

Appendix E

Laboratory Reports



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

June 19, 2023

Josh Jensen
Anchor QEA
1201 3rd Avenue, Suite 2600
Seattle, WA 98101

Re: Analytical Data for Project 220795-01.01
Laboratory Reference No. 2304-330

Dear Josh:

Enclosed are the analytical results and associated quality control data for samples submitted on April 28, 2023.

Please note that the data for the subcontracted dioxin/Furans analyses will follow in the final report.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



Date of Report: June 19, 2023
Samples Submitted: April 28, 2023
Laboratory Reference: 2304-330
Project: 220795-01.01

Case Narrative

Samples were collected on April 27, 2023 and received by the laboratory on April 28, 2023. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Total Metals EPA 6020D/7471B Analysis

All samples were air dried.

The duplicate RPD for Barium is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

The Matrix Spike/ Matrix Spike Duplicate recoveries for Copper and Zinc are outside control limits due to matrix inhomogeneity. The samples were re-extracted and re-analyzed with similar results. The Spike Blank recovery for Copper was 103%. The Spike Blank recovery for Zinc was 105%.

Semivolatiles EPA 8270E/SIM Analysis

The percent recovery for Pyridine is outside the control limits in the Spike Blank (or Spike Blank Duplicate). The method allows for a percentage of the compounds to fall outside of the control limits due to the large number of analytes being spiked.

Organochlorine Pesticides EPA 8081B Analysis

Due to the fact that the degradation of the CCV standards was reproducible after re-injecting the sample extracts, the CCV degradation problem was attributed to the matrix of these samples.

Several of the analytes in the SB/SBD had high recoveries. This is attributed to a high bias in the instrument response for this sample bracket. Because the samples were non-detect for these compounds, no further action was taken.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**TOTAL SOLIDS
SM 2540G**

Matrix: Sediment
 Units: % Solids

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-01					
Laboratory ID:	04-330-01					
Total Solids	46	0.50	SM 2540G	5-3-23	5-4-23	
Client ID:	PS63-SS-02					
Laboratory ID:	04-330-02					
Total Solids	41	0.50	SM 2540G	5-3-23	5-4-23	
Client ID:	PS63-SS-03					
Laboratory ID:	04-330-03					
Total Solids	35	0.50	SM 2540G	5-3-23	5-4-23	
Client ID:	PS63-SS-04					
Laboratory ID:	04-330-04					
Total Solids	50	0.50	SM 2540G	5-3-23	5-4-23	
Client ID:	PS63-SS-05					
Laboratory ID:	04-330-05					
Total Solids	40	0.50	SM 2540G	5-3-23	5-4-23	



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**TOTAL SOLIDS
 SM 2540G
 QUALITY CONTROL**

Matrix: Solids
 Units: % Solids

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	04-330-01								
	ORIG	DUP							
Total Solids	44.2	46.3	NA	NA	NA	NA	5	20	



Date of Report: June 19, 2023
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**TOTAL ORGANIC CARBON
 EPA 9060A**

Matrix: Sediment
 Units: % Carbon

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-01					
Laboratory ID:	04-330-01					
Total Organic Carbon	3.9	0.66	EPA 9060A	5-5-23	5-5-23	

Client ID:	PS63-SS-02					
Laboratory ID:	04-330-02					
Total Organic Carbon	4.5	0.40	EPA 9060A	5-5-23	5-5-23	

Client ID:	PS63-SS-03					
Laboratory ID:	04-330-03					
Total Organic Carbon	6.6	0.49	EPA 9060A	5-8-23	5-8-23	

Client ID:	PS63-SS-04					
Laboratory ID:	04-330-04					
Total Organic Carbon	4.9	0.96	EPA 9060A	5-8-23	5-8-23	

Client ID:	PS63-SS-05					
Laboratory ID:	04-330-05					
Total Organic Carbon	3.9	1.1	EPA 9060A	5-8-23	5-8-23	



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**TOTAL ORGANIC CARBON
 EPA 9060A
 QUALITY CONTROL**

Matrix: Solid
 Units: % Carbon

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0505S1					
Total Organic Carbon	ND	0.042	EPA 9060A	5-5-23	5-5-23	
Laboratory ID:	MB0508S1					
Total Organic Carbon	ND	0.042	EPA 9060A	5-8-23	5-8-23	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-330-02							
	ORIG	DUP						
Total Organic Carbon	4.45	4.56	NA	NA	NA	2	22	
Laboratory ID:	04-330-03							
	ORIG	DUP						
Total Organic Carbon	6.57	6.17	NA	NA	NA	6	22	
SPIKE BLANK								
Laboratory ID:	SB0505S1							
	SB	SB		SB				
Total Organic Carbon	42.6	42.1	NA	101	90-110	NA	NA	
Laboratory ID:	SB0508S1							
	SB	SB		SB				
Total Organic Carbon	40.8	42.1	NA	97	90-110	NA	NA	



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**TOTAL METALS
 EPA 6020D/7471B**

Matrix: Sediment
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: PS63-SS-01						
Laboratory ID: 04-330-01						
Arsenic	10	0.36	EPA 6020B	5-5-23	5-5-23	
Barium	33	0.36	EPA 6020B	5-5-23	5-5-23	
Cadmium	0.39	0.14	EPA 6020B	5-5-23	5-5-23	
Chromium	12	0.36	EPA 6020B	5-5-23	5-5-23	
Copper	32	0.36	EPA 6020B	5-5-23	5-5-23	
Lead	17	0.36	EPA 6020B	5-5-23	5-5-23	
Mercury	0.090	0.014	EPA 7471B	5-5-23	5-5-23	
Nickel	8.1	0.36	EPA 6020B	5-5-23	5-5-23	
Selenium	2.7	1.8	EPA 6020B	5-5-23	5-5-23	
Silver	0.25	0.14	EPA 6020B	5-5-23	5-5-23	
Zinc	110	7.2	EPA 6020B	5-5-23	5-5-23	

Client ID: PS63-SS-02						
Laboratory ID: 04-330-02						
Arsenic	16	0.95	EPA 6020B	5-5-23	5-5-23	
Barium	52	0.95	EPA 6020B	5-5-23	5-5-23	
Cadmium	0.85	0.38	EPA 6020B	5-5-23	5-5-23	
Chromium	33	0.95	EPA 6020B	5-5-23	5-5-23	
Copper	95	0.95	EPA 6020B	5-5-23	5-5-23	
Lead	91	0.95	EPA 6020B	5-5-23	5-5-23	
Mercury	0.77	0.015	EPA 7471B	5-5-23	5-5-23	
Nickel	25	0.95	EPA 6020B	5-5-23	5-5-23	
Selenium	4.0	1.9	EPA 6020B	5-5-23	5-5-23	
Silver	0.73	0.38	EPA 6020B	5-5-23	5-5-23	
Zinc	200	7.6	EPA 6020B	5-5-23	5-5-23	



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TOTAL METALS
EPA 6020D/7471B

Matrix: Sediment
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: PS63-SS-03						
Laboratory ID: 04-330-03						
Arsenic	21	1.1	EPA 6020B	5-5-23	5-5-23	
Barium	56	1.1	EPA 6020B	5-5-23	5-5-23	
Cadmium	1.1	0.45	EPA 6020B	5-5-23	5-5-23	
Chromium	42	1.1	EPA 6020B	5-5-23	5-5-23	
Copper	100	1.1	EPA 6020B	5-5-23	5-5-23	
Lead	91	1.1	EPA 6020B	5-5-23	5-5-23	
Mercury	0.44	0.018	EPA 7471B	5-5-23	5-5-23	
Nickel	29	1.1	EPA 6020B	5-5-23	5-5-23	
Selenium	4.5	2.2	EPA 6020B	5-5-23	5-5-23	
Silver	0.75	0.45	EPA 6020B	5-5-23	5-5-23	
Zinc	220	4.5	EPA 6020B	5-5-23	5-5-23	

Client ID: PS63-SS-04						
Laboratory ID: 04-330-04						
Arsenic	5.8	0.29	EPA 6020B	5-5-23	5-5-23	
Barium	26	0.29	EPA 6020B	5-5-23	5-5-23	
Cadmium	0.35	0.12	EPA 6020B	5-5-23	5-5-23	
Chromium	9.3	0.29	EPA 6020B	5-5-23	5-5-23	
Copper	30	0.29	EPA 6020B	5-5-23	5-5-23	
Lead	20	0.29	EPA 6020B	5-5-23	5-5-23	
Mercury	0.097	0.012	EPA 7471B	5-5-23	5-5-23	
Nickel	5.4	0.29	EPA 6020B	5-5-23	5-5-23	
Selenium	1.8	1.5	EPA 6020B	5-5-23	5-5-23	
Silver	0.21	0.12	EPA 6020B	5-5-23	5-5-23	
Zinc	81	5.9	EPA 6020B	5-5-23	5-5-23	



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**TOTAL METALS
 EPA 6020D/7471B**

Matrix: Sediment
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		PS63-SS-05				
Laboratory ID:		04-330-05				
Arsenic	6.8	0.39	EPA 6020B	5-5-23	5-5-23	
Barium	27	0.39	EPA 6020B	5-5-23	5-5-23	
Cadmium	0.36	0.16	EPA 6020B	5-5-23	5-5-23	
Chromium	6.6	0.39	EPA 6020B	5-5-23	5-5-23	
Copper	33	0.39	EPA 6020B	5-5-23	5-5-23	
Lead	10	0.39	EPA 6020B	5-5-23	5-5-23	
Mercury	0.072	0.016	EPA 7471B	5-5-23	5-5-23	
Nickel	4.8	0.39	EPA 6020B	5-5-23	5-5-23	
Selenium	2.5	2.0	EPA 6020B	5-5-23	5-5-23	
Silver	ND	0.16	EPA 6020B	5-5-23	5-5-23	
Zinc	68	7.8	EPA 6020B	5-5-23	5-5-23	



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**TOTAL METALS
 EPA 6020D/7471B
 QUALITY CONTROL**

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0505SM1					
Arsenic	ND	0.13	EPA 6020B	5-5-23	5-5-23	
Barium	ND	0.13	EPA 6020B	5-5-23	5-5-23	
Cadmium	ND	0.050	EPA 6020B	5-5-23	5-5-23	
Chromium	ND	0.13	EPA 6020B	5-5-23	5-5-23	
Copper	ND	0.13	EPA 6020B	5-5-23	5-5-23	
Lead	ND	0.13	EPA 6020B	5-5-23	5-5-23	
Nickel	ND	0.13	EPA 6020B	5-5-23	5-5-23	
Selenium	ND	0.13	EPA 6020B	5-5-23	5-5-23	
Silver	ND	0.050	EPA 6020B	5-5-23	5-5-23	
Zinc	ND	0.50	EPA 6020B	5-5-23	5-5-23	
Laboratory ID:	MB0505S2					
Mercury	ND	0.25	EPA 7471B	5-5-23	5-5-23	
Laboratory ID:	MB0505SM2					
Selenium	ND	0.13	EPA 6020B	5-5-23	5-5-23	



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**TOTAL METALS
 EPA 6020D/7471B
 QUALITY CONTROL**

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-330-02							
	ORIG	DUP						
Arsenic	10.8	11.2	NA	NA	NA	NA	4	20
Barium	34.3	73.6	NA	NA	NA	NA	73	20
Cadmium	0.559	0.488	NA	NA	NA	NA	14	20
Chromium	21.4	22.5	NA	NA	NA	NA	5	20
Copper	62.4	61.8	NA	NA	NA	NA	1	20
Lead	59.8	73.0	NA	NA	NA	NA	20	20
Nickel	16.3	17.1	NA	NA	NA	NA	5	20
Silver	0.480	0.415	NA	NA	NA	NA	15	20
Zinc	133	121	NA	NA	NA	NA	9	20

Laboratory ID:	04-330-02							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

Laboratory ID:	04-330-02							
	ORIG	DUP						
Selenium	2.63	2.45	NA	NA	NA	NA	7	20

MATRIX SPIKES

Laboratory ID:	04-330-02									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	104	106	100	100	10.8	93	95	75-125	2	20
Barium	136	131	100	100	34.3	101	97	75-125	3	20
Cadmium	46.7	46.3	50.0	50.0	0.559	92	91	75-125	1	20
Chromium	114	112	100	100	21.4	92	91	75-125	1	20
Copper	114	134	50.0	50.0	62.4	102	142	75-125	16	20
Lead	315	288	250	250	59.8	102	91	75-125	9	20
Nickel	106	107	100	100	16.3	89	90	75-125	1	20
Silver	22.2	22.1	25.0	25.0	0.480	87	86	75-125	1	20
Zinc	206	217	100	100	133	74	84	75-125	5	20

Laboratory ID:	04-330-02									
Mercury	0.492	0.488	0.500	0.500	0.00984	96	96	80-120	1	20

Laboratory ID:	04-330-02									
	MS	MSD	MS	MSD		MS	MSD			
Selenium	102	99.0	100	100	2.63	99	96	75-125	3	20



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SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 1 of 2

Matrix: Sediment
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-01					
Laboratory ID:	04-330-01					
n-Nitrosodimethylamine	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Pyridine	ND	4.5	EPA 8270E	5-3-23	5-5-23	
Phenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Aniline	ND	2.3	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethyl)ether	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2-Chlorophenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
1,3-Dichlorobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
1,4-Dichlorobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Benzyl alcohol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
1,2-Dichlorobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2-Methylphenol (o-Cresol)	ND	0.45	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroisopropyl)ether	ND	0.45	EPA 8270E	5-3-23	5-5-23	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.45	EPA 8270E	5-3-23	5-5-23	
n-Nitroso-di-n-propylamine	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Hexachloroethane	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Nitrobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Isophorone	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2-Nitrophenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2,4-Dimethylphenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethoxy)methane	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2,4-Dichlorophenol	ND	0.90	EPA 8270E	5-3-23	5-5-23	
1,2,4-Trichlorobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Naphthalene	0.053	0.036	EPA 8270E/SIM	5-3-23	5-5-23	
4-Chloroaniline	ND	2.3	EPA 8270E	5-3-23	5-5-23	
Hexachlorobutadiene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
4-Chloro-3-methylphenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2-Methylnaphthalene	0.064	0.036	EPA 8270E/SIM	5-3-23	5-5-23	
1-Methylnaphthalene	ND	0.036	EPA 8270E/SIM	5-3-23	5-5-23	
Hexachlorocyclopentadiene	ND	2.3	EPA 8270E	5-3-23	5-5-23	
2,4,6-Trichlorophenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2,3-Dichloroaniline	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2,4,5-Trichlorophenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2-Chloronaphthalene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2-Nitroaniline	ND	0.45	EPA 8270E	5-3-23	5-5-23	
1,4-Dinitrobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Dimethylphthalate	ND	0.45	EPA 8270E	5-3-23	5-5-23	
1,3-Dinitrobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2,6-Dinitrotoluene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
1,2-Dinitrobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Acenaphthylene	0.46	0.036	EPA 8270E/SIM	5-3-23	5-5-23	
3-Nitroaniline	ND	0.45	EPA 8270E	5-3-23	5-5-23	



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SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-01					
Laboratory ID:	04-330-01					
2,4-Dinitrophenol	ND	3.3	EPA 8270E	5-3-23	5-5-23	
Acenaphthene	0.082	0.036	EPA 8270E/SIM	5-3-23	5-5-23	
4-Nitrophenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2,4-Dinitrotoluene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Dibenzofuran	ND	0.23	EPA 8270E	5-3-23	5-5-23	
2,3,5,6-Tetrachlorophenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
2,3,4,6-Tetrachlorophenol	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Diethylphthalate	ND	1.1	EPA 8270E	5-3-23	5-5-23	
4-Chlorophenyl-phenylether	ND	0.45	EPA 8270E	5-3-23	5-5-23	
4-Nitroaniline	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Fluorene	0.33	0.036	EPA 8270E/SIM	5-3-23	5-5-23	
4,6-Dinitro-2-methylphenol	ND	3.1	EPA 8270E	5-3-23	5-5-23	
n-Nitrosodiphenylamine	ND	0.45	EPA 8270E	5-3-23	5-5-23	
1,2-Diphenylhydrazine	ND	0.45	EPA 8270E	5-3-23	5-5-23	
4-Bromophenyl-phenylether	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Hexachlorobenzene	ND	0.45	EPA 8270E	5-3-23	5-5-23	
Pentachlorophenol	ND	3.1	EPA 8270E	5-3-23	5-5-23	
Phenanthrene	1.5	0.45	EPA 8270E	5-3-23	5-5-23	
Anthracene	3.1	0.45	EPA 8270E	5-3-23	5-5-23	
Carbazole	0.41	0.23	EPA 8270E	5-3-23	5-5-23	
Di-n-butylphthalate	ND	2.3	EPA 8270E	5-3-23	5-5-23	
Fluoranthene	3.2	0.45	EPA 8270E	5-3-23	5-5-23	
Pyrene	2.7	0.45	EPA 8270E	5-3-23	5-5-23	
Butylbenzylphthalate	ND	2.3	EPA 8270E	5-3-23	5-5-23	
bis-2-Ethylhexyladipate	ND	2.3	EPA 8270E	5-3-23	5-5-23	
3,3'-Dichlorobenzidine	ND	2.3	EPA 8270E	5-3-23	5-5-23	
Benzo[a]anthracene	2.7	0.45	EPA 8270E	5-3-23	5-5-23	
Chrysene	5.4	0.45	EPA 8270E	5-3-23	5-5-23	
bis(2-Ethylhexyl)phthalate	ND	2.3	EPA 8270E	5-3-23	5-5-23	
Di-n-octylphthalate	ND	2.3	EPA 8270E	5-3-23	5-5-23	
Benzo[b]fluoranthene	5.1	0.45	EPA 8270E	5-3-23	5-5-23	
Benzo(j,k)fluoranthene	1.7	0.45	EPA 8270E	5-3-23	5-5-23	
Benzo[a]pyrene	4.0	0.45	EPA 8270E	5-3-23	5-5-23	
Indeno[1,2,3-cd]pyrene	1.7	0.45	EPA 8270E	5-3-23	5-5-23	
Dibenz[a,h]anthracene	0.42	0.036	EPA 8270E/SIM	5-3-23	5-5-23	
Benzo[g,h,i]perylene	1.6	0.45	EPA 8270E	5-3-23	5-5-23	
Benzoic Acid	ND	0.90	EPA 8270E	5-3-23	5-9-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	75	11 - 111				
Phenol-d6	80	26 - 117				
Nitrobenzene-d5	63	31 - 111				
2-Fluorobiphenyl	60	38 - 109				
2,4,6-Tribromophenol	67	27 - 127				
Terphenyl-d14	62	37 - 116				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 1 of 2

Matrix: Sediment
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-02					
Laboratory ID:	04-330-02					
n-Nitrosodimethylamine	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Pyridine	ND	4.9	EPA 8270E	5-3-23	5-5-23	
Phenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Aniline	ND	2.4	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethyl)ether	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2-Chlorophenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
1,3-Dichlorobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
1,4-Dichlorobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Benzyl alcohol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
1,2-Dichlorobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2-Methylphenol (o-Cresol)	ND	0.49	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroisopropyl)ether	ND	0.49	EPA 8270E	5-3-23	5-5-23	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.49	EPA 8270E	5-3-23	5-5-23	
n-Nitroso-di-n-propylamine	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Hexachloroethane	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Nitrobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Isophorone	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2-Nitrophenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2,4-Dimethylphenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethoxy)methane	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2,4-Dichlorophenol	ND	0.98	EPA 8270E	5-3-23	5-5-23	
1,2,4-Trichlorobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Naphthalene	0.12	0.039	EPA 8270E/SIM	5-3-23	5-5-23	
4-Chloroaniline	ND	2.4	EPA 8270E	5-3-23	5-5-23	
Hexachlorobutadiene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
4-Chloro-3-methylphenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2-Methylnaphthalene	0.12	0.039	EPA 8270E/SIM	5-3-23	5-5-23	
1-Methylnaphthalene	0.059	0.039	EPA 8270E/SIM	5-3-23	5-5-23	
Hexachlorocyclopentadiene	ND	2.4	EPA 8270E	5-3-23	5-5-23	
2,4,6-Trichlorophenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2,3-Dichloroaniline	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2,4,5-Trichlorophenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2-Chloronaphthalene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2-Nitroaniline	ND	0.49	EPA 8270E	5-3-23	5-5-23	
1,4-Dinitrobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Dimethylphthalate	ND	0.49	EPA 8270E	5-3-23	5-5-23	
1,3-Dinitrobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2,6-Dinitrotoluene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
1,2-Dinitrobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Acenaphthylene	0.54	0.49	EPA 8270E	5-3-23	5-5-23	
3-Nitroaniline	ND	0.49	EPA 8270E	5-3-23	5-5-23	



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-02					
Laboratory ID:	04-330-02					
2,4-Dinitrophenol	ND	3.6	EPA 8270E	5-3-23	5-5-23	
Acenaphthene	0.72	0.49	EPA 8270E	5-3-23	5-5-23	
4-Nitrophenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2,4-Dinitrotoluene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Dibenzofuran	0.60	0.24	EPA 8270E	5-3-23	5-5-23	
2,3,5,6-Tetrachlorophenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
2,3,4,6-Tetrachlorophenol	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Diethylphthalate	ND	1.2	EPA 8270E	5-3-23	5-5-23	
4-Chlorophenyl-phenylether	ND	0.49	EPA 8270E	5-3-23	5-5-23	
4-Nitroaniline	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Fluorene	2.0	0.49	EPA 8270E	5-3-23	5-5-23	
4,6-Dinitro-2-methylphenol	ND	3.3	EPA 8270E	5-3-23	5-5-23	
n-Nitrosodiphenylamine	ND	0.49	EPA 8270E	5-3-23	5-5-23	
1,2-Diphenylhydrazine	ND	0.49	EPA 8270E	5-3-23	5-5-23	
4-Bromophenyl-phenylether	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Hexachlorobenzene	ND	0.49	EPA 8270E	5-3-23	5-5-23	
Pentachlorophenol	ND	3.3	EPA 8270E	5-3-23	5-5-23	
Phenanthrene	7.0	0.49	EPA 8270E	5-3-23	5-5-23	
Anthracene	3.6	0.49	EPA 8270E	5-3-23	5-5-23	
Carbazole	0.98	0.24	EPA 8270E	5-3-23	5-5-23	
Di-n-butylphthalate	ND	2.4	EPA 8270E	5-3-23	5-5-23	
Fluoranthene	7.3	0.49	EPA 8270E	5-3-23	5-5-23	
Pyrene	5.9	0.49	EPA 8270E	5-3-23	5-5-23	
Butylbenzylphthalate	ND	2.4	EPA 8270E	5-3-23	5-5-23	
bis-2-Ethylhexyladipate	ND	2.4	EPA 8270E	5-3-23	5-5-23	
3,3'-Dichlorobenzidine	ND	2.4	EPA 8270E	5-3-23	5-5-23	
Benzo[a]anthracene	3.6	0.49	EPA 8270E	5-3-23	5-5-23	
Chrysene	5.8	0.49	EPA 8270E	5-3-23	5-5-23	
bis(2-Ethylhexyl)phthalate	ND	2.4	EPA 8270E	5-3-23	5-5-23	
Di-n-octylphthalate	ND	2.4	EPA 8270E	5-3-23	5-5-23	
Benzo[b]fluoranthene	6.2	0.49	EPA 8270E	5-3-23	5-5-23	
Benzo(j,k)fluoranthene	1.7	0.49	EPA 8270E	5-3-23	5-5-23	
Benzo[a]pyrene	4.4	0.49	EPA 8270E	5-3-23	5-5-23	
Indeno[1,2,3-cd]pyrene	2.1	0.49	EPA 8270E	5-3-23	5-5-23	
Dibenz[a,h]anthracene	0.63	0.49	EPA 8270E	5-3-23	5-5-23	
Benzo[g,h,i]perylene	2.0	0.49	EPA 8270E	5-3-23	5-5-23	
Benzoic Acid	ND	0.98	EPA 8270E	5-3-23	5-9-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	64	11 - 111				
Phenol-d6	83	26 - 117				
Nitrobenzene-d5	67	31 - 111				
2-Fluorobiphenyl	70	38 - 109				
2,4,6-Tribromophenol	74	27 - 127				
Terphenyl-d14	72	37 - 116				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 1 of 2

Matrix: Sediment
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-03					
Laboratory ID:	04-330-03					
n-Nitrosodimethylamine	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Pyridine	ND	5.7	EPA 8270E	5-3-23	5-8-23	
Phenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Aniline	ND	2.9	EPA 8270E	5-3-23	5-8-23	
bis(2-Chloroethyl)ether	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2-Chlorophenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
1,3-Dichlorobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
1,4-Dichlorobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Benzyl alcohol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
1,2-Dichlorobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2-Methylphenol (o-Cresol)	ND	0.57	EPA 8270E	5-3-23	5-8-23	
bis(2-Chloroisopropyl)ether	ND	0.57	EPA 8270E	5-3-23	5-8-23	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.57	EPA 8270E	5-3-23	5-8-23	
n-Nitroso-di-n-propylamine	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Hexachloroethane	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Nitrobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Isophorone	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2-Nitrophenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2,4-Dimethylphenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
bis(2-Chloroethoxy)methane	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2,4-Dichlorophenol	ND	1.1	EPA 8270E	5-3-23	5-8-23	
1,2,4-Trichlorobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Naphthalene	0.17	0.046	EPA 8270E/SIM	5-3-23	5-5-23	
4-Chloroaniline	ND	2.9	EPA 8270E	5-3-23	5-8-23	
Hexachlorobutadiene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
4-Chloro-3-methylphenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2-Methylnaphthalene	0.081	0.046	EPA 8270E/SIM	5-3-23	5-5-23	
1-Methylnaphthalene	0.058	0.046	EPA 8270E/SIM	5-3-23	5-5-23	
Hexachlorocyclopentadiene	ND	2.9	EPA 8270E	5-3-23	5-8-23	
2,4,6-Trichlorophenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2,3-Dichloroaniline	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2,4,5-Trichlorophenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2-Chloronaphthalene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2-Nitroaniline	ND	0.57	EPA 8270E	5-3-23	5-8-23	
1,4-Dinitrobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Dimethylphthalate	ND	0.57	EPA 8270E	5-3-23	5-8-23	
1,3-Dinitrobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2,6-Dinitrotoluene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
1,2-Dinitrobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Acenaphthylene	0.83	0.57	EPA 8270E	5-3-23	5-8-23	
3-Nitroaniline	ND	0.57	EPA 8270E	5-3-23	5-8-23	



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-03					
Laboratory ID:	04-330-03					
2,4-Dinitrophenol	ND	5.2	EPA 8270E	5-3-23	5-8-23	
Acenaphthene	0.61	0.57	EPA 8270E	5-3-23	5-8-23	
4-Nitrophenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2,4-Dinitrotoluene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Dibenzofuran	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2,3,5,6-Tetrachlorophenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
2,3,4,6-Tetrachlorophenol	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Diethylphthalate	ND	1.4	EPA 8270E	5-3-23	5-8-23	
4-Chlorophenyl-phenylether	ND	0.57	EPA 8270E	5-3-23	5-8-23	
4-Nitroaniline	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Fluorene	0.75	0.57	EPA 8270E	5-3-23	5-8-23	
4,6-Dinitro-2-methylphenol	ND	4.4	EPA 8270E	5-3-23	5-8-23	
n-Nitrosodiphenylamine	ND	0.57	EPA 8270E	5-3-23	5-8-23	
1,2-Diphenylhydrazine	ND	0.57	EPA 8270E	5-3-23	5-8-23	
4-Bromophenyl-phenylether	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Hexachlorobenzene	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Pentachlorophenol	ND	5.7	EPA 8270E	5-3-23	5-8-23	
Phenanthrene	3.6	0.57	EPA 8270E	5-3-23	5-8-23	
Anthracene	2.6	0.57	EPA 8270E	5-3-23	5-8-23	
Carbazole	ND	0.57	EPA 8270E	5-3-23	5-8-23	
Di-n-butylphthalate	ND	2.9	EPA 8270E	5-3-23	5-8-23	
Fluoranthene	5.9	0.57	EPA 8270E	5-3-23	5-8-23	
Pyrene	6.7	0.57	EPA 8270E	5-3-23	5-8-23	
Butylbenzylphthalate	ND	2.9	EPA 8270E	5-3-23	5-8-23	
bis-2-Ethylhexyladipate	ND	2.9	EPA 8270E	5-3-23	5-8-23	
3,3'-Dichlorobenzidine	ND	2.9	EPA 8270E	5-3-23	5-8-23	
Benzo[a]anthracene	4.1	0.57	EPA 8270E	5-3-23	5-8-23	
Chrysene	6.8	0.57	EPA 8270E	5-3-23	5-8-23	
bis(2-Ethylhexyl)phthalate	ND	2.9	EPA 8270E	5-3-23	5-8-23	
Di-n-octylphthalate	ND	2.9	EPA 8270E	5-3-23	5-8-23	
Benzo[b]fluoranthene	9.0	0.57	EPA 8270E	5-3-23	5-8-23	
Benzo(j,k)fluoranthene	2.7	0.57	EPA 8270E	5-3-23	5-8-23	
Benzo[a]pyrene	6.8	0.57	EPA 8270E	5-3-23	5-8-23	
Indeno[1,2,3-cd]pyrene	3.3	0.57	EPA 8270E	5-3-23	5-8-23	
Dibenz[a,h]anthracene	0.95	0.046	EPA 8270E/SIM	5-3-23	5-5-23	
Benzo[g,h,i]perylene	3.2	0.57	EPA 8270E	5-3-23	5-8-23	
Benzoic Acid	ND	1.1	EPA 8270E	5-3-23	5-9-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	60	11 - 111				
Phenol-d6	64	26 - 117				
Nitrobenzene-d5	55	31 - 111				
2-Fluorobiphenyl	48	38 - 109				
2,4,6-Tribromophenol	56	27 - 127				
Terphenyl-d14	47	37 - 116				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 1 of 2

Matrix: Sediment
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-04					
Laboratory ID:	04-330-04					
n-Nitrosodimethylamine	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Pyridine	ND	4.0	EPA 8270E	5-3-23	5-5-23	
Phenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Aniline	ND	2.0	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethyl)ether	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2-Chlorophenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
1,3-Dichlorobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
1,4-Dichlorobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Benzyl alcohol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
1,2-Dichlorobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2-Methylphenol (o-Cresol)	ND	0.40	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroisopropyl)ether	ND	0.40	EPA 8270E	5-3-23	5-5-23	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.40	EPA 8270E	5-3-23	5-5-23	
n-Nitroso-di-n-propylamine	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Hexachloroethane	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Nitrobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Isophorone	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2-Nitrophenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2,4-Dimethylphenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethoxy)methane	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2,4-Dichlorophenol	ND	0.80	EPA 8270E	5-3-23	5-5-23	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Naphthalene	0.042	0.032	EPA 8270E/SIM	5-3-23	5-5-23	
4-Chloroaniline	ND	2.0	EPA 8270E	5-3-23	5-5-23	
Hexachlorobutadiene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
4-Chloro-3-methylphenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2-Methylnaphthalene	0.036	0.032	EPA 8270E/SIM	5-3-23	5-5-23	
1-Methylnaphthalene	0.098	0.032	EPA 8270E/SIM	5-3-23	5-5-23	
Hexachlorocyclopentadiene	ND	2.0	EPA 8270E	5-3-23	5-5-23	
2,4,6-Trichlorophenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2,3-Dichloroaniline	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2,4,5-Trichlorophenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2-Chloronaphthalene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2-Nitroaniline	ND	0.40	EPA 8270E	5-3-23	5-5-23	
1,4-Dinitrobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Dimethylphthalate	ND	0.40	EPA 8270E	5-3-23	5-5-23	
1,3-Dinitrobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2,6-Dinitrotoluene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
1,2-Dinitrobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Acenaphthylene	0.24	0.032	EPA 8270E/SIM	5-3-23	5-5-23	
3-Nitroaniline	ND	0.40	EPA 8270E	5-3-23	5-5-23	



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-04					
Laboratory ID:	04-330-04					
2,4-Dinitrophenol	ND	2.9	EPA 8270E	5-3-23	5-5-23	
Acenaphthene	0.61	0.40	EPA 8270E	5-3-23	5-5-23	
4-Nitrophenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2,4-Dinitrotoluene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Dibenzofuran	0.44	0.20	EPA 8270E	5-3-23	5-5-23	
2,3,5,6-Tetrachlorophenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
2,3,4,6-Tetrachlorophenol	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Diethylphthalate	ND	1.0	EPA 8270E	5-3-23	5-5-23	
4-Chlorophenyl-phenylether	ND	0.40	EPA 8270E	5-3-23	5-5-23	
4-Nitroaniline	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Fluorene	0.84	0.40	EPA 8270E	5-3-23	5-5-23	
4,6-Dinitro-2-methylphenol	ND	2.7	EPA 8270E	5-3-23	5-5-23	
n-Nitrosodiphenylamine	ND	0.40	EPA 8270E	5-3-23	5-5-23	
1,2-Diphenylhydrazine	ND	0.40	EPA 8270E	5-3-23	5-5-23	
4-Bromophenyl-phenylether	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Hexachlorobenzene	ND	0.40	EPA 8270E	5-3-23	5-5-23	
Pentachlorophenol	ND	2.7	EPA 8270E	5-3-23	5-5-23	
Phenanthrene	4.4	0.40	EPA 8270E	5-3-23	5-5-23	
Anthracene	1.5	0.40	EPA 8270E	5-3-23	5-5-23	
Carbazole	ND	0.20	EPA 8270E	5-3-23	5-5-23	
Di-n-butylphthalate	ND	2.0	EPA 8270E	5-3-23	5-5-23	
Fluoranthene	9.7	0.40	EPA 8270E	5-3-23	5-5-23	
Pyrene	7.6	0.40	EPA 8270E	5-3-23	5-5-23	
Butylbenzylphthalate	ND	2.0	EPA 8270E	5-3-23	5-5-23	
bis-2-Ethylhexyladipate	ND	2.0	EPA 8270E	5-3-23	5-5-23	
3,3'-Dichlorobenzidine	ND	2.0	EPA 8270E	5-3-23	5-5-23	
Benzo[a]anthracene	3.0	0.40	EPA 8270E	5-3-23	5-5-23	
Chrysene	3.4	0.40	EPA 8270E	5-3-23	5-5-23	
bis(2-Ethylhexyl)phthalate	ND	2.0	EPA 8270E	5-3-23	5-5-23	
Di-n-octylphthalate	ND	2.0	EPA 8270E	5-3-23	5-5-23	
Benzo[b]fluoranthene	3.2	0.40	EPA 8270E	5-3-23	5-5-23	
Benzo(j,k)fluoranthene	1.1	0.40	EPA 8270E	5-3-23	5-5-23	
Benzo[a]pyrene	2.3	0.40	EPA 8270E	5-3-23	5-5-23	
Indeno[1,2,3-cd]pyrene	0.94	0.40	EPA 8270E	5-3-23	5-5-23	
Dibenz[a,h]anthracene	0.24	0.032	EPA 8270E/SIM	5-3-23	5-5-23	
Benzo[g,h,i]perylene	0.86	0.40	EPA 8270E	5-3-23	5-5-23	
Benzoic Acid	ND	0.80	EPA 8270E	5-3-23	5-10-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	59	11 - 111				
Phenol-d6	70	26 - 117				
Nitrobenzene-d5	52	31 - 111				
2-Fluorobiphenyl	49	38 - 109				
2,4,6-Tribromophenol	59	27 - 127				
Terphenyl-d14	56	37 - 116				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 1 of 2

Matrix: Sediment
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-05					
Laboratory ID:	04-330-05					
n-Nitrosodimethylamine	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Pyridine	ND	5.0	EPA 8270E	5-3-23	5-5-23	
Phenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Aniline	ND	2.5	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethyl)ether	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2-Chlorophenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
1,3-Dichlorobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
1,4-Dichlorobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Benzyl alcohol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
1,2-Dichlorobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2-Methylphenol (o-Cresol)	ND	0.50	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroisopropyl)ether	ND	0.50	EPA 8270E	5-3-23	5-5-23	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.50	EPA 8270E	5-3-23	5-5-23	
n-Nitroso-di-n-propylamine	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Hexachloroethane	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Nitrobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Isophorone	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2-Nitrophenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2,4-Dimethylphenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethoxy)methane	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2,4-Dichlorophenol	ND	1.0	EPA 8270E	5-3-23	5-5-23	
1,2,4-Trichlorobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Naphthalene	0.063	0.040	EPA 8270E/SIM	5-3-23	5-5-23	
4-Chloroaniline	ND	2.5	EPA 8270E	5-3-23	5-5-23	
Hexachlorobutadiene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
4-Chloro-3-methylphenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2-Methylnaphthalene	0.044	0.040	EPA 8270E/SIM	5-3-23	5-5-23	
1-Methylnaphthalene	0.048	0.040	EPA 8270E/SIM	5-3-23	5-5-23	
Hexachlorocyclopentadiene	ND	2.5	EPA 8270E	5-3-23	5-5-23	
2,4,6-Trichlorophenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2,3-Dichloroaniline	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2,4,5-Trichlorophenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2-Chloronaphthalene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2-Nitroaniline	ND	0.50	EPA 8270E	5-3-23	5-5-23	
1,4-Dinitrobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Dimethylphthalate	ND	0.50	EPA 8270E	5-3-23	5-5-23	
1,3-Dinitrobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2,6-Dinitrotoluene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
1,2-Dinitrobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Acenaphthylene	0.33	0.040	EPA 8270E/SIM	5-3-23	5-5-23	
3-Nitroaniline	ND	0.50	EPA 8270E	5-3-23	5-5-23	



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-05					
Laboratory ID:	04-330-05					
2,4-Dinitrophenol	ND	3.7	EPA 8270E	5-3-23	5-5-23	
Acenaphthene	0.56	0.50	EPA 8270E	5-3-23	5-5-23	
4-Nitrophenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2,4-Dinitrotoluene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Dibenzofuran	0.37	0.25	EPA 8270E	5-3-23	5-5-23	
2,3,5,6-Tetrachlorophenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
2,3,4,6-Tetrachlorophenol	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Diethylphthalate	ND	1.2	EPA 8270E	5-3-23	5-5-23	
4-Chlorophenyl-phenylether	ND	0.50	EPA 8270E	5-3-23	5-5-23	
4-Nitroaniline	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Fluorene	0.87	0.50	EPA 8270E	5-3-23	5-5-23	
4,6-Dinitro-2-methylphenol	ND	3.4	EPA 8270E	5-3-23	5-5-23	
n-Nitrosodiphenylamine	ND	0.50	EPA 8270E	5-3-23	5-5-23	
1,2-Diphenylhydrazine	ND	0.50	EPA 8270E	5-3-23	5-5-23	
4-Bromophenyl-phenylether	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Hexachlorobenzene	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Pentachlorophenol	ND	3.4	EPA 8270E	5-3-23	5-5-23	
Phenanthrene	4.7	0.50	EPA 8270E	5-3-23	5-5-23	
Anthracene	2.8	0.50	EPA 8270E	5-3-23	5-5-23	
Carbazole	ND	0.50	EPA 8270E	5-3-23	5-5-23	
Di-n-butylphthalate	ND	2.5	EPA 8270E	5-3-23	5-5-23	
Fluoranthene	9.1	0.50	EPA 8270E	5-3-23	5-5-23	
Pyrene	6.3	0.50	EPA 8270E	5-3-23	5-5-23	
Butylbenzylphthalate	ND	2.5	EPA 8270E	5-3-23	5-5-23	
bis-2-Ethylhexyladipate	ND	2.5	EPA 8270E	5-3-23	5-5-23	
3,3'-Dichlorobenzidine	ND	2.5	EPA 8270E	5-3-23	5-5-23	
Benzo[a]anthracene	3.4	0.50	EPA 8270E	5-3-23	5-5-23	
Chrysene	4.3	0.50	EPA 8270E	5-3-23	5-5-23	
bis(2-Ethylhexyl)phthalate	ND	2.5	EPA 8270E	5-3-23	5-5-23	
Di-n-octylphthalate	ND	2.5	EPA 8270E	5-3-23	5-5-23	
Benzo[b]fluoranthene	3.4	0.50	EPA 8270E	5-3-23	5-5-23	
Benzo(j,k)fluoranthene	1.2	0.50	EPA 8270E	5-3-23	5-5-23	
Benzo[a]pyrene	2.5	0.50	EPA 8270E	5-3-23	5-5-23	
Indeno[1,2,3-cd]pyrene	0.95	0.50	EPA 8270E	5-3-23	5-5-23	
Dibenz[a,h]anthracene	0.22	0.040	EPA 8270E/SIM	5-3-23	5-5-23	
Benzo[g,h,i]perylene	0.84	0.50	EPA 8270E	5-3-23	5-5-23	
Benzoic Acid	ND	1.0	EPA 8270E	5-3-23	5-10-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	81	11 - 111				
Phenol-d6	90	26 - 117				
Nitrobenzene-d5	77	31 - 111				
2-Fluorobiphenyl	86	38 - 109				
2,4,6-Tribromophenol	80	27 - 127				
Terphenyl-d14	89	37 - 116				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**SEMIVOLATILE ORGANICS EPA 8270E/SIM
 QUALITY CONTROL**

page 1 of 2

Matrix: Solid
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0503S3					
n-Nitrosodimethylamine	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Pyridine	ND	0.20	EPA 8270E	5-3-23	5-5-23	
Phenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Aniline	ND	0.10	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethyl)ether	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2-Chlorophenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
1,3-Dichlorobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
1,4-Dichlorobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Benzyl alcohol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
1,2-Dichlorobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2-Methylphenol (o-Cresol)	ND	0.020	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroisopropyl)ether	ND	0.020	EPA 8270E	5-3-23	5-5-23	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.020	EPA 8270E	5-3-23	5-5-23	
n-Nitroso-di-n-propylamine	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Hexachloroethane	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Nitrobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Isophorone	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2-Nitrophenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2,4-Dimethylphenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
bis(2-Chloroethoxy)methane	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2,4-Dichlorophenol	ND	0.040	EPA 8270E	5-3-23	5-5-23	
1,2,4-Trichlorobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Naphthalene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
4-Chloroaniline	ND	0.10	EPA 8270E	5-3-23	5-5-23	
Hexachlorobutadiene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
4-Chloro-3-methylphenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2-Methylnaphthalene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
1-Methylnaphthalene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Hexachlorocyclopentadiene	ND	0.10	EPA 8270E	5-3-23	5-5-23	
2,4,6-Trichlorophenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2,3-Dichloroaniline	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2,4,5-Trichlorophenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2-Chloronaphthalene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2-Nitroaniline	ND	0.020	EPA 8270E	5-3-23	5-5-23	
1,4-Dinitrobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Dimethylphthalate	ND	0.020	EPA 8270E	5-3-23	5-5-23	
1,3-Dinitrobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2,6-Dinitrotoluene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
1,2-Dinitrobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Acenaphthylene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
3-Nitroaniline	ND	0.020	EPA 8270E	5-3-23	5-5-23	



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**SEMIVOLATILE ORGANICS EPA 8270E/SIM
 QUALITY CONTROL**

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0503S3					
2,4-Dinitrophenol	ND	0.15	EPA 8270E	5-3-23	5-5-23	
Acenaphthene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
4-Nitrophenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2,4-Dinitrotoluene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Dibenzofuran	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2,3,5,6-Tetrachlorophenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
2,3,4,6-Tetrachlorophenol	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Diethylphthalate	ND	0.050	EPA 8270E	5-3-23	5-5-23	
4-Chlorophenyl-phenylether	ND	0.020	EPA 8270E	5-3-23	5-5-23	
4-Nitroaniline	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Fluorene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
4,6-Dinitro-2-methylphenol	ND	0.14	EPA 8270E	5-3-23	5-5-23	
n-Nitrosodiphenylamine	ND	0.020	EPA 8270E	5-3-23	5-5-23	
1,2-Diphenylhydrazine	ND	0.020	EPA 8270E	5-3-23	5-5-23	
4-Bromophenyl-phenylether	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Hexachlorobenzene	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Pentachlorophenol	ND	0.14	EPA 8270E	5-3-23	5-5-23	
Phenanthrene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Anthracene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Carbazole	ND	0.020	EPA 8270E	5-3-23	5-5-23	
Di-n-butylphthalate	ND	0.10	EPA 8270E	5-3-23	5-5-23	
Fluoranthene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Pyrene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Butylbenzylphthalate	ND	0.10	EPA 8270E	5-3-23	5-5-23	
bis-2-Ethylhexyladipate	ND	0.10	EPA 8270E	5-3-23	5-5-23	
3,3'-Dichlorobenzidine	ND	0.10	EPA 8270E	5-3-23	5-5-23	
Benzo[a]anthracene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Chrysene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
bis(2-Ethylhexyl)phthalate	ND	0.10	EPA 8270E	5-3-23	5-5-23	
Di-n-octylphthalate	ND	0.10	EPA 8270E	5-3-23	5-5-23	
Benzo[b]fluoranthene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Benzo(j,k)fluoranthene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Benzo[a]pyrene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Indeno[1,2,3-cd]pyrene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Dibenz[a,h]anthracene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Benzo[g,h,i]perylene	ND	0.0040	EPA 8270E/SIM	5-3-23	5-5-23	
Benzoic Acid	ND	0.040	EPA 8270E	5-3-23	5-9-23	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	79	11 - 111				
Phenol-d6	84	26 - 117				
Nitrobenzene-d5	70	31 - 111				
2-Fluorobiphenyl	76	38 - 109				
2,4,6-Tribromophenol	83	27 - 127				
Terphenyl-d14	80	37 - 116				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

SEMIVOLATILE ORGANICS EPA 8270E/SIM
QUALITY CONTROL

page 1 of 2

Matrix: Solid
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0503S1										
	SB	SBD	SB	SBD	SB	SBD					
n-Nitrosodimethylamine	0.474	0.522	0.667	0.667	71	78	20 - 120	10	30		
Pyridine	0.111	0.148	0.667	0.667	17	22	20 - 120	29	30		I
Phenol	0.464	0.511	0.667	0.667	70	77	49 - 109	10	23		
Aniline	0.343	0.446	0.667	0.667	51	67	20 - 120	26	30		
bis(2-Chloroethyl)ether	0.449	0.487	0.667	0.667	67	73	20 - 120	8	30		
2-Chlorophenol	0.458	0.501	0.667	0.667	69	75	52 - 105	9	26		
1,3-Dichlorobenzene	0.445	0.477	0.667	0.667	67	72	20 - 120	7	30		
1,4-Dichlorobenzene	0.448	0.491	0.667	0.667	67	74	51 - 102	9	28		
Benzyl alcohol	0.599	0.651	0.667	0.667	90	98	20 - 120	8	30		
1,2-Dichlorobenzene	0.449	0.483	0.667	0.667	67	72	20 - 120	7	30		
2-Methylphenol (o-Cresol)	0.449	0.488	0.667	0.667	67	73	20 - 120	8	30		
bis(2-Chloroisopropyl)ether	0.463	0.500	0.667	0.667	69	75	20 - 120	8	30		
(3+4)-Methylphenol (m,p-Cresol)	0.473	0.514	0.667	0.667	71	77	20 - 120	8	30		
n-Nitroso-di-n-propylamine	0.474	0.514	0.667	0.667	71	77	46 - 111	8	25		
Hexachloroethane	0.450	0.486	0.667	0.667	67	73	20 - 120	8	30		
Nitrobenzene	0.474	0.509	0.667	0.667	71	76	20 - 120	7	30		
Isophorone	0.483	0.510	0.667	0.667	72	76	20 - 120	5	30		
2-Nitrophenol	0.476	0.498	0.667	0.667	71	75	20 - 120	5	30		
2,4-Dimethylphenol	0.459	0.512	0.667	0.667	69	77	20 - 120	11	30		
bis(2-Chloroethoxy)methane	0.464	0.493	0.667	0.667	70	74	20 - 120	6	30		
2,4-Dichlorophenol	0.487	0.523	0.667	0.667	73	78	20 - 120	7	30		
1,2,4-Trichlorobenzene	0.461	0.498	0.667	0.667	69	75	52 - 106	8	28		
Naphthalene	0.478	0.520	0.667	0.667	72	78	20 - 120	8	30		
4-Chloroaniline	0.456	0.512	0.667	0.667	68	77	20 - 120	12	30		
Hexachlorobutadiene	0.468	0.508	0.667	0.667	70	76	20 - 120	8	30		
4-Chloro-3-methylphenol	0.502	0.545	0.667	0.667	75	82	54 - 112	8	20		
2-Methylnaphthalene	0.475	0.512	0.667	0.667	71	77	20 - 120	7	30		
1-Methylnaphthalene	0.492	0.528	0.667	0.667	74	79	20 - 120	7	30		
Hexachlorocyclopentadiene	0.605	0.654	0.667	0.667	91	98	20 - 120	8	30		
2,4,6-Trichlorophenol	0.502	0.530	0.667	0.667	75	79	20 - 120	5	30		
2,3-Dichloroaniline	0.487	0.522	0.667	0.667	73	78	20 - 120	7	30		
2,4,5-Trichlorophenol	0.513	0.544	0.667	0.667	77	82	20 - 120	6	30		
2-Chloronaphthalene	0.486	0.522	0.667	0.667	73	78	20 - 120	7	30		
2-Nitroaniline	0.516	0.547	0.667	0.667	77	82	20 - 120	6	30		
1,4-Dinitrobenzene	0.512	0.523	0.667	0.667	77	78	20 - 120	2	30		
Dimethylphthalate	0.508	0.539	0.667	0.667	76	81	20 - 120	6	30		
1,3-Dinitrobenzene	0.511	0.540	0.667	0.667	77	81	20 - 120	6	30		
2,6-Dinitrotoluene	0.507	0.539	0.667	0.667	76	81	20 - 120	6	30		
1,2-Dinitrobenzene	0.520	0.526	0.667	0.667	78	79	20 - 120	1	30		



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**SEMIVOLATILE ORGANICS EPA 8270E/SIM
 QUALITY CONTROL**

page 2 of 2

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0503S1									
	SB	SBD	SB	SBD	SB	SBD				
Acenaphthylene	0.530	0.571	0.667	0.667	79	86	20 - 120	7	30	
3-Nitroaniline	0.502	0.530	0.667	0.667	75	79	20 - 120	5	30	
2,4-Dinitrophenol	0.750	0.690	0.667	0.667	112	103	20 - 120	8	30	
Acenaphthene	0.507	0.532	0.667	0.667	76	80	55 - 101	5	20	
4-Nitrophenol	0.644	0.674	0.667	0.667	97	101	34 - 136	5	22	
2,4-Dinitrotoluene	0.530	0.562	0.667	0.667	79	84	51 - 111	6	21	
Dibenzofuran	0.502	0.542	0.667	0.667	75	81	20 - 120	8	30	
2,3,5,6-Tetrachlorophenol	0.497	0.518	0.667	0.667	75	78	20 - 120	4	30	
2,3,4,6-Tetrachlorophenol	0.530	0.564	0.667	0.667	79	85	20 - 120	6	30	
Diethylphthalate	0.520	0.559	0.667	0.667	78	84	20 - 120	7	30	
4-Chlorophenyl-phenylether	0.494	0.522	0.667	0.667	74	78	20 - 120	6	30	
4-Nitroaniline	0.522	0.552	0.667	0.667	78	83	20 - 120	6	30	
Fluorene	0.507	0.540	0.667	0.667	76	81	20 - 120	6	30	
4,6-Dinitro-2-methylphenol	0.521	0.521	0.667	0.667	78	78	20 - 120	0	30	
n-Nitrosodiphenylamine	0.484	0.521	0.667	0.667	73	78	20 - 120	7	30	
1,2-Diphenylhydrazine	0.480	0.516	0.667	0.667	72	77	20 - 120	7	30	
4-Bromophenyl-phenylether	0.499	0.525	0.667	0.667	75	79	20 - 120	5	30	
Hexachlorobenzene	0.497	0.530	0.667	0.667	75	79	20 - 120	6	30	
Pentachlorophenol	0.529	0.551	0.667	0.667	79	83	34 - 134	4	23	
Phenanthrene	0.498	0.534	0.667	0.667	75	80	20 - 120	7	30	
Anthracene	0.501	0.544	0.667	0.667	75	82	20 - 120	8	30	
Carbazole	0.499	0.534	0.667	0.667	75	80	20 - 120	7	30	
Di-n-butylphthalate	0.536	0.568	0.667	0.667	80	85	20 - 120	6	30	
Fluoranthene	0.505	0.541	0.667	0.667	76	81	20 - 120	7	30	
Pyrene	0.515	0.543	0.667	0.667	77	81	53 - 113	5	20	
Butylbenzylphthalate	0.523	0.555	0.667	0.667	78	83	20 - 120	6	30	
bis-2-Ethylhexyladipate	0.508	0.539	0.667	0.667	76	81	20 - 120	6	30	
3,3'-Dichlorobenzidine	0.446	0.510	0.667	0.667	67	76	20 - 120	13	30	
Benzo[a]anthracene	0.496	0.532	0.667	0.667	74	80	20 - 120	7	30	
Chrysene	0.511	0.542	0.667	0.667	77	81	20 - 120	6	30	
bis(2-Ethylhexyl)phthalate	0.698	0.795	0.667	0.667	105	119	20 - 120	13	30	
Di-n-octylphthalate	0.530	0.558	0.667	0.667	79	84	20 - 120	5	30	
Benzo[b]fluoranthene	0.504	0.532	0.667	0.667	76	80	20 - 120	5	30	
Benzo(j,k)fluoranthene	0.497	0.525	0.667	0.667	75	79	20 - 120	5	30	
Benzo[a]pyrene	0.498	0.529	0.667	0.667	75	79	20 - 120	6	30	
Indeno[1,2,3-cd]pyrene	0.539	0.570	0.667	0.667	81	85	20 - 120	6	30	
Dibenz[a,h]anthracene	0.550	0.587	0.667	0.667	82	88	20 - 120	7	30	
Benzo[g,h,i]perylene	0.542	0.569	0.667	0.667	81	85	20 - 120	5	30	
Surrogate:										
2-Fluorophenol					61	65	11 - 111			
Phenol-d6					65	69	26 - 117			
Nitrobenzene-d5					65	69	31 - 111			
2-Fluorobiphenyl					68	72	38 - 109			
2,4,6-Tribromophenol					79	85	27 - 127			
Terphenyl-d14					76	79	37 - 116			



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

PCBs EPA 8082A

Matrix: Sediment
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: PS63-SS-01						
Laboratory ID:	04-330-01					
Aroclor 1016	ND	0.023	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1221	ND	0.023	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1232	ND	0.023	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1242	ND	0.0023	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1248	ND	0.0023	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1254	0.010	0.0023	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1260	0.013	0.0023	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1262	ND	0.0023	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1268	ND	0.0023	EPA 8082A	5-5-23	5-8-23	X
Surrogate:	Percent Recovery	Control Limits				
DCB	85	50-127				
Client ID: PS63-SS-02						
Laboratory ID:	04-330-02					
Aroclor 1016	ND	0.024	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1221	ND	0.024	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1232	ND	0.024	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1242	ND	0.0024	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1248	ND	0.0024	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1254	0.030	0.0024	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1260	0.040	0.0024	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1262	ND	0.0024	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1268	ND	0.0024	EPA 8082A	5-5-23	5-8-23	X
Surrogate:	Percent Recovery	Control Limits				
DCB	91	50-127				
Client ID: PS63-SS-03						
Laboratory ID:	04-330-03					
Aroclor 1016	ND	0.14	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1221	ND	0.14	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1232	ND	0.14	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1242	ND	0.014	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1248	ND	0.014	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1254	0.046	0.014	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1260	0.045	0.014	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1262	ND	0.014	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1268	ND	0.014	EPA 8082A	5-5-23	5-8-23	X
Surrogate:	Percent Recovery	Control Limits				
DCB	108	50-127				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

PCBs EPA 8082A

Matrix: Sediment
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-04					
Laboratory ID:	04-330-04					
Aroclor 1016	ND	0.020	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1221	ND	0.020	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1232	ND	0.020	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1242	ND	0.0020	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1248	ND	0.0020	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1254	0.025	0.0020	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1260	0.026	0.0020	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1262	ND	0.0020	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1268	ND	0.0020	EPA 8082A	5-5-23	5-8-23	X
Surrogate:	Percent Recovery	Control Limits				
DCB	91	50-127				
Client ID:	PS63-SS-05					
Laboratory ID:	04-330-05					
Aroclor 1016	ND	0.025	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1221	ND	0.025	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1232	ND	0.025	EPA 8082A	5-5-23	5-8-23	X,U1
Aroclor 1242	ND	0.0025	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1248	ND	0.0025	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1254	ND	0.0025	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1260	0.0031	0.0025	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1262	ND	0.0025	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1268	ND	0.0025	EPA 8082A	5-5-23	5-8-23	X
Surrogate:	Percent Recovery	Control Limits				
DCB	64	50-127				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0505S1					
Aroclor 1016	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1221	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1232	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1242	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1248	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1254	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1260	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1262	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Aroclor 1268	ND	0.0010	EPA 8082A	5-5-23	5-8-23	X
Surrogate:	Percent Recovery	Control Limits				
DCB	107	50-127				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0505S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	0.555	0.537	0.500	0.500	N/A	111	107	55-119	3	34	
Surrogate:											
DCB						117	115	50-127			



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**ORGANOCHLORINE
 PESTICIDES EPA 8081B**

Matrix: Sediment
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-01					
Laboratory ID:	04-330-01					
HCBd	ND	2.3	EPA 8081B	4-25-23	5-9-23	
Hexachlorobenzene	ND	2.3	EPA 8081B	4-25-23	5-9-23	
alpha-BHC	ND	2.3	EPA 8081B	4-25-23	5-9-23	
gamma-BHC	ND	2.3	EPA 8081B	4-25-23	5-9-23	
beta-BHC	ND	2.3	EPA 8081B	4-25-23	5-9-23	Y1
delta-BHC	ND	2.3	EPA 8081B	4-25-23	5-9-23	
Heptachlor	ND	2.3	EPA 8081B	4-25-23	5-9-23	Y1
Aldrin	ND	2.3	EPA 8081B	4-25-23	5-9-23	
Heptachlor epoxide	ND	2.3	EPA 8081B	4-25-23	5-9-23	
gamma-Chlordane	ND	4.5	EPA 8081B	4-25-23	5-9-23	
alpha-Chlordane	ND	4.5	EPA 8081B	4-25-23	5-9-23	
4,4'-DDE	ND	4.5	EPA 8081B	4-25-23	5-9-23	
Endosulfan I	ND	2.3	EPA 8081B	4-25-23	5-9-23	
Dieldrin	ND	4.5	EPA 8081B	4-25-23	5-9-23	
Endrin	ND	4.5	EPA 8081B	4-25-23	5-9-23	
4,4'-DDD	ND	4.5	EPA 8081B	4-25-23	5-9-23	
Endosulfan II	ND	4.5	EPA 8081B	4-25-23	5-9-23	
4,4'-DDT	ND	4.5	EPA 8081B	4-25-23	5-9-23	Y1
Endrin aldehyde	ND	4.5	EPA 8081B	4-25-23	5-9-23	
Methoxychlor	ND	4.5	EPA 8081B	4-25-23	5-9-23	Y1
Endosulfan sulfate	ND	4.5	EPA 8081B	4-25-23	5-9-23	Y1
Endrin ketone	ND	4.5	EPA 8081B	4-25-23	5-9-23	Y1
Toxaphene	ND	23	EPA 8081B	4-25-23	5-9-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control limits</i>				
<i>Tetrachloro-m-xylene</i>	<i>45</i>	<i>33-108</i>				
<i>Decachlorobiphenyl</i>	<i>111</i>	<i>27-120</i>				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**ORGANOCHLORINE
 PESTICIDES EPA 8081B**

Matrix: Sediment
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-02					
Laboratory ID:	04-330-02					
HCBD	ND	4.9	EPA 8081B	4-25-23	5-9-23	
Hexachlorobenzene	ND	4.9	EPA 8081B	4-25-23	5-9-23	
alpha-BHC	ND	4.9	EPA 8081B	4-25-23	5-9-23	
gamma-BHC	ND	4.9	EPA 8081B	4-25-23	5-9-23	
beta-BHC	ND	4.9	EPA 8081B	4-25-23	5-9-23	
delta-BHC	ND	4.9	EPA 8081B	4-25-23	5-9-23	
Heptachlor	ND	4.9	EPA 8081B	4-25-23	5-9-23	Y1
Aldrin	ND	4.9	EPA 8081B	4-25-23	5-9-23	
Heptachlor epoxide	ND	4.9	EPA 8081B	4-25-23	5-9-23	
gamma-Chlordane	ND	9.8	EPA 8081B	4-25-23	5-9-23	
alpha-Chlordane	ND	9.8	EPA 8081B	4-25-23	5-9-23	
4,4'-DDE	ND	9.8	EPA 8081B	4-25-23	5-9-23	
Endosulfan I	ND	4.9	EPA 8081B	4-25-23	5-9-23	
Dieldrin	ND	9.8	EPA 8081B	4-25-23	5-9-23	
Endrin	ND	9.8	EPA 8081B	4-25-23	5-9-23	
4,4'-DDD	ND	9.8	EPA 8081B	4-25-23	5-9-23	
Endosulfan II	ND	9.8	EPA 8081B	4-25-23	5-9-23	
4,4'-DDT	ND	9.8	EPA 8081B	4-25-23	5-9-23	Y1
Endrin aldehyde	ND	9.8	EPA 8081B	4-25-23	5-9-23	
Methoxychlor	ND	9.8	EPA 8081B	4-25-23	5-9-23	Y1
Endosulfan sulfate	ND	9.8	EPA 8081B	4-25-23	5-9-23	Y1
Endrin ketone	ND	9.8	EPA 8081B	4-25-23	5-9-23	Y1
Toxaphene	ND	49	EPA 8081B	4-25-23	5-9-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control limits</i>				
<i>Tetrachloro-m-xylene</i>	<i>39</i>	<i>33-108</i>				
<i>Decachlorobiphenyl</i>	<i>81</i>	<i>27-120</i>				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**ORGANOCHLORINE
 PESTICIDES EPA 8081B**

Matrix: Sediment
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-03					
Laboratory ID:	04-330-03					
HCBD	ND	2.9	EPA 8081B	4-25-23	5-9-23	
Hexachlorobenzene	ND	2.9	EPA 8081B	4-25-23	5-9-23	
alpha-BHC	ND	2.9	EPA 8081B	4-25-23	5-9-23	
gamma-BHC	ND	2.9	EPA 8081B	4-25-23	5-9-23	Y1
beta-BHC	ND	2.9	EPA 8081B	4-25-23	5-9-23	
delta-BHC	ND	2.9	EPA 8081B	4-25-23	5-9-23	
Heptachlor	ND	2.9	EPA 8081B	4-25-23	5-9-23	Y1
Aldrin	ND	2.9	EPA 8081B	4-25-23	5-9-23	Y1
Heptachlor epoxide	ND	2.9	EPA 8081B	4-25-23	5-9-23	
gamma-Chlordane	ND	5.7	EPA 8081B	4-25-23	5-9-23	Y1
alpha-Chlordane	ND	5.7	EPA 8081B	4-25-23	5-9-23	
4,4'-DDE	ND	5.7	EPA 8081B	4-25-23	5-9-23	
Endosulfan I	ND	2.9	EPA 8081B	4-25-23	5-9-23	
Dieldrin	ND	5.7	EPA 8081B	4-25-23	5-9-23	Y1
Endrin	ND	5.7	EPA 8081B	4-25-23	5-9-23	
4,4'-DDD	ND	5.7	EPA 8081B	4-25-23	5-9-23	
Endosulfan II	ND	5.7	EPA 8081B	4-25-23	5-9-23	
4,4'-DDT	ND	5.7	EPA 8081B	4-25-23	5-9-23	Y1
Endrin aldehyde	ND	5.7	EPA 8081B	4-25-23	5-9-23	
Methoxychlor	ND	5.7	EPA 8081B	4-25-23	5-9-23	Y1
Endosulfan sulfate	ND	5.7	EPA 8081B	4-25-23	5-9-23	Y1
Endrin ketone	ND	5.7	EPA 8081B	4-25-23	5-9-23	Y1
Toxaphene	ND	29	EPA 8081B	4-25-23	5-9-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control limits</i>				
<i>Tetrachloro-m-xylene</i>	<i>59</i>	<i>33-108</i>				
<i>Decachlorobiphenyl</i>	<i>45</i>	<i>27-120</i>				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**ORGANOCHLORINE
 PESTICIDES EPA 8081B**

Matrix: Sediment
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-04					
Laboratory ID:	04-330-04					
HCBd	ND	2.0	EPA 8081B	4-25-23	5-9-23	
Hexachlorobenzene	ND	2.0	EPA 8081B	4-25-23	5-9-23	
alpha-BHC	ND	2.0	EPA 8081B	4-25-23	5-9-23	
gamma-BHC	ND	2.0	EPA 8081B	4-25-23	5-9-23	
beta-BHC	ND	2.0	EPA 8081B	4-25-23	5-9-23	
delta-BHC	ND	2.0	EPA 8081B	4-25-23	5-9-23	
Heptachlor	ND	2.0	EPA 8081B	4-25-23	5-9-23	Y1
Aldrin	ND	2.0	EPA 8081B	4-25-23	5-9-23	
Heptachlor epoxide	ND	2.0	EPA 8081B	4-25-23	5-9-23	
gamma-Chlordane	ND	4.0	EPA 8081B	4-25-23	5-9-23	
alpha-Chlordane	ND	4.0	EPA 8081B	4-25-23	5-9-23	
4,4'-DDE	ND	4.0	EPA 8081B	4-25-23	5-9-23	
Endosulfan I	ND	2.0	EPA 8081B	4-25-23	5-9-23	
Dieldrin	ND	4.0	EPA 8081B	4-25-23	5-9-23	
Endrin	ND	4.0	EPA 8081B	4-25-23	5-9-23	
4,4'-DDD	ND	4.0	EPA 8081B	4-25-23	5-9-23	
Endosulfan II	ND	4.0	EPA 8081B	4-25-23	5-9-23	
4,4'-DDT	ND	4.0	EPA 8081B	4-25-23	5-9-23	Y1
Endrin aldehyde	ND	4.0	EPA 8081B	4-25-23	5-9-23	
Methoxychlor	ND	4.0	EPA 8081B	4-25-23	5-9-23	Y1
Endosulfan sulfate	ND	4.0	EPA 8081B	4-25-23	5-9-23	Y1
Endrin ketone	ND	4.0	EPA 8081B	4-25-23	5-9-23	Y1
Toxaphene	ND	20	EPA 8081B	4-25-23	5-9-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control limits</i>				
<i>Tetrachloro-m-xylene</i>	<i>37</i>	<i>33-108</i>				
<i>Decachlorobiphenyl</i>	<i>56</i>	<i>27-120</i>				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**ORGANOCHLORINE
 PESTICIDES EPA 8081B**

Matrix: Sediment
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PS63-SS-05					
Laboratory ID:	04-330-05					
HCBD	ND	2.5	EPA 8081B	4-25-23	5-9-23	
Hexachlorobenzene	ND	2.5	EPA 8081B	4-25-23	5-9-23	
alpha-BHC	ND	2.5	EPA 8081B	4-25-23	5-9-23	
gamma-BHC	ND	2.5	EPA 8081B	4-25-23	5-9-23	Y1
beta-BHC	ND	2.5	EPA 8081B	4-25-23	5-9-23	
delta-BHC	ND	2.5	EPA 8081B	4-25-23	5-9-23	
Heptachlor	ND	2.5	EPA 8081B	4-25-23	5-9-23	Y1
Aldrin	ND	2.5	EPA 8081B	4-25-23	5-9-23	
Heptachlor epoxide	ND	2.5	EPA 8081B	4-25-23	5-9-23	
gamma-Chlordane	ND	5.0	EPA 8081B	4-25-23	5-9-23	
alpha-Chlordane	ND	5.0	EPA 8081B	4-25-23	5-9-23	
4,4'-DDE	ND	5.0	EPA 8081B	4-25-23	5-9-23	
Endosulfan I	ND	2.5	EPA 8081B	4-25-23	5-9-23	
Dieldrin	ND	5.0	EPA 8081B	4-25-23	5-9-23	
Endrin	ND	5.0	EPA 8081B	4-25-23	5-9-23	
4,4'-DDD	ND	5.0	EPA 8081B	4-25-23	5-9-23	
Endosulfan II	ND	5.0	EPA 8081B	4-25-23	5-9-23	
4,4'-DDT	ND	5.0	EPA 8081B	4-25-23	5-9-23	Y1
Endrin aldehyde	ND	5.0	EPA 8081B	4-25-23	5-9-23	
Methoxychlor	ND	5.0	EPA 8081B	4-25-23	5-9-23	Y1
Endosulfan sulfate	ND	5.0	EPA 8081B	4-25-23	5-9-23	Y1
Endrin ketone	ND	5.0	EPA 8081B	4-25-23	5-9-23	Y1
Toxaphene	ND	25	EPA 8081B	4-25-23	5-9-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control limits</i>				
<i>Tetrachloro-m-xylene</i>	<i>56</i>	<i>33-108</i>				
<i>Decachlorobiphenyl</i>	<i>73</i>	<i>27-120</i>				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**ORGANOCHLORINE
 PESTICIDES EPA 8081B
 QUALITY CONTROL**

Matrix: Solid
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0505S2					
HCBD	ND	0.10	EPA 8081B	4-25-23	5-8-23	
Hexachlorobenzene	ND	0.10	EPA 8081B	4-25-23	5-8-23	
alpha-BHC	ND	0.10	EPA 8081B	4-25-23	5-8-23	
gamma-BHC	ND	0.10	EPA 8081B	4-25-23	5-8-23	
beta-BHC	ND	0.10	EPA 8081B	4-25-23	5-8-23	
delta-BHC	ND	0.10	EPA 8081B	4-25-23	5-8-23	
Heptachlor	ND	0.10	EPA 8081B	4-25-23	5-8-23	
Aldrin	ND	0.10	EPA 8081B	4-25-23	5-8-23	
Heptachlor epoxide	ND	0.10	EPA 8081B	4-25-23	5-8-23	
gamma-Chlordane	ND	0.20	EPA 8081B	4-25-23	5-8-23	
alpha-Chlordane	ND	0.20	EPA 8081B	4-25-23	5-8-23	
4,4'-DDE	ND	0.20	EPA 8081B	4-25-23	5-8-23	
Endosulfan I	ND	0.10	EPA 8081B	4-25-23	5-8-23	
Dieldrin	ND	0.20	EPA 8081B	4-25-23	5-8-23	
Endrin	ND	0.20	EPA 8081B	4-25-23	5-8-23	
4,4'-DDD	ND	0.20	EPA 8081B	4-25-23	5-8-23	
Endosulfan II	ND	0.20	EPA 8081B	4-25-23	5-8-23	
4,4'-DDT	ND	0.20	EPA 8081B	4-25-23	5-8-23	
Endrin aldehyde	ND	0.20	EPA 8081B	4-25-23	5-8-23	
Methoxychlor	ND	0.20	EPA 8081B	4-25-23	5-8-23	
Endosulfan sulfate	ND	0.20	EPA 8081B	4-25-23	5-8-23	
Endrin ketone	ND	0.20	EPA 8081B	4-25-23	5-8-23	
Toxaphene	ND	1.0	EPA 8081B	4-25-23	5-8-23	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control limits</i>				
<i>Tetrachloro-m-xylene</i>	63	33-108				
<i>Decachlorobiphenyl</i>	69	27-120				



Date of Report: June 19, 2023
 Samples Submitted: April 28, 2023
 Laboratory Reference: 2304-330
 Project: 220795-01.01

**ORGANOCHLORINE
 PESTICIDES EPA 8081B
 QUALITY CONTROL**

Matrix: Solid
 Units: ug/Kg (ppb)

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD			
					Result	Recovery	Limits	RPD	Limit	Flags	
SPIKE BLANKS											
Laboratory ID:	SB0505S2										
	SB	SBD	SB	SBD		SB	SBD				
alpha-BHC	107	114	100	100	N/A	107	114	59-113	6	17	I
gamma-BHC	109	114	100	100	N/A	109	114	58-112	4	17	I
beta-BHC	105	113	100	100	N/A	105	113	50-108	7	17	I
delta-BHC	89.7	97.4	100	100	N/A	90	97	58-117	8	16	
Heptachlor	111	110	100	100	N/A	111	110	51-115	1	15	
Aldrin	105	108	100	100	N/A	105	108	56-112	3	15	
Heptachlor epoxide	113	119	100	100	N/A	113	119	56-116	5	15	I
gamma-Chlordane	105	113	100	100	N/A	105	113	55-110	7	16	I
alpha-Chlordane	107	119	100	100	N/A	107	119	55-110	11	16	I
4,4'-DDE	116	126	100	100	N/A	116	126	56-125	8	16	I
Endosulfan I	111	121	100	100	N/A	111	121	56-111	9	16	I
Dieldrin	115	127	100	100	N/A	115	127	60-118	10	16	I
Endrin	120	117	100	100	N/A	120	117	58-122	3	16	
4,4'-DDD	102	113	100	100	N/A	102	113	59-120	10	17	
Endosulfan II	114	106	100	100	N/A	114	106	57-119	7	16	
4,4'-DDT	116	123	100	100	N/A	116	123	52-125	6	20	
Endrin aldehyde	90.7	99.0	100	100	N/A	91	99	52-112	9	16	
Methoxychlor	108	117	100	100	N/A	108	117	54-132	8	20	
Endosulfan sulfate	102	105	100	100	N/A	102	105	55-111	3	18	
Endrin ketone	107	106	100	100	N/A	107	106	54-115	1	18	

Surrogate:

Tetrachloro-m-xylene

100 106 33-108

Decachlorobiphenyl

93 99 27-120





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- X2 - Sample extract treated with a silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference

