



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 80s sunny

Date: 7/8/24

Tide Source: RTK

Sampling Method: power grab

Crew: CC

GRAB DATA	Location ID: SS1300					
	On armored slope (Y/N)? <u>Y</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): 126 8776.03				Longitude/Easting (X): 203415.52		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1337	21.8	29	Y	-1.06	-22.9	
SAMPLE DATA						
Sample ID: LDW24-SS1300						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay		
cobble	brown surface	none	H ₂ S	worms, trace organic		
gravel	drab olive	slight	petroleum	debris.		
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/8/24
 Sampling Method: powergrab

Weather: 80s sunny
 Tide Source: RTK
 Crew: CC

GRAB DATA	Location ID: <u>SS1304</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1268732.61</u>				Longitude/Easting (X): <u>203084.74</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1318</u>	<u>-30.4</u>	<u>27</u>	<u>Y</u>	<u>-1.27</u>	<u>-31.7</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1304</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>Shrimp on surface.</u> <u>Stiff sediment below brown surface. woody fibers.</u> <u>4cm stick below surface.</u> <u>slight shell hash.</u>		
gravel	drab olive	slight	petroleum			
<u>sand</u> (F M C)	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.19.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC DS LVB

GRAB DATA	Location ID: SS1305					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 202749.78				Longitude/Easting (X): 1268677.91		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0855 0849"	-26.5	26	Y	-0.71	-27.2	
SAMPLE DATA						
Sample ID: LDW24-SS1305						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay		
cobble	brown surface	none	H ₂ S	Mostly silt, some fine sand, worms. slight. Trace organic debris.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60S sunny

Date: 6.19.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC DS LVR

GRAB DATA	Location ID: SS1306					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 202561.82				Longitude/Easting (X): 1268749.48		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0919	-25.2	28	Y	-1.0	-26.2	
SAMPLE DATA						
Sample ID: LDW24-SS1306						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	worms. Mostly silt, some		
gravel	drab olive	slight	petroleum	fine sand. trace trace		
sand (F M C)	brown	moderate	other:	organic material.		
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 7.8.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC

GRAB DATA		Location ID: SS1307				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 1268857.42				Longitude/Easting (X): 202701.02		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1130	32.0	27	Y	+0.73	-31.3	
SAMPLE DATA		Sample ID: LDW24-SS1307				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: Some organic debris. stiff sediment below brown surface.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 7.8.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC

GRAB DATA	Location ID: SS1308					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1268972.49				Longitude/Easting (X): 202842.15		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1040	-28.1	29	Y	+2.86	-25.3	
SAMPLE DATA						
Sample ID: LDW24 - SS1308						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	bioassay.		
gravel	drab olive	slight	petroleum	organic debris, worms		
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, 50s

Date: 5-23-2024

Tide Source: RTK

Sampling Method: hand collect

Crew: SP, CC, DS, EG, LVB

GRAB DATA	Location ID: SS1313					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm):		
Latitude/Northing (Y): 202551.14			Longitude/Easting (X): 1269243.83			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1031	0	10 cm	Y	-1.50	-	
SAMPLE DATA						
Sample ID: LDW24-SS1313						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	slight rust line at ~8 cm.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, 50s

Date: 5-23-2024

Tide Source: RTK

Sampling Method: hand collect

Crew: SR, CC, DS, LVB, EG

GRAB DATA	Location ID: <u>SS1314</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>—</u>		
Latitude/Northing (Y): <u>202583.83</u>				Longitude/Easting (X): <u>1269245.65</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1016</u>	<u>0</u>	<u>10 cm</u>	<u>Y</u>	<u>-0.97</u>	<u>—</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1314</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>glass fragment</u>		
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
silt	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: Overcast, 50s

Date: 5.23.2024

Tide Source: RTH

Sampling Method: hand collect.

Crew: SP, CC, DS, LVB, EG

GRAB DATA	Location ID: SS1315					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 202753.82			Longitude/Easting (X): 1269393.21			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1129 ^{Sc}	0	10cm	Y	-2.39	—	
1129						
SAMPLE DATA						
Sample ID: LDW24-SS1315						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	2 glass fragment trace organics metal debris at surface		
gravel trace	drab olive	slight	petroleum			
sand (F) (M) (C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, SCs

Date: 5-23-2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, DS, LVB, EG

GRAB DATA	Location ID: <u>SS1316</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>—</u>		
Latitude/Northing (Y): <u>202846.60</u>				Longitude/Easting (X): <u>1269400.77</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1116</u>	<u>0</u>	<u>10 cm</u>	<u>Y</u>	<u>-2.24</u>	<u>—</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1316</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>Streaks of rust colored sediment.</u> <u>collected close to waterline.</u>		
<u>gravel</u> <u>some</u>	drab olive	slight	petroleum			
<u>sand</u> (F) (M) (C)	<u>brown</u>	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, SCS

Date: 5/23/2024

Tide Source: RTK

Sampling Method: hand collect

Crew: SR, CC, DS, LB, EG

GRAB DATA		Location ID: SS1317				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 202866.44				Longitude/Easting (X): 1269452.23		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1001	0	10 cm	Y	-0.62	—	
SAMPLE DATA		Sample ID: LDW24-SS1317 and -SS1317-FD				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: Screw + metal fragments, glass. layer of rust colored sediment at ~ 9 cm collected at high elevation in bank area amid rip rap.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F) (M) (C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 7.8.24

Tide Source: RTK

Sampling Method: powergrab

Crew: cc

GRAB DATA	Location ID: SS1319					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1269407.27				Longitude/Easting (X): 202915.96		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1107	-11.0	20	Y	+1.57	-9.4	
SAMPLE DATA						
Sample ID: LDW24-SS1319						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	well-sorted gravel and med-coarse sand on surface for top ~ 2-3 cm. below is grey silt with fine sand. ~ 10cm chunk of rip rap on surface. some smaller ~ 3cm chunks of rip rap. worms, wood fragments.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, SCs

Date: 5.23.2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, DS, LVB, EG

GRAB DATA	Location ID: SS1332					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 202167.77			Longitude/Easting (X): 1269270.59			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1044	0	10 cm	Y	-1.76	NC	
SAMPLE DATA						
Sample ID: LDW24-SS1332						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	rust-colored sediment pockets trace shell hash + woody fibers.		
gravel lots	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.18.24

Tide Source: R.Tk

Sampling Method: powergrab

Crew: CC SR LVB

GRAB DATA	Location ID: SS1349					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201958.95				Longitude/Easting (X): 1269360.20		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1527	-19.2	26	Y	+9.31	-9.9	
						first grab rejected due to rope in jaws.
SAMPLE DATA	Sample ID: LDW24-SS1349					
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	algae on surface, leaf and wood debris in surface. Mostly silt, some fine sand, shell hash.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.6.2024
 Sampling Method: hand collect

Weather: sunny, 60s
 Tide Source: RTK
 Crew: SP, CC, DS, LVB

GRAB DATA		Location ID: <u>SS1351</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>201969.15</u>				Longitude/Easting (X): <u>1269390.37</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>10:3</u>	<u>0</u>	<u>10 cm</u>	<u>Y</u>	<u>-2.25</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1351</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>brown sand w/ rusty debris</u> <u>shell fragments</u> <u>metal debris on surface</u> <u>woody debris</u>		
cobble	<u>brown surface</u> <u>hint</u>	none	H ₂ S			
gravel	drab olive	<u>slight</u>	<u>petroleum</u>			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.5.2024
 Sampling Method: hand collect

Weather: Sun, 60s
 Tide Source: RTH
 Crew: SR, CC, LVB

GRAB DATA		Location ID: SS1352				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): —			
Latitude/Northing (Y): 201939.54		Longitude/Easting (X): 1269417.52				
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1135	0	10 cm	Y	-2.48	—	collected at waterline at base of toe wall
SAMPLE DATA		Sample ID: LDW24-SS1352				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: rusty shards (metal?) woody debris brown sand w/ darker layers warm in hole		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.19.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC LVR

GRAB DATA	Location ID: SS1353					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201885.60				Longitude/Easting (X): 1269384.36		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1227	-13.0	29	Y	+2.27	-10.7	
SAMPLE DATA						
Sample ID: LDW24-SS1353						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Shell hash, worms. fine wood/organic debris. larger wood chunks ~10cm long at ~10cm depth.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 6.20.24

Tide Source: RTK

Sampling Method: power grab

Crew: CC LVB

GRAB DATA	Location ID: SS1354					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201910.99				Longitude/Easting (X): 1269417.41		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1315	-8.9	25	Y	+2.06	-6.8	sticks / organic debris in grab
SAMPLE DATA						
Sample ID: LDW24 - SS1354						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	very slight sheen across surface. mostly silt with some fine sand, algae, sticks, other organic debris, some brown mottling on surface. mostly gray.		
gravel	drab olive	slight	petroleum			
sand (F/M/C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.5.2024
 Sampling Method: hand collect

Weather: partly cloudy, 60s
 Tide Source: RTK
 Crew: SP, CC, LVB

GRAB DATA		Location ID: <u>SS1355</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>201925.76</u>				Longitude/Easting (X): <u>1269426.24</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1132</u>	<u>0</u>	<u>10 cm</u>	<u>Y</u>	<u>-2.48</u>	<u>—</u>	<u>collected at ^{waterline} mudline (SR) at base of toe wall</u>
SAMPLE DATA		Sample ID: <u>LDW24 - SS1355</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor	Comments:			
cobble <u>gravel</u> <u>pea sized</u> <u>sand</u> (F M C) <u>silt</u> clay	<u>brown surface</u> <u>slight</u> drab olive brown <u>gray</u> <u>dark</u> black	none <u>H₂S</u> <u>slight</u> <u>petroleum</u> moderate other: strong	<u>rusty shards (metal?)</u> <u>sand at surface, dark silt under</u> <u>woody debris</u>			



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60° sunny

Date: 6.19.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: SS1356					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201856.26				Longitude/Easting (X): 1269408.52		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1137	-12.8	27	Y	+0.63	-12.2 -12.17 (SE)	woody debris/shells in jaw.
SAMPLE DATA						
Sample ID: LDW24-SS1356						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	woody debris/sticks in jaw. worms, organic material, shells on surface.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.19.24
 Sampling Method: powergrab

Weather: 60s sunny
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA		Location ID: <u>SS1357</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>201881.10</u>				Longitude/Easting (X): <u>1269431.94</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1157</u>	<u>-12.0</u>	<u>9</u>	<u>N</u>	<u>H.22</u>	<u>-10.8</u>	<u>Penetration too low. rejected.</u>
<u>1200</u>	<u>-7.8</u> -12.0	<u>30</u>	<u>Y</u>	<u>H.22</u>	<u>-6.6</u> -10.8	<u>debris in jaw, woody. accepted</u>
SAMPLE DATA		Sample ID: <u>LDW24-SS1357</u> & <u>LDW24-SS1357-FD</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>sticks and woody debris on surface. organic debris: leaf litter, algae, shell hash. worms.</u>		
cobble	<u>brown surface</u>	<u>none</u>	<u>H₂S</u>			
gravel	<u>drab olive</u>	<u>slight</u>	<u>petroleum</u>			
<u>sand (F M C)</u>	<u>brown</u>	<u>moderate</u>	<u>other:</u>			
<u>silt</u>	<u>gray</u>	<u>strong</u>				
clay	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: partly cloudy, 60s

Date: 6.5.2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, LVB

GRAB DATA	Location ID: SS1358					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201909.52			Longitude/Easting (X): 1269448.48			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
SP 1110	0	10 cm	Y	-2.84	—	collected at waterline
1120						
SAMPLE DATA						
Sample ID: LDW24-SS1358						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor	Comments:			
cobble	brown surface	none H ₂ S	organic debris mussel + worm in sample			
gravel	drab olive	slight petroleum				
sand (F M C)	brown	moderate other:				
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 6-5-2024
Sampling Method: hand-wileet

Weather: sun/clouds, 60s
Tide Source: RTH
Crew: SP, CC, LVB

GRAB DATA	Location ID: SS 1359					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201920.31				Longitude/Easting (X): 1269460.00		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1221	0	10cm	X	-0.95	—	collected above toe wall near bulkhead.
SAMPLE DATA						
Sample ID: LDW2A-SS1359						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	lots of debris, woody debris, rocks, rusty material Sand w/ silt underneath. metal fragments rust/black colored streaks warm		
gravel some	drab olive	slight	petroleum			
sand (F)(M)(C)	brown	moderate	other:			
silt	gray dark	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: partly cloudy, 60s

Date: 6.5.2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, LVB

GRAB DATA	Location ID: LDW24 ^{SP} SS1360					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201903.04				Longitude/Easting (X): 1269458.09		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1110	0	10cm	Y	-2.84	—	collected at waterline
SAMPLE DATA						
Sample ID: LDW24-SS1360						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	lots of organic debris slight sheen		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray dash	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6-5-2024
 Sampling Method: hand collect

Weather: sun/clouds, 60s
 Tide Source: RTH
 Crew: SR, CC, LVB

GRAB DATA		Location ID: <u>SS1362</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>201911.47</u>				Longitude/Easting (X): <u>1269470.24</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1227</u>	<u>0</u>	<u>10 cm</u>	<u>Y</u>	<u>-0.54</u>	<u>—</u>	<u>Collected above the wall near bulkhead</u>
SAMPLE DATA		Sample ID: <u>LDW24-SS1362</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble <u>gravel</u> <u>sand (F M C)</u> <u>silt</u> clay	brown surface drab olive <u>brown</u> gray black	<u>none</u> slight moderate strong	H ₂ S petroleum other:	<u>metal debris</u>		



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 6.5.2024
Sampling Method: hand collect

Weather: partly cloudy, 60s
Tide Source: RTR
Crew: SR, CC, LVB

GRAB DATA	Location ID: SS1363					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201855.64			Longitude/Easting (X): 1269465.43			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1057	0	10cm	Y	-3.06	—	collected at edge of waterline.
SAMPLE DATA						
Sample ID: LDW2A-SS1363						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	lots of woody debris throughout		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray dark	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: Sun, 60s

Date: 6-6-2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SP, LVB, CC, DS

GRAB DATA	Location ID: SS1364					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201900.80				Longitude/Easting (X): 1269478.67		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1044	0	10cm	Y	-2.93	—	collected above tee wall near base of bulkhead.
SAMPLE DATA						
Sample ID: LDW24-SS1364						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	slight	none	H ₂ S	top - hint of brown surface then sand w/ rusty / gray color then gray silt at bottom trace woody debris	
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.19.24
 Sampling Method: powergrab

Weather: 60s sunny
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA		Location ID: <u>SS1365</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>201831.75</u>				Longitude/Easting (X): <u>1269441.95</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1120</u>	<u>-10.4</u>	<u>25</u>	<u>Y</u>	<u>0.36</u>	<u>-10.0</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1365</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>lots of wood debris. red paint chip 1cm. shells, organic debris; leaves, algae. 13cm wood block.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	<u>drab-olive</u>	slight	petroleum			
<u>(sand) (F) M C)</u>	<u>brown</u>	moderate	other:			
<u>(silt)</u>	<u>gray</u>	strong				
clay	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/18/24
 Sampling Method: power grab

Weather: 80s sunny
 Tide Source: RTK
 Crew: CC

GRAB DATA		Location ID: <u>SS1366</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>126946S.21</u>				Longitude/Easting (X): <u>201862.36</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1155</u>	<u>5.9</u>	<u>27</u>	<u>Y</u>	<u>-0.26</u>	<u>-6.2</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1366</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>organic debris: leaf litter, algae, sticks, worms, shell hash.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	<u>drab olive</u>	slight	petroleum			
sand (F M C)	<u>brown</u>	moderate	other:			
silt	<u>gray</u>	strong				
clay	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.5.2024
 Sampling Method: hand collect

Weather: partly cloudy, 60s
 Tide Source: RTK
 Crew: SR, CC, LVB

GRAB DATA		Location ID: <u>SS1367</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>201873.11</u>				Longitude/Easting (X): <u>1269475.52</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1027</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>-2.96</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1367</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>lots of organics / woody debris</u> <u>slight sheen at surface</u>		
cobble	<u>brown surface</u>	none	H ₂ S			
gravel	drab olive	<u>slight</u>	<u>petroleum</u>			
sand (F M C)	brown	moderate	other:			
<u>silt</u>	<u>gray dark</u>	strong				
clay	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.6.2024
 Sampling Method: hand collect

Weather: Sun, 60s
 Tide Source: RTH
 Crew: SR, LVB, DS, CC

GRAB DATA		Location ID: <u>SS1368</u>		Depth of overlying sediment, if known (cm): <u>—</u>		
		On armored slope (Y/N)? <u>N</u>				
Latitude/Northing (Y): <u>201883.96</u>		Longitude/Easting (X): <u>1269483.72</u>				
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1051</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>-3.22</u>	<u>—</u>	<u>collected above toe wall, slightly shifted from target, which was on slag pile.</u>
SAMPLE DATA		Sample ID: <u>LDW24-SS1368</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>glass fragments (abundant)</u> <u>woody debris + metal fragments.</u> <u>gravel and sand at top,</u> <u>then silt below 5cm.</u> <u>worm</u>		
gravel	<u>drab olive</u>	<u>slight</u>	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	<u>moderate</u>	other:			
<u>silt</u>	<u>gray</u> <u>dark</u>	<u>strong</u>				
clay	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 6.5.2024
Sampling Method: hand collect

Weather: partly cloudy, 60s
Tide Source: RTR
Crew: SR, CC, LVB

GRAB DATA	Location ID: SSI369					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201847.89			Longitude/Easting (X): 1269499.93			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1043	0	10cm	Y	-2.96	—	
SAMPLE DATA						
Sample ID: LDW2A-SSI369						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	lots of woody debris very dark under surface.		
gravel	drab olive	slight	petroleum			
trace sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.5.2024
 Sampling Method: hand collect

Weather: Sun/clouds, 60s
 Tide Source: RTK
 Crew: SR, LVB, CC

GRAB DATA		Location ID: <u>SS1370</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>201859.96</u>			Longitude/Easting (X): <u>1269518.13</u>			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1158</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>-1.54</u>	<u>—</u>	<u>Collected at base of slope (slag?)</u>
SAMPLE DATA		Sample ID: <u>LDW24-SS1370</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>brown down to ~8 cm (sand & silt)</u> <u>dark gray below (sand</u> <u>rust-colored streaks</u> <u>warm in hole</u> <u>Some wood debris</u>		
<u>gravel</u> <u>some</u>	drab olive	slight	petroleum			
<u>sand</u> (F M C)	<u>brown</u>	moderate	other:			
<u>silt</u> <u>trace</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.19.24

Tide Source: R-TK

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: SS1371					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201779.56				Longitude/Easting (X): 1269478.84		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1102	-10.7	27	Y	-0.39	-11.1	
SAMPLE DATA						
Sample ID: LDW24-SS1371						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Noody debris. worms.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 7.8.24

Tide Source: RTR

Sampling Method: powergrab

Crew: CC

GRAB DATA	Location ID: SS1322					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1269427.35				Longitude/Easting (X): 203094.0		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0857	-21.7	26	Y	+7.21	-14.5	
SAMPLE DATA						
Sample ID: LDW24-SS1322						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	organic debris, shell hash, shells, worms.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: Sun, 60s

Date: 6.6.2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SR, LVB, CC, DS

GRAB DATA	Location ID: SS1373					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201839.48			Longitude/Easting (X): 1269538.09			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1133	0	10 cm	Y	-3.36	—	
SAMPLE DATA						
Sample ID: LDW24-SS1373						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	lots of woody debris		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: Sun / clouds, 60s

Date: 6-5-2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, LVB

GRAB DATA	Location ID: SS1374					
	On armored slope (Y/N)?			Depth of overlying sediment, if known (cm):		
Latitude/Northing (Y): 201849.34			Longitude/Easting (X): 1269573.38			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1312	0	10cm	Y	+1.15	—	collected on slope amid rip rap.
SAMPLE DATA						
Sample ID: LDW24-SS1374						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	gravel: pea-sized up to 1 inch. silt pockets baby crab glass fragments		
gravel lots	drab olive	slight	petroleum			
sand (F) (M) (C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 6.20.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: SS1375					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201749.63				Longitude/Easting (X): 1269517.75		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1254	-10.9	28	Y	+1.62	-9.3	sticks in jaw.
SAMPLE DATA						
Sample ID: LPW24-SS1375						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	sticks, worms, shell hash, algae.		
gravel	drab olive	slight	petroleum			
sand (F/M/C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: Sun, 6/05

Date: 6.6.2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SP, LVB, CC, DS

GRAB DATA	Location ID: SS1376					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201778.02				Longitude/Easting (X): 1269580.17		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1143	0	10cm	Y	-3.34	—	
SAMPLE DATA						
Sample ID: LDW24-SS1376						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	brown surface w gray sand underneath. baby clam aquatic vegetation at surface		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: Sun / clouds, 60s

Date: 6.5.2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SR, CC, LVB

GRAB DATA		Location ID: SS1377				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): —			
Latitude/Northing (Y): 201809.84			Longitude/Easting (X): 1269598.77			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1307	0	10cm	Y	+1.15	—	
SAMPLE DATA		Sample ID: LDW24-SS1377				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface hint	none	H ₂ S	gravel: pea-sized up to 1/4" trace organic debris		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown dark	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sun

Date: 7/9/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC DS

GRAB DATA		Location ID: SS1379				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 1269528.75				Longitude/Easting (X): 201229.1		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0839	+15.5 +10.9	26	Y	+8.94	-6.6	
	-10.9				-2.0	
SAMPLE DATA		Sample ID: LDW24-SS1379				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bio assay. worms, trace organic debris (sticks, roots). a few shells on surface. /barnacles.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/9/24
 Sampling Method: powergrab

Weather: 70s sun
 Tide Source: RTK
 Crew: ce DS

GRAB DATA	Location ID: <u>SS1380</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1269565.71</u>				Longitude/Easting (X): <u>201170.82</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>0911</u>	<u>-11.5</u>	<u>27</u>	<u>Y</u>	<u>+8.17</u>	<u>-3.3</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1380</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>bioassay.</u> <u>wood debris, shells,</u> <u>under silty brown surface</u> <u>is grey silty sand.</u>		
cobble	<u>brown surface</u>	none	<u>H₂S</u>			
gravel	<u>drab olive</u>	<u>slight</u>	petroleum			
<u>sand</u> (F M C)	<u>brown</u>	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/9/24
 Sampling Method: powergrab

Weather: 70s sun
 Tide Source: RTK
 Crew: CC DS

GRAB DATA		Location ID: <u>SS1381</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>1269585.49</u> <u>1269565.71</u>		Longitude/Easting (X): <u>201170.82</u> <u>201239.40</u>				
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>0936</u>	<u>-14.7</u>	<u>27</u>	<u>Y</u>	<u>17.56</u>	<u>-7.1</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1381</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>Some leaves, woody debris, worms, some barnacles on surface.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand</u> (F M C)	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, SOS

Date: 5-23-2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, DS, WB, EG

GRAB DATA	Location ID: SS1389					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 201625.03				Longitude/Easting (X): 1269845.68		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1205	0	10 cm	X	-2.21	—	
SAMPLE DATA						
Sample ID: LDW24-SS1389						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	trace shell hash		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt trace	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 80s sunny

Date: 7/18/24

Tide Source: RTR

Sampling Method: powergrab

Crew: CC

GRAB DATA	Location ID: SS1391					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1269875.0				Longitude/Easting (X): 201530.70		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1249	-8.4	27	Y	-1.08	-9.5	
SAMPLE DATA						
Sample ID: LDW24-SS1391						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: organic debris, worms		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: SOs cloudy

Date: 6.18.24

Tide Source: RTK

Sampling Method: power grab

Crew: CC SR LVB

GRAB DATA	Location ID: SS1392					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201458.85				Longitude/Easting (X): 1270299.10		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1250	-17.8	28	Y	+4.78	-13.0	
SAMPLE DATA						
Sample ID: LDW24-SS1392						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	Many worms.		
gravel	drab olive	slight	petroleum	Mostly silt with some		
(sand) (F M C)	brown	moderate	other:	fine sand. Trace shell hash.		
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: sunny 50s

Date: 6.18.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC SP LUB

GRAB DATA	Location ID: SS1393					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201331.28				Longitude/Easting (X): 1270448.40		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1316	-20.6	27	Y	+5.54	-15.1	
SAMPLE DATA						
Sample ID: LDW24-SS1393						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay Trace organic debris.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.20.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: SS1394					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201460.70				Longitude/Easting (X): 1270502.80		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0850	-13.3	29	Y	-0.22	-13.5	
SAMPLE DATA						
Sample ID: LDW24-SS1394						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	slight sheen spot on surface. Mostly silt with very little fine sand. worms. trace organic debris.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.19.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: SS1395					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201557.15				Longitude/Easting (X): 1270439.77		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0951	-12.9	27	Y	-1.24	-14.1	
SAMPLE DATA						
Sample ID: LDW24 - SS1395						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Mostly silt, some fine sand. worms, wood & some organic debris.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.18.24
 Sampling Method: power grab.

Weather: 60s sunny
 Tide Source: RTK
 Crew: CC SR LVB

GRAB DATA	Location ID: <u>SS1396</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>201557.98</u>				Longitude/Easting (X): <u>1270495.64</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1410</u>	<u>21.2</u>	<u>29</u>	<u>Y</u>	<u>+7.59</u>	<u>-13.6</u> <u>-28.8 (SR)</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1396</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>bioassay.</u> <u>worms, trace woody debris. Mostly silt, very little fine sand</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.19.24
 Sampling Method: powergrab

Weather: 60s sunny
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA		Location ID: <u>SS1397</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>201555.79</u>				Longitude/Easting (X): <u>1270542.71</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1005</u>	<u>-12.4</u>	<u>29</u>	<u>Y</u>	<u>-1.22</u>	<u>-13.6</u>	
SAMPLE DATA		Sample ID: <u>LDW24 - SS1397</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>Mostly silt, some very fine sand. worms. trace organic debris.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.18.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC SR LVB

GRAB DATA	Location ID: SS1398					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201637.65				Longitude/Easting (X): 1270497.28		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1434	-22.3	30	Y	+8.15	-14.2	
SAMPLE DATA						
Sample ID: LDW24 - SS1398						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	bin stick on surface.		
gravel	drab olive	slight	petroleum	brown surface, grey when		
sand (F/M C)	brown	moderate	other:	homogenized.		
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6-19-24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: 551399					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201639.44				Longitude/Easting (X): 1270645.13		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1027	-10.8	>30	N	-0.96	-11.8	Back in jaw. over penetrated.
1033	-11.6	25	Y	-0.96	-12.6	OK. keep this attempt.
SAMPLE DATA						
Sample ID: LDW24-551399						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	WORMS. mostly silt, some fine and medium sand. some wood debris. 20 cm strip of thin plastic		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					

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SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 100% sunny

Date: 6.20.24

Tide Source: RTK

Sampling Method: power grab

Crew: CC LVB

GRAB DATA		Location ID: SS1400				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 201466.86				Longitude/Easting (X): 1270693.56		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0804	-14.9	28	Y	+1.80	-13.1	
SAMPLE DATA		Sample ID: LDW24-SS1400				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay		
cobble	brown surface	none	H ₂ S	Sticks, worms, mostly silt, some fine sand. ^{3 med}		
gravel	drab olive	slight	petroleum			
(sand) (F M C)	brown brownish grey	moderate	other:			
(silt)	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.20.24

Tide Source: RTK

Sampling Method: power grab

Crew: CC CVB

GRAB DATA	Location ID: SS1394 SS1401					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 201463.59			Longitude/Easting (X): 1270743.87			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0832	-6.7	29	Y	+0.53	-6.2	overpenetrated on one edge slightly. collect sample from undisturbed side.
SAMPLE DATA						
Sample ID: LDW24-SS1394 LDW24-SS1401						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Some trace organic debris. Silt with very little fine sand. Slight sheen. A few shells.		
gravel	drab olive	slight	petroleum			
sand (F/M/C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: partly cloudy, 50s

Date: 6.5.2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SP, CC, LVB

GRAB DATA		Location ID: <u>SS1402</u>				
		On armored slope (Y/N)? <u>Y</u>	Depth of overlying sediment, if known (cm): <u>unknown</u>			
Latitude/Northing (Y): <u>201465.25</u>				Longitude/Easting (X): <u>1270800.16</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>0906</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>-0.82</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1402 + LDW24-SS1402-FID</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble <u>gravel</u> <u>sand (F M C)</u> <u>silt trace</u> clay	<u>brown surface</u> drab olive <u>brown</u> <u>gray</u> black	<u>none</u> slight moderate strong	H ₂ S petroleum other:	<u>layers of dark gray & rusty colored sediment</u> <u>two 1cm pieces of rigid, flat, manmade building material.</u>		



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, 50s

Date: 5-24-2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SP, CC, DS, LVB

GRAB DATA	Location ID: <u>SS1403</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>—</u>		
Latitude/Northing (Y): <u>200898.33</u>				Longitude/Easting (X): <u>1269584.49</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1034</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>-0.61</u>	<u>—</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1403</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>trace organic fibers</u> <u>Collected just on downs from edge of creek.</u> <u>Low GPS accuracy.</u>		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
<u>silt</u> <u>95%</u>	<u>gray</u> <u>dark</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 5.24.2024
 Sampling Method: hand collect

Weather: overcast, SCB
 Tide Source: RTH
 Crew: SP, CC, DS, LVB

GRAB DATA		Location ID: <u>SS1404</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>201032.96</u>				Longitude/Easting (X): <u>1269677.70</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1041</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>-0.97</u>	<u>—</u>	<u>Collected close to waterline</u>
SAMPLE DATA		Sample ID: <u>LDW24-SS1404</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>top ~2cm is brown w/ pushty streaks.</u> <u>then dark gray/black w/ streaks</u> <u>shell fragment</u> <u>Low GPS accuracy.</u>		
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	brown	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s cloudy

Date: 6.18.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC SR LVB

GRAB DATA	Location ID: <u>SS1410</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>201091.50</u>				Longitude/Easting (X): <u>1270190.78</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1501</u>	<u>-25.8</u>	<u>28</u>	<u>Y</u>	<u>+8.79</u>	<u>-17.0</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1410</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>bioassay</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	Mostly silt, some fine sand. worms, woody debris (slight). slight sheen in 2cm spot.		
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: Sun, 60s

Date: 6-6-2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, LVB

GRAB DATA	Location ID: SS1411					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 200751.28			Longitude/Easting (X): 1269966.31			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1255	0	10cm	Y	-1.64	—	collected at waterline (base of rip rap slope)
SAMPLE DATA						
Sample ID: LDW24-SS1411 + LDW24-SS1411-FD						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	brown sand w/ black silt underneath gravel mostly at surface some worms		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 5-24-2024
 Sampling Method: hand collect

Weather: overcast, SCS
 Tide Source: RTH
 Crew: SP, CC, DS, LVB

GRAB DATA		Location ID: <u>SS1412</u>				
		On armored slope (Y/N)? <u>Y</u>	Depth of overlying sediment, if known (cm): <u>unknown</u>			
Latitude/Northing (Y): <u>200727.59</u>				Longitude/Easting (X): <u>1269953.98</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1441</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>+1.57</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1412</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>Collected in gap in rip rap slope at high elevation.</u> <u>mostly sand, pocket of silt towards bottom of hole.</u> <u>Some rusty-colored streaks.</u> <u>some glass fragments.</u> <u>some natural fibers / sticks</u> <u>trace shell hash</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
silt	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 5.24.2024
 Sampling Method: hand collect

Weather: overcast, 50s
 Tide Source: RTK
 Crew: SR, CC, DS, LVB

GRAB DATA		Location ID: <u>SS1417</u>				
		On armored slope (Y/N)? <u>Y</u>	Depth of overlying sediment, if known (cm): <u>unknown</u>			
Latitude/Northing (Y): <u>200521.99</u>				Longitude/Easting (X): <u>1270142.82</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1418</u>	<u>0</u>	<u>10 cm</u>	<u>Y</u>	<u>0.35</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1417</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>thin sand / gravel layer,</u> <u>then silt.</u> <u>organic fibers</u>		
<u>gravel</u> <u>some</u>	drab olive	slight	petroleum			
sand (F) (M) (C)	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, 50s

Date: 6-4-2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SP, DS, LVB

GRAB DATA	Location ID: SS1427					
	On armored slope (Y/N)? Y			Depth of overlying sediment, if known (cm): unknown		
Latitude/Northing (Y): 200380.79			Longitude/Easting (X): 1270252.01			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1035	0	10cm	Y	-0.27	—	collected at top of rip rap slope
				-1.23		
SAMPLE DATA						
Sample ID: LDW24-SS1427						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	layers of brown M/C sand w/ layers of gray fine sand.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.20.24
 Sampling Method: powergrab

Weather: 70s Sunny
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA	Location ID: <u>SS1434</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>SS1434 200315.16</u>				Longitude/Easting (X): <u>1270370.29</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1339</u>	<u>-3.6</u>	<u>18</u>	<u>Y</u>	<u>+3.42</u>	<u>-0.2</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1434</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>some shells on top. Mostly sand, very little silt.</u>		
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.20.24
 Sampling Method: powergrab

Weather: 70s sunny
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA		Location ID: <u>SS13 ~ SS1436</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>✓</u>			
Latitude/Northing (Y): <u>200293.16</u>				Longitude/Easting (X): <u>1270451.61</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1400</u>	<u>-4.5</u>	<u>21</u>	<u>Y</u>	<u>+4.36</u>	<u>-0.1</u>	<u>One side has <1cm pen but collecting sample from other side with 21cm pen. Sample sloped due to surface of sampling location. (taken on a slope).</u>
SAMPLE DATA		Sample ID: <u>LDW24-SS1436</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
<u>cobble</u> <u>1-3 big pieces</u>	<u>brown surface</u>	<u>none</u>	<u>H₂S</u>	<u>Mostly sand, some silt. shells on surface. 2-3 bigger rocks (cobble-sized) with some smaller gravel. Mostly sand. shell hash. small shrimp.</u>		
<u>gravel</u>	<u>drab olive</u>	<u>slight</u>	<u>petroleum</u>			
<u>sand (F M C)</u>	<u>brown</u>	<u>moderate</u>	<u>other:</u>			
<u>silt</u>	<u>gray</u>	<u>strong</u>				
<u>clay</u>	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.20.24
 Sampling Method: powergrab

Weather: Sunny 70s
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA		Location ID: <u>LDW24-551444</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>NA (rejected)</u>				Longitude/Easting (X): <u>NA (rejected)</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1424	-2.0	7	N	—	—	overpenetrated underpenetrated
1431	-2.0	8	N	+5.81	+3.8	underpenetrated
1420	—	—	A	—	—	Rock in Jaw.
SAMPLE DATA		Sample ID: <u>LDW24-551444</u> ⁽³²⁾ Sample not collected.				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: stay come back to hand collect at this location. both ^{cc} all attempts rejected		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					

* Come back to hand collect this location and other high elevation ITS: 1447, 1449, 1454, 1456



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.26.24
 Sampling Method: hand collect

Weather: 60s sunny
 Tide Source: RTR
 Crew: CC KM

GRAB DATA		Location ID: SS1444				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 200202.59				Longitude/Easting (X): 1270486.40		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1417	0	10 cm	Y	-1.09		
SAMPLE DATA		Sample ID: LDW24-SS1444				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: shell hash, trace silt, and fine sand. Mostly medium-coarse sand. Trace gravel. glass fragments.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sun

Date: 7/24/24

Tide Source: R-TK

Sampling Method: powergrab

Crew: CDS SM JL

GRAB DATA		Location ID: SS1445				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): ^{200263.93} 1270573.77		Longitude/Easting (X): 1270573.77				
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1058	-15.0	25	Y	+3.71	-11.3	OK.
SAMPLE DATA		Sample ID: LDW24-SS1445				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	worms, shells sandy silt. trace organic debris.		
gravel	drab olive	slight	petroleum			
<u>sand</u> (F M C)	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.26.24
 Sampling Method: hand collect

Weather: 60c sunny
 Tide Source: RTK
 Crew: CC KM

GRAB DATA		Location ID: <u>SS1446</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>200178.50</u>				Longitude/Easting (X): <u>1270512.13</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1420</u>	<u>0</u>	<u>10</u>	<u>Y</u>	<u>-1.09</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1446</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>Algae, shell hash.</u> <u>Top ~2-3 cm was brown sand, below was dark grey silt with rust colored pockets. glass fragments.</u> <u>trace gravel. trace organic debris.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60S sunny

Date: 6.26.24

Tide Source: RTK

Sampling Method: hand collect

Crew: CC KM

GRAB DATA	Location ID: SS 1447					
	On armored slope (Y/N)? Y-N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 200129.99				Longitude/Easting (X): 1270556.87		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1338	0	10cm	Y	-0.46	—	
SAMPLE DATA						
Sample ID: LDW24 - SS1447						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Mostly sand, trace silt & fine sand. Gravel on surface (trace). multicolor green of sand		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 6.25.24
Sampling Method: hand collect

Weather: 70s sunny
Tide Source: RTK
Crew: SP CC

GRAB DATA	Location ID: <u>SS1449</u>					
	On armored slope (Y/N)? <u>X</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>200083.45</u>				Longitude/Easting (X): <u>1270590.47</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1525</u>	<u>0</u>	<u>10.0cm</u>	<u>X</u>	<u>-0.23</u>	<u>—</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1445 " LDW24-SS1449</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>Mostly sand, some silt. Glass and gravel, and brick fragments. White crumbly chunk unidentified. Algae on surface.</u>		
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 6.25.24

Tide Source: RTIC

Sampling Method: hand collect

Crew: SPCC

GRAB DATA		Location ID: SS1454				
		On armored slope (Y/N)? Y*	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 2000 10.83				Longitude/Easting (X): 1270648.03		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1422	0	10cm	Y	-1.90	—	
SAMPLE DATA		Sample ID: LDW24-SS1454				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: Mostly silt. Top 2cm is sand. Then stiff silt below. Stiff crumbly sandy silt.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					

*some nrap but collected in soft area slightly away from nrap.



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sun

Date: 7/10/24

Tide Source: RTR

Sampling Method: powergrab

Crew: CCDS

GRAB DATA		Location ID: SS1455				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 1270684.74				Longitude/Easting (X): 200034.83		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1027	-8.0	25	Y	+6.74	-1.3	
SAMPLE DATA		Sample ID: LDW24-SS1455				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: algae on surface. shrimp on surface. brown silty sand with red / rust packets. shells, some color organic debris.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 6.25.24
Sampling Method: hand-collect

Weather: 70s sunny
Tide Source: RTR
Crew: secc

GRAB DATA		Location ID: TT456 SS1456				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 199950.61					Longitude/Easting (X): 1270672.44	
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1125	0	10	Y	+2.45	—	collected in sandy met among nprp
SAMPLE DATA		Sample ID: LDW24-LT456 LDW24-SS1456				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: less silty than core, but similar. layer of dark black rocks at 8cm below surface aquatic veg at surface some gravel.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 50s cloudy

Date: 6.18.24

Tide Source: R-TK

Sampling Method: power grab

Crew: CC, SR, LVB

GRAB DATA		Location ID: SS1458				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 199989.09				Longitude/Easting (X): 1270758.4 1270758.4		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0908	-2.0	20	Y	-0.37	1.63 - 2.37 -24	
SAMPLE DATA		Sample ID: LDW24-SS1458				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	sediment sloped in grab. sheen in 1cm spot on surface. brown silty surface, slight sheen.		
gravel <i>peg</i>	drab olive	slight	petroleum			
sand (F) (M) (C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/10
 Sampling Method: powergrab

Weather: 70s sun
 Tide Source: RTK
 Crew: CCDS

GRAB DATA		Location ID: SS1461				
		On armored slope (Y/N)? <u>no</u>		Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1270732.91				Longitude/Easting (X): 199904.01		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1008	-3.5	13	Y	+7.24	+3.7	collected from furthest part of grab.
SAMPLE DATA		Sample ID: LDW24-SS1461				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	glass, gravel, debris on surface - shell hash. Mostly med-coarse sand.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.18.24
 Sampling Method: power grab

Weather: 50s cloudy
 Tide Source: RTK
 Crew: CC SR LVB

GRAB DATA		Location ID: SS1469a SS1462				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): —			
Latitude/Northing (Y): 199921.61				Longitude/Easting (X): 1270768.04		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0930	-1.0	25	Y	-0.33	-1.3	
SAMPLE DATA		Sample ID: LDW24-SS1469 LDW24-SS1462				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Organic debris on surface very little silt. pea size gravel. mostly sand.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 6.25.24
Sampling Method: hand collect

Weather: 70s sunny
Tide Source: RTK
Crew: SRCC

GRAB DATA	Location ID: SS1463					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 199863.41				Longitude/Easting (X): 1270779.55		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1247	—	10cm	Y	-0.85	—	
SAMPLE DATA						
Sample ID: LDW24-SS1463						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: mostly fine sand. brown surface.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/9/24
 Sampling Method: powergrab

Weather: 70s sunny
 Tide Source: RTK
 Crew: CC DS

GRAB DATA		Location ID: <u>SS1464</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>1270832.17</u>				Longitude/Easting (X): <u>199841.25</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1032</u>	<u>10.1</u>	<u>30</u>	<u>Y</u>	<u>+5.30</u>	<u>-4.8</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1464</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>worms, sandy silt.</u> <u>some organic debris.</u> <u>shell hash.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.18.24
 Sampling Method: powergrab

Weather: 50s cloudy
 Tide Source: RTK
 Crew: CC, SR, LVB

GRAB DATA	Location ID: <u>SS1469</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>200373.35</u>				Longitude/Easting (X): <u>1271238.13</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>0948</u>	<u>-1.0</u>	<u>23</u>	<u>Y</u>	<u>-0.16</u>	<u>-1.2</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1469</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>brown silty surface.</u> <u>organic debris.</u> <u>mottled dark brown silt with brown sand.</u> <u>some 1-inch gravel.</u> <u>wood fibers.</u>		
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/10/24
 Sampling Method: powergrab

Weather: 70s sun
 Tide Source: RTK
 Crew: CC DS

GRAB DATA	Location ID: SS1471					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1270973.21				Longitude/Easting (X): 260191.99		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1141	-18.3	27	Y	+4.33	-13.1'	
					-14.0	
SAMPLE DATA						
Sample ID: LDW24-SS1471						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	3cm brown surface.		
gravel	drab olive	slight	petroleum	sandy silt. fine		
sand (F M C)	brown	moderate	other:	worms. Trace organic		
silt	gray	strong		debris.		
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sun

Date: 7/24/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC PS SM JL

GRAB DATA	Location ID: SS1472					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 200055.71			Longitude/Easting (X): 127111.25			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1202	-19.5	10	Y	HOT	-18.5	OK.
SAMPLE DATA						
Sample ID: LDW 24 - SS1472						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	bioassay. shells, large piece of metal on surface (~10cm x 10cm x 15cm chunk). collected sample from around the chunk.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/24/24
 Sampling Method: power grab

Weather: 70s sun
 Tide Source: RTK
 Crew: CC DS SM JL

GRAB DATA		Location ID: SS1450 " SS1473				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 200002.93 200006.78		Longitude/Easting (X): 1271242.57 1271252.40				
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1121	—	—	N	—	—	Perap metal in jaw - rejected
1126	-14.7	18	Y	+2.37	-12.3	OK.
SAMPLE DATA		Sample ID: LDW24-SS1450 CC LDW24-SS1473				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	vegetation on surface lots of organic debris and shells		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70S sunny

Date: 7.8.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC

GRAB DATA	Location ID: SS1474					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1271247.03				Longitude/Easting (X): 199905.71		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0933	22.4	25	Y	+6.00	-16.4	
SAMPLE DATA						
Sample ID: LDW24-SS1474 & LDW24-SS1474-FD						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay		
cobble	brown surface	none	H ₂ S	organic debris, shell hash, whole shells, worms		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/10/24
 Sampling Method: powergrab

Weather: 70SSUN
 Tide Source: RTK
 Crew: CC DS

GRAB DATA		Location ID: <u>SS1475</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>1271226.05</u>				Longitude/Easting (X): <u>199758.39</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1224</u>	<u>-22.1</u>	<u>30</u>	<u>Y</u>	<u>+2.77</u>	<u>-19.3</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1475</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	none <u>cc</u>	<u>H₂S</u>	<u>thin brown surface; dark grey beneath. sandy silt. worms.</u>		
gravel	drab olive	slight	petroleum			
<u>sand (F/M/C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/9/24
 Sampling Method: powergrab

Weather: 80s sun
 Tide Source: RTK
 Crew: CC DS

GRAB DATA		Location ID: SS1481				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 1271448.66				Longitude/Easting (X): 199814.43		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1206	-10.5	27	Y	+1.44	-9.1	
SAMPLE DATA		Sample ID: LDW24-SS1481				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay. worms, some organic debris and shells Mostly fine-med ^{sand} with pockets of coarse and gravel. Silty sand.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 80s sun

Date: 7/9/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC DS

GRAB DATA	Location ID: SS1482					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1271339.35				Longitude/Easting (X): 199616.97		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1229	-19.4	27	Y	+0.82	-18.6	
SAMPLE DATA						
Sample ID: LDW24-SS1482						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	brown surface with dark blackish grey fine sand and silt beneath.		
gravel	drab olive	slight	petroleum			
sand (F) M C	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/9/24
 Sampling Method: powergrab

Weather: 70s sunny
 Tide Source: RTK
 Crew: CC DS

GRAB DATA		Location ID: <u>SS1484</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>1271503.20</u>				Longitude/Easting (X): <u>199745.15</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1137</u>	<u>-12.7</u>	<u>27</u>	<u>Y</u>	<u>+2.57</u>	<u>-10.1</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1484</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>bioassay.</u> <u>vegetation on surface.</u> <u>worms (many).</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	<u>drab olive</u>	<u>slight</u>	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	<u>moderate</u>	other:			
<u>silt</u>	<u>gray</u>	<u>strong</u>				
clay	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.25.24
 Sampling Method: hand collect

Weather: 70s sunny
 Tide Source: RTK
 Crew: CC SR

GRAB DATA		Location ID: <u>SS1485</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>199410.41</u>					Longitude/Easting (X): <u>1271165.55</u>	
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1008</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>+5.68</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1485</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>mostly sand, very little silt, multicolored sand. Mostly medium sand.</u>		
cobble	brown surface	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 50s sunny

Date: 6.18.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC SR LVB

GRAB DATA		Location ID: 551494				
		On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA	
Latitude/Northing (Y): 199592.34				Longitude/Easting (X): 1271648.16		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1006	-7.4	26	Y	-0.08	-7.5	
SAMPLE DATA		Sample ID: LDW24-551494				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay. shell hash. dark brown with brown surface. sheen on surface. mostly silt.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: SOs cloudy

Date: 6.18.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC SP LVB

GRAB DATA		Location ID: SS1496				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 194522.59				Longitude/Easting (X): 1271725.67		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1227	-11.0	26	Y	+3.99	-7.0	Out of intertidal because of riprap.
SAMPLE DATA		Sample ID: LDW24-SS1496				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	worms, wood debris, small trace shell frag.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.18.24
 Sampling Method: powergrab

Weather: 50s sunny
 Tide Source: RTK
 Crew: EC SR LVB

GRAB DATA		Location ID: SS1497				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 199469.51				Longitude/Easting (X): 1271756.45		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1130	-8.4	28	Y	+1.93	-6.5X(SR)	
SAMPLE DATA		Sample ID: LDW24-SS1497				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay. barnacle and shell frag. metal frag (one). sheen after homogenizing.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: SOs cloudy

Date: 6.18.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC, SR, LVB

GRAB DATA		Location ID: SS1498				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm):			
Latitude/Northing (Y): 199498.80				Longitude/Easting (X): 1271738.49		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1155 1158	—	0	N	—	—	Rock in jaw
1156	—	0	N	—	—	Rock in jaw
1158	-8.0	27	N	+2.93	-5.1	Rejected because. Subtidal mudline, farther from shore
1211	-7.5	27	Y	+3.28	-4.2	Accepted, best attempt.
SAMPLE DATA		Sample ID: LDW24-SS1498				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: woody debris. worm tubes, organic debris.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, 50s

Date: 6.4.2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SR, DS, LVB

GRAB DATA		Location ID: SS1506				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 199347.12				Longitude/Easting (X): 1271895.76		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1005	0	10 cm	Y	-1.67	—	
SAMPLE DATA		Sample ID: LDW24-SS1506				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Streaks of rusty color & dark gray/black wood fragment warm		
gravel	drab olive	slight	petroleum			
sand (F/M/C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, SOs

Date: 6-4-2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SR, DS, LVB

GRAB DATA	Location ID: SS1512					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 199227.80				Longitude/Easting (X): 1272024.28		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1010	0	10cm	Y	-1.67	—	
SAMPLE DATA						
Sample ID: LDW2A-SS1512						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S			
gravel trace	drab olive	slight	petroleum			
sand (F)(M)(C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 6.4.2024
Sampling Method: hand collect

Weather: overcast, showers, SQS
Tide Source: RTH
Crew: SP, DS, LVB

GRAB DATA	Location ID: <u>SS1514</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>—</u>		
Latitude/Northing (Y): <u>199145.75</u>				Longitude/Easting (X): <u>1272103.46</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>0922</u>	<u>0</u>	<u>10 cm</u>	<u>Y</u>	<u>-1.31</u>	<u>—</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1514</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>metal fragment</u> <u>large cement pieces</u> <u>including at ~10'cm</u>		
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
silt	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 7/10/24
Sampling Method: ~~powergrab~~ "hand collect"

Weather: 70s sun
Tide Source: RTK
Crew: CCPS

GRAB DATA	Location ID: SS1516					
	On armored slope (Y/N)? Y*			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 198833.45				Longitude/Easting (X): 1271777.16		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1323	—	10	Y	+1.38	—	
SAMPLE DATA						
Sample ID: LDW24-SS1516						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Shells		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					

* collected in gap in nrap.



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 6.19.24

Tide Source: RTR

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: SSIS17					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 198881.29				Longitude/Easting (X): 1271923.74		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1416	-19.8	25	Y	+6.47	-13.3	
SAMPLE DATA						
Sample ID: LDW24-SSIS17						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	worms, trace woody debris.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 50s sunny

Date: 6.18.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC SR LVB

GRAB DATA	Location ID: SS1518					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): SS1518 ^C 198963.63			Longitude/Easting (X): 1271981.12			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1102	-20.7	29	Y	+1.10	-19.6	
SAMPLE DATA						
Sample ID: LDW24-SS1518						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	bioassay. brown surface, dark grey homogenized. worms, shell hash, sticks.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.4.2024
 Sampling Method: hand collect

Weather: overcast, 50s, showers
 Tide Source: RTH
 Crew: SR, DS, LVB

GRAB DATA		Location ID: <u>SS1523</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>199039.67</u>			Longitude/Easting (X): <u>1272197.00</u>			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>0850</u>	<u>0</u>	<u>10 cm</u>	<u>Y</u>	<u>-0.63</u>	<u>—</u>	<u>collected at base of rip rap slope</u>
SAMPLE DATA		Sample ID: <u>LDW24-SS1523 + LDW24-SS1523-FD</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>silt towards bottom of 10 cm</u> <u>some worms</u>		
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand</u> (F) (M) (C)	<u>brown</u>	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sun

Date: 7/10/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CCDS

GRAB DATA		Location ID: SS1525				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 1271969.83				Longitude/Easting (X): 198724.28		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1115	-9.2	29	Y	+5.44	-3.8	
SAMPLE DATA		Sample ID: LDW24-SS1525				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: Sandy silt. Fine organic debris on surface and throughout. Trace shell hash.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.7.2024
 Sampling Method: hand collect

Weather: Sun, 60s
 Tide Source: RTK
 Crew: SR, LVB

GRAB DATA		Location ID: <u>SS1526</u>				
		On armored slope (Y/N)? <u>Y</u>		Depth of overlying sediment, if known (cm): <u>unknown</u>		
Latitude/Northing (Y): <u>198574.88</u>				Longitude/Easting (X): <u>1271921.65</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1448</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>+1.58</u>	<u>—</u>	<u>collected above at fall at base of rip rap slope.</u>
SAMPLE DATA		Sample ID: <u>LDW24-SS1526</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>trace organic debris</u> <u>patches of darker / black and gray sand mixed throughout</u>		
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt trace</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.20.24
 Sampling Method: powergrab

Weather: 70s sunny
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA	Location ID: <u>SS1533</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>148507.84</u> <u>148507884u</u>			Longitude/Easting (X): <u>1272206.43</u>			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1220</u>	<u>-6.7</u>	<u>26</u>	<u>Y</u>	<u>+0.11</u>	<u>-6.6</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1533</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>a few shells on surface. worms. some shell frag.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, showers, 50s

Date: 6.4.2024

Tide Source: RTR

Sampling Method: hand-collect

Crew: SR, LVB, DS

GRAB DATA	Location ID: SS1537					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 198965.01			Longitude/Easting (X): 1272292.59			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0846	0	10cm	Y	-0.63	—	collected at base of rip rap
SAMPLE DATA						
Sample ID: LDW2A-SS1537						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	top 3+cm = sand lots of gravel below		
gravel lots	drab olive	slight	petroleum			
sand (F) (M) (C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.19.24
 Sampling Method: powergrab

Weather: 70s sunny
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA		Location ID: <u>SS1546</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>NA</u>			
Latitude/Northing (Y): <u>198885.19</u>				Longitude/Easting (X): <u>1272448.77</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1357</u>	<u>-5.5</u>	<u>26</u>	<u>Y</u>	<u>+6.12</u>	<u>+0.6</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1546</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>Fine organic debris. Silty surface with more sand under surface.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	<u>brown</u>	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 50s sunny

Date: 6.18.24

Tide Source: RTK

Sampling Method: power grab

Crew: SR CC LVB

GRAB DATA		Location ID: <u>SS1548</u>				
		On armored slope (Y/N)? <u>N</u>		Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>198649.40</u>				Longitude/Easting (X): <u>1272379.39</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1048</u>	<u>-20.5</u>	<u>22</u>	<u>Y</u>	<u>+0.66</u>	<u>-19.8</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1548</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>dark grey with brown surface. worms, shell hash.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.19.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: SS1551					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 198785.65			Longitude/Easting (X): 1272492.63			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1332	-1.0	17.0	Y	+4.88	+3.9	brick in jaw. taking sample from unaffected side.
SAMPLE DATA						
Sample ID: LDW24-SS1551						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	very little silt a few pea sized rocks. mostly sand. brick on surface.		
gravel	drab olive	slight	petroleum			
sand (F MC)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/10/24
 Sampling Method: powergrab

Weather: 70s sunny
 Tide Source: RTK
 Crew: CC DS

GRAB DATA	Location ID: <u>SS1557</u>					
	On armored slope (Y/N)? <u>Y rip rap</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1272630.77</u>				Longitude/Easting (X): <u>198663.34</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>0919</u>	<u>—</u>	<u>—</u>	<u>N</u>	<u>—</u>	<u>—</u>	<u>~ 2 cm sediment in grab.</u>
<u>0927</u>	<u>-9.1</u>	<u>26</u>	<u>Y</u>	<u>+8.30</u>	<u>-0.8</u>	<u>OK.</u>
SAMPLE DATA						
Sample ID: <u>LDW24-SS1557</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>Algae on surface 1cm.</u> <u>brownish red color</u> <u>beneath brown surface.</u> <u>Silty sand with some</u> <u>small gravel.</u>		
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70S sun

Date: 7/10/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CCDS

GRAB DATA		Location ID: SS1558				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y):				Longitude/Easting (X):		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1339	-19.0	24	Y	+1.01	-18.0	
SAMPLE DATA		Sample ID: LDW24-SS1558				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	brown surface and very ^{cc} dark grey dark blackish sandy silt grey silty sand beneath. Trace fine organic debris and shells, gravel, on surface and within.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s

Date: 7/10/24

Tide Source: RTR

Sampling Method: powergrab

Crew: CC DS

GRAB DATA	Location ID: SS1560					
	On armored slope (Y/N)? <u>Y</u> ^{rip} _{grab}			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): 1272729.53				Longitude/Easting (X): 198634.28		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0945	-10.5	22	<u>Y</u>	+8.09	-2.4	
SAMPLE DATA						
Sample ID: LDW24-SS1560						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	Brown for first 4-5cm, then grey with streaks of <u>rust</u> color, worms, and pockets of grey sandy silt. Mostly silty sand. Some algae/shells on surface.		
gravel	drab olive	slight	petroleum			
<u>sand</u> (F M C)	<u>brown</u>	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 5.24.2024
 Sampling Method: hand collect

Weather: overcast, 50s.
 Tide Source: RTK
 Crew: SP, CC, DS, LVB

GRAB DATA		Location ID: <u>SS1561</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>198378.78</u>				Longitude/Easting (X): <u>1272274.84</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1115</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>-1.84</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW2A-SS1561</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>0-5cm - brown / sandy</u> <u>below 5cm - dark gray / black, silty</u> <u>large wood debris in ^{SP} hole</u> <u>(~5cm across)</u> <u>organic fibers</u>		
cobble	brown surface	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand</u> (F) (M) (C)	<u>brown</u>	moderate	other:			
<u>silt</u>	<u>gray</u> <u>dark</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: overcast, 50s

Date: 5.24.2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SP, CC, DS, LVB

GRAB DATA	Location ID: SS156A					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 198321.66			Longitude/Easting (X): 1272344.74			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1122	0	10 cm	Y	-2.05	—	
SAMPLE DATA						
Sample ID: LDW24 - SS156A						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	wad debris glass fragments		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/9/24
 Sampling Method: hand

Weather: 80s sun
 Tide Source: RTK
 Crew: CCPS

GRAB DATA	Location ID: <u>SS1565</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>198330.57</u>				Longitude/Easting (X): <u>1272384.48</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1347</u>	<u>—</u>	<u>10cm</u>	<u>X</u>	<u>-0.28</u>	<u>—</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS7565</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>some pockets of red color. Mostly sand w/ some fine silt & silt.</u>		
cobble	brown surface	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand</u> (F M C)	brown	moderate	other:			
silt	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 50s, overcast

Date: 5-24-2024

Tide Source: RTK

Sampling Method: hand collect

Crew: SP, CC, DS, LVB

GRAB DATA		Location ID: SS1566				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 198251.42				Longitude/Easting (X): 1272431.62		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1347	0	10 cm	Y	-0.39	—	
SAMPLE DATA		Sample ID: LDW24-SS1566				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	mostly sandy, silt layer at bottom of hole.		
gravel	drab olive	slight	petroleum			
sand (F) (M) (C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 80s sunny

Date: 7/18/24

Tide Source: RTR

Sampling Method: hand collect

Crew: CC

GRAB DATA	Location ID: SS1567					
	On armored slope (Y/N)? Y*			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 198247.04				Longitude/Easting (X): 1272492.45		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1525	0	10	Y	+2.08	—	
SAMPLE DATA						
Sample ID: LDW24-SS1567						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	mostly sand. rip rap and gravel / cobble in area, but *		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					

* collected in gap among rip rap / cobble.



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 50s, overcast

Date: 5.24.2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SS, CC, DS, LVB

GRAB DATA	Location ID: SS1568					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 198221.63				Longitude/Easting (X): 1272489.83		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1342	0	10cm	Y	-0.71	—	
SAMPLE DATA						
Sample ID: LDW24-SS1568						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	Location shifted downstream to first sampleable location from street end park. gravel at surfaces then silty soft woody debris		
(gravel) surface	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
(silt)	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/9/24
 Sampling Method: powergrab

Weather: 8th 90s
 Tide Source: RTK
 Crew: CC PS

GRAB DATA	Location ID: <u>SS 1569</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1272560.41</u>				Longitude/Easting (X): <u>198197.87</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1406</u>	<u>-2.5</u>	<u>28</u>	<u>Y</u>	<u>-0.16</u>	<u>-2.7</u>	<u>collected from Aiber side.</u>
SAMPLE DATA						
Sample ID: <u>LDW24-SS1569</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>brown silty sand with pockets of rust color.</u>		
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/19/24
 Sampling Method: powergrab

Weather: 90s sun
 Tide Source: RTK
 Crew: CC PS

GRAB DATA	Location ID: <u>SS1570</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1272582.49</u>				Longitude/Easting (X): <u>198161.77</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1427</u>	<u>-3.0</u>	<u>29</u>	<u>Y</u>	<u>+0.15</u>	<u>-2.9</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1570</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>→ 1cm long very small baby fish on surface, and lots of algae on surface.</u> <u>Sandy silt.</u> <u>organic debris (sticks, leaves)</u>		
cobble	<u>brown surface</u>	none	H ₂ S			
gravel	<u>drab olive</u>	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	<u>black</u>					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/8/24
 Sampling Method: powergrab

Weather: 80s sunny
 Tide Source: RTR
 Crew: CC

GRAB DATA		Location ID: SS1571				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 198187.75				Longitude/Easting (X): 1272606.58		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1457	-6.6	23	Y	+0.97	-5.6 -6.1 ^{cc}	
SAMPLE DATA		Sample ID: LDW24-SS1571				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: algae, small sticks, ^{cc} leaf worms, Mostly silt, some fine sand.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.19.24
 Sampling Method: powergrab.

Weather: 60s sunny
 Tide Source: RTK
 Crew: CC LVB

GRAB DATA		Location ID: 551572					
		On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 198177.97				Longitude/Easting (X): NA 1272672.41			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments	
1448	7.40' = 21.9	30	Y	+7.49	-14.4	Some leaf litter in jaws.	
SAMPLE DATA		Sample ID: LDW24-551572					
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:							
Sediment type	Sediment color	Sediment odor		Comments: bioassay.			
cobble	brown surface	none	H ₂ S	shells, leaf litter, wood fragments, other organic debris. worms algae. A lot of organic debris.			
gravel	drab olive	slight	petroleum				
sand (F M C)	brown	moderate	other:				
silt	gray	strong					
clay	black						



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.20.24

Tide Source: RTR

Sampling Method: powergrab

Crew: CC LUB

GRAB DATA	Location ID: SS1574					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 198378.12				Longitude/Easting (X): 1272803.56		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1048	-10.4	28	Y	-1.94	-12.3	
SAMPLE DATA						
Sample ID: LDW24-SS1574						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	worms, some organic debris.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 80s sunny

Date: 7/8/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC

GRAB DATA	Location ID: SS1575					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1273121.94				Longitude/Easting (X): 198811.08		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1417	-7.3	30	Y	-0.51	-7.8	
SAMPLE DATA						
Sample ID: LDW24-SS1575						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	a few sticks (small). trace shell hash.		
gravel	drab olive	slight	petroleum			
sand (F/M/C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 80s sunny

Date: 7/8/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC

GRAB DATA	Location ID: <u>SS1576</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1273165.31</u>				Longitude/Easting (X): <u>198841.29</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1433</u>	<u>-7.9</u>	<u>29</u>	<u>Y</u>	<u>+0.06</u>	<u>-7.8</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1576</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>Two long sticks just undersurface (~1ft long)</u> <u>small woody debris.</u> <u>trace algae on surface.</u> <u>worms, shells.</u>		
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/10/24
 Sampling Method: powergrab

Weather: 70s sun
 Tide Source: RTK
 Crew: CC DS

GRAB DATA	Location ID: <u>SS1578</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1272814.42</u>				Longitude/Easting (X): <u>198085.84</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1355</u>	<u>-15.1</u>	<u>26</u>	<u>Y</u>	<u>+0.76</u>	<u>-14.3</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1578</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>bioassay</u> <u>shells, vegetation, wood/</u> <u>stick fragments on</u> <u>surface and throughout.</u>		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.20.24

Tide Source: RTR

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: SS1580					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 197942.44				Longitude/Easting (X): 1272959.14		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1020	-11.3	27	Y	-2.07	-13.4	
SAMPLE DATA						
Sample ID: LDW24-SS1580						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	sticks, some organic debris. Mostly silt with some finesand.		
gravel	drab olive	slight	petroleum	~12cm stick at ~8cm deep.		
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 7/9/24
 Sampling Method: powergrab

Weather: 90s sun
 Tide Source: RTK
 Crew: CC DS

GRAB DATA	Location ID: <u>SS1583</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1273019.36</u>				Longitude/Easting (X): <u>197829.42</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1651</u>	<u>-9.7</u>	<u>29</u>	<u>Y</u>	<u>+0.64</u>	<u>-9.1</u>	
<u>1454</u>						
SAMPLE DATA						
Sample ID: <u>LDW24-SS1583</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>Sandy silt.</u> <u>trace fine organic</u> <u>debris, soft texture.</u>		
gravel	drab olive	slight	petroleum			
<u>sand</u> (F M C)	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s sunny

Date: 6.20.24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC LVB

GRAB DATA	Location ID: 551584					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 197806.15				Longitude/Easting (X): 1273112.87		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0947	-11.4	27	Y	-1.79	-13.2	
SAMPLE DATA						
Sample ID: LDW24-551584						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: bioassay.		
cobble	brown surface	none	H ₂ S	shrimp on surface - worms.		
gravel	drab olive	slight	petroleum	some shells, organic debris.		
sand (F M C)	brown	moderate	other:	woody, algae, fibers.		
silt	gray	strong		shell hash.		
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sun

Date: 7/10/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC DS

GRAB DATA	Location ID: SS1578 " SS1587					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 1271501.69				Longitude/Easting (X): 199159.50		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0820	—	—	N	—	—	debris in jaw
0825	-8.3	21	Y	+9.12	+0.8	ok.
SAMPLE DATA						
Sample ID: LDW24-SS1578 " LDW24-SS1587						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	1cm layer of algae on surface. worms. Brown with streaks / pockets of rust and grey color.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sun

Date: 7/10/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC DS

GRAB DATA		Location ID: SS1588				
		On armored slope (Y/N)? N	Depth of overlying sediment, if known (cm): NA			
Latitude/Northing (Y): 1271602.85				Longitude/Easting (X): 199059.20		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0850	—	—	N	—	—	Rocking jaw. no sample.
0855	-6.2	21	Y	+8.91	3.6 ^{5.6}	ok.
					+2.7	
SAMPLE DATA		Sample ID: LDW24-SS1588				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	algae on surface. Silty sand.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s sunny

Date: 7/9/24

Tide Source: RTK

Sampling Method: powergrab

Crew: CC DS

GRAB DATA	Location ID: SS1590					
	On armored slope (Y/N)? Y *			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): NA			Longitude/Easting (X): NA			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1014	—	—	N	—	—	Rocks in jaw and sample is mostly rubble.
1018	—	—	N	—	—	Rocks in jaw not sampleable
SAMPLE DATA						
Sample ID: LDW24-SS1590 ⁽²⁾ NA (no sample collected)						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					

* collected amid gap in riprap.

No sample collected by vessel. Sample collected by hand with separate form.



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 80s sun

Date: 7/9/24

Tide Source: RTK

Sampling Method: hand collect

Crew: CCDS

GRAB DATA	Location ID: SS1590 SS1590					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): NA		
Latitude/Northing (Y): 200294.81				Longitude/Easting (X): 1270361.76		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1311	—	10cm	Y	10.02	—	
SAMPLE DATA						
Sample ID: LDW24-SS1590						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: hand collect grey sand with brown streaks / interbedded.		
cobble	brown surface	none	H ₂ S			
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
Date: 7/9/24
Sampling Method: powergrabs

Weather: 70s sun
Tide Source: RTK
Crew: CCDS

GRAB DATA	Location ID: <u>SS1591</u>					
	On armored slope (Y/N)? <u>Y*</u>			Depth of overlying sediment, if known (cm): <u>NA</u>		
Latitude/Northing (Y): <u>1270304.79</u>				Longitude/Easting (X): <u>200309.15</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>0955</u>	<u>5.5</u>	<u>19</u>	<u>Y</u>	<u>+6.85</u>	<u>+1.8</u>	<u>debris in jaw. collected from fuller side of sampler.</u>
SAMPLE DATA						
Sample ID: <u>LDW24-SS1591</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	<u>none</u>	H ₂ S	<u>Some pockets of dark grey sand. Some gravel. Mostly sand with some silt, shells.</u>		
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	<u>brown</u>	moderate	other:			
<u>silt</u>	gray	strong				
clay	black					

* collected in gap in armoring/rp rap.



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 5-23-2024
 Sampling Method: hand collect

Weather: overcast, SOs
 Tide Source: RTH
 Crew: SR, CC, DS, LVB, EG

GRAB DATA		Location ID: <u>SS1821 (under structure)</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>—</u>			
Latitude/Northing (Y): <u>202206.31 *</u>				Longitude/Easting (X): <u>1269249.07 *</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1101</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>-2.17</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1821</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>shell frag. (mussel)</u> <u>collected in open spot amid rip rap on slope.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
<u>grave</u> <u>trace</u>	drab olive	slight	petroleum			
<u>sand</u> (F) (M) (C)	<u>brown</u>	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					

*Coordinates 12 ft. downstream of sample point.

Sample location ~19 ft from upstream side of structure.



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 70s, sun

Date: 6/25/24

Tide Source: RTK

Sampling Method: diver-collected

Crew: KM, DS

GRAB DATA	Location ID: SS1822 (under-structure)					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): n/a		
Latitude (Northing Y): 201167.43				Longitude (Easting X): 1270224.12		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1252	-7.0	10.0	Y	-1.15	-8.2	
SAMPLE DATA						
Sample ID: LDW24-SS1822						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	shells, worms, organic matter collected 18 ft forward shoreline from coordinates documented above		
gravel	drab olive	slight	petroleum			
sand (F/M/C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s, 5kn

Date: 6/25/24

Tide Source: RTK

Sampling Method: diver-collected

Crew: KM, DS

GRAB DATA		Location ID: SS1823 (under-structure)				
		On armored slope (Y/N)? N		Depth of overlying sediment, if known (cm): n/a		
Latitude/Northing (Y): 201130.76				Longitude/Easting (X): 1270245.21		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
0930	-14.0	10.0	Y	+6.88	-7.1	
SAMPLE DATA		Sample ID: LDW24-SS1823				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: Shell hash, organic matter collected 25 ft under pier from coordinates documented above		
cobble	brown surface	none	H ₂ S			
gravel trace	drab olive	slight	petroleum			
sand (F)(M)(C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60s, Sun

Date: 6/25/24

Tide Source: R/TK

Sampling Method: diver-collected

Crew: KM, OS

GRAB DATA	Location ID: 551824 (under-structure)					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): N/A		
Latitude <u>Northing</u> (Y): 201063.76				Longitude <u>Easting</u> (X): 1270344.64		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1105	-9.0	10.0	Y	+3.27	-5.7	
SAMPLE DATA						
Sample ID: LDW24-551824						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	shell hash, organic matter		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong		collected on target @ coordinates documented above		
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6.24.24
 Sampling Method: diver-collected

Weather: 60s sunny
 Tide Source: RTK
 Crew: CC KN

GRAB DATA		Location ID: <u>SS1825 (under-structure)</u>				
		On armored slope (Y/N)? <u>N</u>	Depth of overlying sediment, if known (cm): <u>N/A</u>			
Latitude/Northing (Y): <u>201013.73</u>				Longitude/Easting (X): <u>1270366.07</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1353</u>	<u>-4.0</u>	<u>10.0</u>	<u>Y</u>	<u>-2.58</u>	<u>-6.6</u>	
SAMPLE DATA		Sample ID: <u>LDWZY-SS1825</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>collected 20 ft under pier from coordinates documented above</u> <u>organic matter, algae, worms, slight shell hash.</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand (F M C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II
 Date: 6-24-24
 Sampling Method: diver - collected

Weather: 60s sunny
 Tide Source: RTK
 Crew: CC KM

GRAB DATA	Location ID: <u>SS1826 (under-structure)</u>					
	On armored slope (Y/N)? <u>N</u>			Depth of overlying sediment, if known (cm): <u>n/a</u>		
Latitude/Northing (Y): <u>200071.84</u>				Longitude/Easting (X): <u>1271210.41</u>		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1155</u>	<u>-2.0</u>	<u>10.0</u>	<u>Y</u>	<u>-1.35</u>	<u>-3.4</u>	
SAMPLE DATA						
Sample ID: <u>LDW24-SS1826</u>						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments: <u>organic matter, sheen</u> <u>collected 15 ft under pier from coordinates documented above</u>		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S			
gravel	drab olive	slight	petroleum			
<u>sand (F/M) C)</u>	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: 60° sunny

Date: 6.24.24

Tide Source: RTK

Sampling Method: diver

Crew: CCM

GRAB DATA	Location ID: SS1827 (under-structure)					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): 1/4		
Latitude/Northing (Y): 200029.69			Longitude/Easting (X): 1271263.23			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1035	5.0	10.0	Y	+2.21	-2.8	bioassay location
SAMPLE DATA						
Sample ID: LOWZY-SS1827						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	4 "coarse cutters" collected 15 ft under pier from boat coordinates documented above Shells, organic matter, sheen		
gravel	drab olive	slight	petroleum			
sand (F)(M)(C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: rain, 50s

Date: 5.24.2024

Tide Source: RTK

Sampling Method: hand collect

Crew: SR, CC, DS, LVB

GRAB DATA	Location ID: SS1828 (under-structure)					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 198452.64*			Longitude/Easting (X): 1272216.89*			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1234	0	10 cm	Y	-2.33	—	
SAMPLE DATA						
Sample ID: LDW24-SS1828						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	shell hash		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown yellow/light	moderate	other:			
silt	gray	strong				
clay	black					

* 160 ft downstream from edge of structure; 8 ft back to bulkhead
* coordinates 8 ft. further upstream from structure (see diagram)



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: rain, 50s, cloudy

Date: 5.24.2024

Tide Source: RTR

Sampling Method: hand collect

Crew: SP, CC, DS, LVB

GRAB DATA	Location ID: SS1829 (under-structure)					
	On armored slope (Y/N)? N			Depth of overlying sediment, if known (cm): —		
Latitude/Northing (Y): 198452.64 *				Longitude/Easting (X): 1272216.89 *		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1155	0	10 cm	Y	-2.47	—	
SAMPLE DATA						
Sample ID: LDW24-SS1829						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor	Comments:			
cobble	brown surface	none	Spots of sheen darker under surface layer brown			
gravel	drab olive	slight				
sand (F M C)	brown light	moderate				
silt	gray	strong				
clay	black					

* 44 ft downstream from edge of structure

* Coordinates 8 ft further upstream from structure



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: partly cloudy, 60s

Date: 5-23-2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, DS, LVB, EG

GRAB DATA	Location ID: SS1830 (under-structure)					
	On armored slope (Y/N)? Y			Depth of overlying sediment, if known (cm): unknown		
Latitude/Northing (Y): 198650.16			Longitude/Easting (X): 1272726.02			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1425	0	10 cm	Y	+2.67	—	
SAMPLE DATA						
Sample ID: LDW24-SS1830						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	a few glass fragments trace organics Collected amid rip rap on steep slope adjacent to structure. Low GPS accuracy.		
gravel lots	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: partly cloudy, 60s.

Date: 5-23-2024

Tide Source: RTK

Sampling Method: hand collect

Crew: SP, CC, DS, LVB, EG

GRAB DATA		Location ID: <u>SS1831 (under-structure)</u>				
		On armored slope (Y/N)? <u>Y</u>	Depth of overlying sediment, if known (cm): <u>unknown</u>			
Latitude/Northing (Y): <u>198657.72 *</u>			Longitude/Easting (X): <u>1272850.27 *</u>			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
<u>1408</u>	<u>0</u>	<u>10cm</u>	<u>Y</u>	<u>+1.29</u>	<u>—</u>	
SAMPLE DATA		Sample ID: <u>LDW24-SS1831</u>				
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	<u>brown surface</u>	<u>none</u>	H ₂ S	<u>brown on surface then dark gray</u> <u>Some woody debris.</u> <u>Collected in patch of exposed sediment amid rip rap.</u>		
<u>gravel</u>	drab olive	slight	petroleum			
<u>sand</u> (F M C)	brown	moderate	other:			
<u>silt</u>	<u>gray</u>	strong				
clay	black					

* Sample collected 25 ft away from coordinates along bulkhead.
(sample towards outer inlet).



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: partly cloudy; 60s

Date: 5.23.2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SP, CC, DS, LVB, EG

GRAB DATA	Location ID: SS1832 (unair-structure)					
	On armored slope (Y/N)? Y			Depth of overlying sediment, if known (cm): unknown		
Latitude/Northing (Y): 198655.84 *			Longitude/Easting (X): 1272969.15 *			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1345	0	10cm	Y	+0.51	—	
SAMPLE DATA						
Sample ID: LDW24-SS1832						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	rusty brown surface, then dbrown, then rusty, then light brown sand. Collected in patch of exposed sediment amid rip rap.		
gravel	drab olive	slight	petroleum			
sand (F) (M) (C)	brown	moderate	other:			
silt	gray	strong				
clay	black					

* Sample collected 48.5 ft straight back from coordinate point. (along bulkhead).



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: partly cloudy, 50s.

Date: 5-23-2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, DS, LVB, EG

GRAB DATA	Location ID: SS1833 (under structure)					
	On armored slope (Y/N)? Y			Depth of overlying sediment, if known (cm): unknown		
Latitude/Northing (Y): 198836.38 *				Longitude/Easting (X): 1273049.53 *		
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1332	0	10 cm	Y	+0.16	—	
SAMPLE DATA						
Sample ID: LDW24-SS1833						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	layers of brown, rust, and then dark gray trace organics (shells) Sample collected in patch of sediment amid rip rap.		
gravel	drab olive	slight	petroleum			
sand (F)(M)(C)	brown	moderate	other:			
silt	gray	strong				
clay	black					

* Coordinates collected 18 ft. farther into slip from sample location.



SURFACE SEDIMENT COLLECTION FORM

Project Name / #: LDW AOC5 MR Phase II

Weather: partly cloudy, 60s

Date: 5.23.2024

Tide Source: RTH

Sampling Method: hand collect

Crew: SR, CC, DS, LVB, EG

GRAB DATA	Location ID: SS1834 (inter-structure)					
	On armored slope (Y/N)? Y			Depth of overlying sediment, if known (cm): unknown		
Latitude/Northing (Y): 198948.59			Longitude/Easting (X): 1273205.83			
Grab time	Water depth (ft)	Penetration depth (cm)	Acceptable grab (Y/N)	Tide Level (ft)	Mudline elevation (ft MLLW)	Comments
1309	0	10cm	Y	-0.88	—	
SAMPLE DATA						
Sample ID: LDW24-SS1834						
Pre-homogenization analyses (circle): VOC Sulfides Ammonia AVS/SEM TPH-P Other:						
Sediment type	Sediment color	Sediment odor		Comments:		
cobble	brown surface	none	H ₂ S	lots of gravel/concrete trace organic debris. trace shell frag. Collected in patch of exposed sediment amid riprap.		
gravel	drab olive	slight	petroleum			
sand (F M C)	brown	moderate	other:			
silt	gray	strong				
clay	black					