1361B	L2757140-30	EPA 1613B	1,2,3,7,8-PeCDF	580	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-IT1364A	L2757140-31	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	3	ng/kg	R	J	25
K2408853	LDW24-IT1364A	L2757140-31	EPA 1613B	1,2,3,7,8-PeCDF	41	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SS1364	L2757140-32	EPA 1613B	1,2,3,7,8-PeCDF	20	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-IT1373A	L2757140-33	EPA 1613B	1,2,3,7,8-PeCDF	21	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SS1373	L2757140-34	EPA 1613B	1,2,3,7,8-PeCDF	6.4	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SS1376	L2757140-36	EPA 1613B	1,2,3,7,8-PeCDF	0.79	ng/kg	"M,J,EMPC"	J	23H
K2408853	LDW24-SS1376	L2757140-36	EPA 1613B	2,3,4,6,7,8-HxCDF	0.53	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1378A	L2757140-37	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.098	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1378A	L2757140-37	EPA 1613B	1,2,3,4,7,8,9-HpCDF	0.96	ng/kg	"J,R"	U	25
K2408853	LDW24-SS1399	L2757140-38	EPA 1613B	1,2,3,7,8-PeCDD	5	ng/kg	"M,R"	J	25
K2408853	LDW24-SS1399	L2757140-38	EPA 1613B	1,2,3,7,8-PeCDF	3.7	ng/kg	"M,J,EMPC"	J	23H
K2408853	LDW24-SS1402	L2757140-39	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.26	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1402	L2757140-39	EPA 1613B	1,2,3,7,8-PeCDF	11	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SC1341H	L2757140-4	EPA 1613B	1,2,3,7,8-PeCDF	5.5	ng/kg	EMPC	J	23H
K2408853	LDW24-SS1402-FD	L2757140-40	EPA 1613B	Total Tetrachlorodibenzofuran	22.6	ng/kg		J	9A
K2408853	LDW24-SS1402-FD	L2757140-40	EPA 1613B	Total Tetrachlorodibenzo-p-dic	4.64	ng/kg		J	9A
K2408853	LDW24-IT1444	L2757140-41	EPA 1613B	"1,2,3,6,7,8-Hexachlorodibenzo	0.14	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1444	L2757140-41	EPA 1613B	2,3,4,6,7,8-HxCDF	0.074	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1444	L2757140-41	EPA 1613B	2,3,7,8-TCDF	0.098	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1444	L2757140-42	EPA 1613B	2,3,7,8-TCDF	0.41	ng/kg	"M,J,R"	U	25

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2408853	LDW24-SS1446	L2757140-43	EPA 1613B	1,2,3,7,8-PeCDD	1.4	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1468A	L2757140-45	EPA 1613B	1,2,3,7,8-PeCDF	0.81	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1485A	L2757140-47	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.039	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1485A	L2757140-47	EPA 1613B	1,2,3,4,7,8-HxCDF	0.13	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1485A	L2757140-47	EPA 1613B	1,2,3,7,8-PeCDD	0.14	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1485A	L2757140-47	EPA 1613B	2,3,7,8-TCDF	0.079	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1485	L2757140-48	EPA 1613B	"1,2,3,6,7,8-Hexachlorodibenzo	0.16	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1485	L2757140-48	EPA 1613B	"1,2,3,7,8,9-Hexachlorodibenzo	0.057	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1485	L2757140-48	EPA 1613B	1,2,3,4,7,8,9-HpCDF	0.17	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1485	L2757140-48	EPA 1613B	2,3,7,8-TCDF	0.15	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1486B	L2757140-49	EPA 1613B	"1,2,3,4,6,7,8-Heptachlorodiben	0.37	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1486B	L2757140-49	EPA 1613B	"1,2,3,6,7,8-Hexachlorodibenzo	0.013	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1486B	L2757140-49	EPA 1613B	"1,2,3,7,8,9-Hexachlorodibenzo	0.021	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1486B	L2757140-49	EPA 1613B	1,2,3,4,7,8-HxCDF	0.014	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1486B	L2757140-49	EPA 1613B	1,2,3,7,8-PeCDF	0.02	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1486B	L2757140-49	EPA 1613B	2,3,4,7,8-PeCDF	0.014	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1341J	L2757140-5	EPA 1613B	1,2,3,7,8-PeCDF	5.5	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-IT1486C	L2757140-50	EPA 1613B	1,2,3,4,6,7,8-HpCDF	0.091	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1486C	L2757140-50	EPA 1613B	1,2,3,4,7,8-HxCDF	0.014	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1486C	L2757140-50	EPA 1613B	2,3,4,7,8-PeCDF	0.018	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1486C	L2757140-50	EPA 1613B	2,3,7,8-TCDF	0.048	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1519C	L2757140-52	EPA 1613B	1,2,3,4,7,8-HxCDF	0.065	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1519C	L2757140-52	EPA 1613B	1,2,3,7,8-PeCDF	0.059	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1524A	L2757140-53	EPA 1613B	"1,2,3,6,7,8-Hexachlorodibenzo	0.17	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1524A	L2757140-53	EPA 1613B	1,2,3,4,7,8,9-HpCDF	0.097	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1524A	L2757140-53	EPA 1613B	1,2,3,4,7,8-HxCDD	0.14	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1524A	L2757140-53	EPA 1613B	1,2,3,4,7,8-HxCDF	0.24	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1524A	L2757140-53	EPA 1613B	2,3,7,8-TCDF	0.33	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1527A-FD	L2757140-57	EPA 1613B	1,2,3,7,8-PeCDF	2.9	ng/kg	"M,J,EMPC"	J	23H
K2408853	LDW24-IT1527C	L2757140-59	EPA 1613B	1,2,3,7,8-PeCDF	4	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SC1343D	L2757140-6	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	1.5	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1343D	L2757140-6	EPA 1613B	1,2,3,4,7,8-HxCDD	4.4	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1343D	L2757140-6	EPA 1613B	1,2,3,7,8-PeCDF	4.5	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-IT1527E	L2757140-60	EPA 1613B	1,2,3,7,8-PeCDF	4.4	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-IT1527G	L2757140-61	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.083	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1527G	L2757140-61	EPA 1613B	1,2,3,7,8-PeCDF	1.1	ng/kg	"M,J,EMPC"	J	23H
K2408853	LDW24-IT1527G	L2757140-61	EPA 1613B	2,3,4,6,7,8-HxCDF	0.34	ng/kg	"M,J,R"	U	25

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2408853	LDW24-IT1528B	L2757140-62	EPA 1613B	"1,2,3,6,7,8-Hexachlorodibenzo	2.8	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1528B	L2757140-62	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.36	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1528B	L2757140-62	EPA 1613B	1,2,3,7,8-PeCDF	3.3	ng/kg	"M,J,EMPC"	J	23H
K2408853	LDW24-IT1528C	L2757140-63	EPA 1613B	1,2,3,7,8-PeCDF	2.9	ng/kg	"M,J,EMPC"	J	23H
K2408853	LDW24-IT1528G	L2757140-65	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.37	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1528G	L2757140-65	EPA 1613B	1,2,3,7,8-PeCDF	2.8	ng/kg	"M,J,EMPC"	J	23H
K2408853	LDW24-IT1528I	L2757140-66	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.49	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1528I	L2757140-66	EPA 1613B	2,3,7,8-TCDF	2	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1343E	L2757140-7	EPA 1613B	1,2,3,4,7,8-HxCDD	1.9	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1343E	L2757140-7	EPA 1613B	1,2,3,7,8-PeCDF	2.4	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-IT1546A	L2757140-70	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.19	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	"1,2,3,4,6,7,8-Heptachlorodiben	726	ng/kg		J	9A
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.38	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	1,2,3,4,6,7,8-HpCDF	48	ng/kg		J	9A
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	1,2,3,4,7,8-HxCDD	2.4	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	OCDF	94.1	ng/kg		J	9A
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	Total Heptachlorodibenzo-p-di	2600	ng/kg		J	9A
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	Total HpCDF	162	ng/kg		J	9A
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	Total Pentachlorodibenzofuran	40.6	ng/kg		J	9A
K2408853	LDW24-IT1546B	L2757140-71	EPA 1613B	Total Tetrachlorodibenzo-p-dic	2.89	ng/kg		J	9A
K2408853	LDW24-IT1546B-FD	L2757140-72	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.35	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1546B-FD	L2757140-72	EPA 1613B	1,2,3,4,7,8,9-HpCDF	4.4	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1546B-FD	L2757140-72	EPA 1613B	1,2,3,7,8-PeCDD	1.8	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1546C	L2757140-73	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.98	ng/kg	R	J	25
K2408853	LDW24-IT1546G	L2757140-75	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	1.5	ng/kg	R	J	25
K2408853	LDW24-SS1546	L2757140-76	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.25	ng/kg	"J,R"	U	25
K2408853	LDW24-SS1546	L2757140-76	EPA 1613B	1,2,3,7,8-PeCDF	1	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1590A	L2757140-77	EPA 1613B	"1,2,3,6,7,8-Hexachlorodibenzo	0.065	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1590A	L2757140-77	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	0.024	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1590A	L2757140-77	EPA 1613B	1,2,3,4,6,7,8-HpCDF	0.12	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1590A	L2757140-77	EPA 1613B	1,2,3,4,7,8-HxCDD	0.051	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1590A	L2757140-77	EPA 1613B	1,2,3,4,7,8-HxCDF	0.023	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1590A	L2757140-77	EPA 1613B	1,2,3,7,8-PeCDF	0.024	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1590A	L2757140-77	EPA 1613B	OCDF	0.35	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1590	L2757140-78	EPA 1613B	"1,2,3,7,8,9-Hexachlorodibenzo	0.06	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SS1590	L2757140-78	EPA 1613B	"1,2,3,7,8,9-Hexachlorodibenzo	0.58	ng/kg	"J,R"	U	25
K2408853	LDW24-SS1590	L2757140-78	EPA 1613B	1,2,3,4,7,8,9-HpCDF	0.092	ng/kg	"M,J,R"	U	25

**Qualified Data Summary Table  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2408853	LDW24-SS1590	L2757140-78	EPA 1613B	1,2,3,4,7,8-HxCDD	0.14	ng/kg	"J,R"	U	25
K2408853	LDW24-SS1590	L2757140-78	EPA 1613B	1,2,3,4,7,8-HxCDF	0.12	ng/kg	"J,R"	U	25
K2408853	LDW24-SS1590	L2757140-78	EPA 1613B	1,2,3,7,8-PeCDD	0.082	ng/kg	"J,R"	U	25
K2408853	LDW24-SS1590	L2757140-78	EPA 1613B	2,3,4,6,7,8-HxCDF	0.073	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1591	L2757140-79	EPA 1613B	"1,2,3,6,7,8-Hexachlorodibenzo	0.099	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1591	L2757140-79	EPA 1613B	1,2,3,4,7,8,9-HpCDF	0.22	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1591	L2757140-79	EPA 1613B	1,2,3,4,7,8-HxCDD	0.12	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1591	L2757140-79	EPA 1613B	1,2,3,4,7,8-HxCDF	0.27	ng/kg	"J,R"	U	25
K2408853	LDW24-IT1591	L2757140-79	EPA 1613B	1,2,3,7,8-PeCDD	0.16	ng/kg	"M,J,R"	U	25
K2408853	LDW24-IT1591	L2757140-79	EPA 1613B	2,3,4,6,7,8-HxCDF	0.19	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1343E-FD	L2757140-8	EPA 1613B	1,2,3,7,8-PeCDD	1.1	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1343E-FD	L2757140-8	EPA 1613B	1,2,3,7,8-PeCDF	2.2	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SC1343E-FD	L2757140-8	EPA 1613B	2,3,7,8-TCDF	1.3	ng/kg	R	J	25
K2408853	LDW24-SS1591	L2757140-80	EPA 1613B	1,2,3,7,8-PeCDF	0.61	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SS1591	L2757140-80	EPA 1613B	2,3,7,8-TCDF	0.5	ng/kg	"M,J,R"	U	25
K2408853	LDW24-SC1343G	L2757140-9	EPA 1613B	1,2,3,4,7,8-HxCDD	3.3	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1343G	L2757140-9	EPA 1613B	1,2,3,7,8-PeCDD	2.2	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1343G	L2757140-9	EPA 1613B	1,2,3,7,8-PeCDF	13	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SC1341EDUP	WG3790321-4	EPA 1613B	"2,3,7,8-Tetrachlorodibenzo-p-	1.1	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1341EDUP	WG3790321-4	EPA 1613B	1,2,3,4,6,7,8-HpCDF	109	ng/kg		J	9A
K2408853	LDW24-SC1341EDUP	WG3790321-4	EPA 1613B	1,2,3,7,8-PeCDD	3.4	ng/kg	"J,R"	U	25
K2408853	LDW24-SC1341EDUP	WG3790321-4	EPA 1613B	1,2,3,7,8-PeCDF	3.1	ng/kg	"J,EMPC"	J	23H
K2408853	LDW24-SC1341EDUP	WG3790321-4	EPA 1613B	OCDF	344	ng/kg		J	9A
K2408853	LDW24-SC1341EDUP	WG3790321-4	EPA 1613B	Total HpCDF	378	ng/kg		J	9A
K2408853	LDW24-SC1341EDUP	WG3790321-4	EPA 1613B	Total PeCDD	14	ng/kg		J	9A
K2408853	LDW24-SC1346FDUP	WG3790323-4	EPA 1613B	1,2,3,7,8-PeCDF	52	ng/kg	"M,EMPC"	J	23H
K2408853	LDW24-SC1346FDUP	WG3790323-4	EPA 1613B	Total Tetrachlorodibenzo-p-dic	8.55	ng/kg		J	9A
K2408853	LDW24-IT1546BDUP	WG3790331-4	EPA 1613B	"1,2,3,4,6,7,8-Heptachlorodiben	494	ng/kg		J	9A
K2408853	LDW24-IT1546BDUP	WG3790331-4	EPA 1613B	1,2,3,4,6,7,8-HpCDF	62.9	ng/kg		J	9A
K2408853	LDW24-IT1546BDUP	WG3790331-4	EPA 1613B	1,2,3,4,7,8,9-HpCDF	5.1	ng/kg	"M,R"	J	25
K2408853	LDW24-IT1546BDUP	WG3790331-4	EPA 1613B	OCDF	138	ng/kg		J	9A
K2408853	LDW24-IT1546BDUP	WG3790331-4	EPA 1613B	Total Heptachlorodibenzo-p-di	1940	ng/kg		J	9A
K2408853	LDW24-IT1546BDUP	WG3790331-4	EPA 1613B	Total HpCDF	214	ng/kg		J	9A
K2408853	LDW24-IT1546BDUP	WG3790331-4	EPA 1613B	Total Pentachlorodibenzofuran	52.5	ng/kg		J	9A
K2408853	LDW24-IT1546BDUP	WG3790331-4	EPA 1613B	Total Tetrachlorodibenzo-p-dic	8.02	ng/kg		J	9A
K2408853	LDW24-SS1402-FDDUP	WG3790575-4	EPA 1613B	Total Tetrachlorodibenzofuran	24.9	ng/kg		J	9A
K2408853	LDW24-SS1402-FDDUP	WG3790575-4	EPA 1613B	Total Tetrachlorodibenzo-p-dic	7.71	ng/kg		J	9A

**Qualified Data Summary Table**  
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SDG	Sample ID	Laboratory ID	Method	Analyte	Result	Units	Laboratory Qualifier	Validation Qualifier	Validation Reason
K2411658	LDW24-IT1590A	K2411658-001	EPA 8270D	Pentachlorophenol		ug/kg	U	UJ	10L
K2411658	LDW24-IT1590A	K2411658-001	EPA 8270D	Phenol	8.3	ug/kg	J	U	7