
HIGH 4
Top
Bottom

HIGH 4
Top
Bottom


High 1
Top
Bottom


High 1
Top
Bottom


High 1
Top
Bottom


High 3
Top
Bottom


High 3
Top
Bottom

High 3
Top
Bottom

HIGH 2
Top
Bottom


HIGH 2
Top
Bottom


HIGH 2
Top
Bottom

Attachment B

Poughkeepsie Sediment Cores

Laboratory Results

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **Normandeau Associates Inc.-Stowe**

Project CHPE Hudson River
Workorder 3265451
Report ID 208934 on 11/23/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Sep 24, 2022.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Sarah Leung (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Don Nazario - Normandeau Associates, Inc.-Stowe
Michael Mettler - Normandeau Associates, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sarah Leung

Sarah Leung *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3265451001	POUGH 1A	Solid	09/23/2022 11:30	09/24/2022 08:49	CBC	Collected By Client
3265451002	POUGH 1B	Solid	09/23/2022 11:45	09/24/2022 08:49	CBC	Collected By Client
3265451003	POUGH 2A	Solid	09/23/2022 09:20	09/24/2022 08:49	CBC	Collected By Client
3265451004	POUGH 2B	Solid	09/23/2022 09:30	09/24/2022 08:49	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID		
3265451001	POUGH 1A	**S1**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.
3265451002	POUGH 1B	**S2**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.
3265451003	POUGH 2A	**S3**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.
3265451004	POUGH 2B	**S4**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.

Result Notations

Notation Ref.	
1	See attached subcontract Dioxin results from ALS Houston. SLW 11/23/2022
2	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 56% in the bracketing CCV.
3	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 43% in the bracketing CCV.
4	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased low 62% in the bracketing CCV.
5	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 31% in the bracketing CCV.
6	The surrogate Decachlorobiphenyl for method SW846 8081B was outside of control limits. The % Recovery was reported as 26.9 and the control limits were 30 to 135. This result was reported at a dilution of 5.

Detected Results Summary

Client Sample ID	POUGH 1A	Collected	09/23/2022 11:30
Lab Sample ID	3265451001	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	6.0	mg/kg	3.3	1.1	SW846 6010D	#
Cadmium, Total	0.28J	mg/kg	0.82	0.27	SW846 6010D	#
Copper, Total	14.9	mg/kg	3.3	1.1	SW846 6010D	#
Lead, Total	14.4	mg/kg	3.3	1.1	SW846 6010D	#
Mercury, Total	0.064J	mg/kg	0.092	0.030	SW846 7471B	#
SEMIVOLATILES						
Benzo(a)anthracene	45.8J	ug/kg	84.4	28.7	SW846 8270D	#
Benzo(a)pyrene	54.7J	ug/kg	84.4	28.7	SW846 8270D	#
Benzo(b)fluoranthene	35.3J	ug/kg	84.4	28.7	SW846 8270D	#
Benzo(g,h,i)perylene	41.0J	ug/kg	84.4	28.7	SW846 8270D	#
Benzo(k)fluoranthene	40.4J	ug/kg	84.4	28.7	SW846 8270D	#
Chrysene	36.1J	ug/kg	84.4	28.7	SW846 8270D	#
Fluoranthene	47.9J	ug/kg	84.4	28.7	SW846 8270D	#
Phenanthrene	34.8J	ug/kg	84.4	28.7	SW846 8270D	#
Pyrene	68.3J	ug/kg	84.4	28.7	SW846 8270D	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	47.1	%	0.1	0.01	S2540G-11	#
Total Solids	52.9	%	0.1	0.01	S2540G-11	#

Detected Results Summary

Client Sample ID	POUGH 1B	Collected	09/23/2022 11:45
Lab Sample ID	3265451002	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	5.3	mg/kg	3.2	1.1	SW846 6010D	#
Copper, Total	12.2	mg/kg	3.2	1.1	SW846 6010D	#
Lead, Total	10	mg/kg	3.2	1.1	SW846 6010D	#
Mercury, Total	0.036J	mg/kg	0.083	0.026	SW846 7471B	#
SEMIVOLATILES						
Chrysene	26.1J	ug/kg	72.7	24.7	SW846 8270D	#
Pyrene	38.9J	ug/kg	72.7	24.7	SW846 8270D	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	39.7	%	0.1	0.01	S2540G-11	#
Total Solids	60.3	%	0.1	0.01	S2540G-11	#

Detected Results Summary

Client Sample ID	POUGH 2A	Collected	09/23/2022 09:20
Lab Sample ID	3265451003	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	6.6	mg/kg	3.4	1.1	SW846 6010D	#
Cadmium, Total	0.78J	mg/kg	0.85	0.28	SW846 6010D	#
Copper, Total	24.5	mg/kg	3.4	1.1	SW846 6010D	#
Lead, Total	28.1	mg/kg	3.4	1.1	SW846 6010D	#
Mercury, Total	0.14	mg/kg	0.081	0.026	SW846 7471B	#
SEMIVOLATILES						
Benzo(a)anthracene	43.6J	ug/kg	77.4	26.3	SW846 8270D	#
Benzo(a)pyrene	47.7J	ug/kg	77.4	26.3	SW846 8270D	#
Benzo(b)fluoranthene	36.6J	ug/kg	77.4	26.3	SW846 8270D	#
Benzo(g,h,i)perylene	33.0J	ug/kg	77.4	26.3	SW846 8270D	#
Benzo(k)fluoranthene	42.9J	ug/kg	77.4	26.3	SW846 8270D	#
Chrysene	47.9J	ug/kg	77.4	26.3	SW846 8270D	#
Fluoranthene	62.2J	ug/kg	77.4	26.3	SW846 8270D	#
Indeno(1,2,3-cd)pyrene	34.3J	ug/kg	77.4	26.3	SW846 8270D	#
Phenanthrene	35.2J	ug/kg	77.4	26.3	SW846 8270D	#
Pyrene	65.1J	ug/kg	77.4	26.3	SW846 8270D	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	45.3	%	0.1	0.01	S2540G-11	#
Total Solids	54.7	%	0.1	0.01	S2540G-11	#

Detected Results Summary

Client Sample ID	POUGH 2B	Collected	09/23/2022 09:30
Lab Sample ID	3265451004	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	4.7	mg/kg	3.4	1.1	SW846 6010D	#
Copper, Total	11.2	mg/kg	3.4	1.1	SW846 6010D	#
Lead, Total	9.4	mg/kg	3.4	1.1	SW846 6010D	#
Mercury, Total	0.035J	mg/kg	0.077	0.025	SW846 7471B	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	42.2	%	0.1	0.01	S2540G-11	#
Total Solids	57.8	%	0.1	0.01	S2540G-11	#

Results

Client Sample ID	POUGH 1A	Collected	09/23/2022 11:30
Lab Sample ID	3265451001	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	6.0	S1	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:43	A1S	E1
Cadmium, Total	0.28J	J,S1	mg/kg	0.82	0.27	SW846 6010D	1	10/18/2022 16:43	A1S	E1
Copper, Total	14.9	S1	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:43	A1S	E1
Lead, Total	14.4	S1	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:43	A1S	E1
Mercury, Total	0.064J	J,S1	mg/kg	0.092	0.030	SW846 7471B	1	09/28/2022 14:26	WDA	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S1	ug/kg	15.7	10.1	SW846 8081B	5	10/05/2022 05:06	KJH	E
4,4'-DDE	ND	ND,3,S1	ug/kg	15.7	5.1	SW846 8081B	5	10/05/2022 05:06	KJH	E
4,4'-DDT	ND	ND,4,S1	ug/kg	15.7	4.5	SW846 8081B	5	10/05/2022 05:06	KJH	E
Chlordane	ND	ND,S1	ug/kg	322	54.3	SW846 8081B	5	10/05/2022 05:06	KJH	E
Dieldrin	ND	ND,5,S1	ug/kg	15.7	6.1	SW846 8081B	5	10/05/2022 05:06	KJH	E
Mirex	ND	ND,S1	ug/kg	15.7	4.9	SW846 8081B	5	10/05/2022 05:06	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	59.5%	30 – 135	10/05/2022 05:06	
Tetrachloro-m-xylene	877-09-8	64.1%	30 – 111	10/05/2022 05:06	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Acenaphthylene	ND	ND,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Anthracene	ND	ND,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Benzo(a)anthracene	45.8J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Benzo(a)pyrene	54.7J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Benzo(b)fluoranthene	35.3J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Benzo(g,h,i)perylene	41.0J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Benzo(k)fluoranthene	40.4J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Chrysene	36.1J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Fluoranthene	47.9J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Fluorene	ND	ND,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Indeno(1,2,3-cd)pyrene	ND	ND,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Naphthalene	ND	ND,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Phenanthrene	34.8J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E
Pyrene	68.3J	J,S1	ug/kg	84.4	28.7	SW846 8270D	1	09/27/2022 10:20	S7M	E

Results

Client Sample ID	POUGH 1A	Collected	09/23/2022 11:30
Lab Sample ID	3265451001	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	52.1%	19 – 132	09/27/2022 10:20	
2-Fluorobiphenyl	321-60-8	49.7%	40 – 110	09/27/2022 10:20	
2-Fluorophenol	367-12-4	45.3%	26 – 116	09/27/2022 10:20	
Nitrobenzene-d5	4165-60-0	49.5%	38 – 112	09/27/2022 10:20	
Phenol-d5	4165-62-2	47.6%	35 – 111	09/27/2022 10:20	
Terphenyl-d14	98904-43-9	55.9%	45 – 126	09/27/2022 10:20	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S1	ug/L			EPA 1613B	1	11/23/2022 10:44	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S1	ug/kg	3.8	0.94	SW846 8260C	1	09/27/2022 13:58	TMP	B
Ethylbenzene	ND	ND,S1	ug/kg	3.8	1.3	SW846 8260C	1	09/27/2022 13:58	TMP	B
Toluene	ND	ND,S1	ug/kg	3.8	1.3	SW846 8260C	1	09/27/2022 13:58	TMP	B
Total Xylenes	ND	ND,S1	ug/kg	11.3	2.6	SW846 8260C	1	09/27/2022 13:58	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.8%	56 – 124	09/27/2022 13:58	
4-Bromofluorobenzene	460-00-4	93.2%	51 – 128	09/27/2022 13:58	
Dibromofluoromethane	1868-53-7	104%	62 – 123	09/27/2022 13:58	
Toluene-d8	2037-26-5	95%	59 – 131	09/27/2022 13:58	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	47.1	S1	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	52.9	S1	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Results

Client Sample ID	POUGH 1B	Collected	09/23/2022 11:45
Lab Sample ID	3265451002	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	5.3	S2	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:46	A1S	E1
Cadmium, Total	ND	ND,S2	mg/kg	0.80	0.27	SW846 6010D	1	10/18/2022 16:46	A1S	E1
Copper, Total	12.2	S2	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:46	A1S	E1
Lead, Total	10	S2	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:46	A1S	E1
Mercury, Total	0.036J	J,S2	mg/kg	0.083	0.026	SW846 7471B	1	10/13/2022 15:04	A1S	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S2	ug/kg	13.6	8.8	SW846 8081B	5	10/05/2022 05:16	KJH	E
4,4'-DDE	ND	ND,3,S2	ug/kg	13.6	4.4	SW846 8081B	5	10/05/2022 05:16	KJH	E
4,4'-DDT	ND	ND,4,S2	ug/kg	13.6	3.9	SW846 8081B	5	10/05/2022 05:16	KJH	E
Chlordane	ND	ND,S2	ug/kg	279	47.0	SW846 8081B	5	10/05/2022 05:16	KJH	E
Dieldrin	ND	ND,5,S2	ug/kg	13.6	5.3	SW846 8081B	5	10/05/2022 05:16	KJH	E
Mirex	ND	ND,S2	ug/kg	13.6	4.2	SW846 8081B	5	10/05/2022 05:16	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	26.9*%	30 – 135	10/05/2022 05:16	6
Tetrachloro-m-xylene	877-09-8	52.6%	30 – 111	10/05/2022 05:16	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Acenaphthylene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Anthracene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Benzo(a)anthracene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Benzo(a)pyrene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Benzo(b)fluoranthene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Benzo(g,h,i)perylene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Benzo(k)fluoranthene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Chrysene	26.1J	J,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Fluoranthene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Fluorene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Indeno(1,2,3-cd)pyrene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Naphthalene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Phenanthrene	ND	ND,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E
Pyrene	38.9J	J,S2	ug/kg	72.7	24.7	SW846 8270D	1	09/27/2022 10:45	S7M	E

Results

Client Sample ID	POUGH 1B	Collected	09/23/2022 11:45
Lab Sample ID	3265451002	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	70.4%	19 – 132	09/27/2022 10:45	
2-Fluorobiphenyl	321-60-8	67.2%	40 – 110	09/27/2022 10:45	
2-Fluorophenol	367-12-4	63%	26 – 116	09/27/2022 10:45	
Nitrobenzene-d5	4165-60-0	65.9%	38 – 112	09/27/2022 10:45	
Phenol-d5	4165-62-2	63.9%	35 – 111	09/27/2022 10:45	
Terphenyl-d14	98904-43-9	73.6%	45 – 126	09/27/2022 10:45	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S2	ug/L			EPA 1613B	1	11/23/2022 10:45	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S2	ug/kg	3.3	0.84	SW846 8260C	1	09/27/2022 14:22	TMP	B
Ethylbenzene	ND	ND,S2	ug/kg	3.3	1.1	SW846 8260C	1	09/27/2022 14:22	TMP	B
Toluene	ND	ND,S2	ug/kg	3.3	1.1	SW846 8260C	1	09/27/2022 14:22	TMP	B
Total Xylenes	ND	ND,S2	ug/kg	10.0	2.3	SW846 8260C	1	09/27/2022 14:22	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.6%	56 – 124	09/27/2022 14:22	
4-Bromofluorobenzene	460-00-4	90.9%	51 – 128	09/27/2022 14:22	
Dibromofluoromethane	1868-53-7	105%	62 – 123	09/27/2022 14:22	
Toluene-d8	2037-26-5	96.8%	59 – 131	09/27/2022 14:22	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	39.7	S2	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	60.3	S2	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Results

Client Sample ID	POUGH 2A	Collected	09/23/2022 09:20
Lab Sample ID	3265451003	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	6.6	S3	mg/kg	3.4	1.1	SW846 6010D	1	10/18/2022 16:47	A1S	E1
Cadmium, Total	0.78J	J,S3	mg/kg	0.85	0.28	SW846 6010D	1	10/18/2022 16:47	A1S	E1
Copper, Total	24.5	S3	mg/kg	3.4	1.1	SW846 6010D	1	10/18/2022 16:47	A1S	E1
Lead, Total	28.1	S3	mg/kg	3.4	1.1	SW846 6010D	1	10/18/2022 16:47	A1S	E1
Mercury, Total	0.14	S3	mg/kg	0.081	0.026	SW846 7471B	1	10/13/2022 15:06	A1S	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S3	ug/kg	14.8	9.6	SW846 8081B	5	10/05/2022 05:27	KJH	E
4,4'-DDE	ND	ND,3,S3	ug/kg	14.8	4.8	SW846 8081B	5	10/05/2022 05:27	KJH	E
4,4'-DDT	ND	ND,4,S3	ug/kg	14.8	4.3	SW846 8081B	5	10/05/2022 05:27	KJH	E
Chlordane	ND	ND,S3	ug/kg	306	51.5	SW846 8081B	5	10/05/2022 05:27	KJH	E
Dieldrin	ND	ND,5,S3	ug/kg	14.8	5.8	SW846 8081B	5	10/05/2022 05:27	KJH	E
Mirex	ND	ND,S3	ug/kg	14.8	4.6	SW846 8081B	5	10/05/2022 05:27	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	52.7%	30 – 135	10/05/2022 05:27	
Tetrachloro-m-xylene	877-09-8	53.2%	30 – 111	10/05/2022 05:27	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Acenaphthylene	ND	ND,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Anthracene	ND	ND,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Benzo(a)anthracene	43.6J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Benzo(a)pyrene	47.7J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Benzo(b)fluoranthene	36.6J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Benzo(g,h,i)perylene	33.0J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Benzo(k)fluoranthene	42.9J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Chrysene	47.9J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Fluoranthene	62.2J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Fluorene	ND	ND,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Indeno(1,2,3-cd)pyrene	34.3J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Naphthalene	ND	ND,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Phenanthrene	35.2J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E
Pyrene	65.1J	J,S3	ug/kg	77.4	26.3	SW846 8270D	1	09/27/2022 11:10	S7M	E

Results

Client Sample ID	POUGH 2A	Collected	09/23/2022 09:20
Lab Sample ID	3265451003	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	49%	19 – 132	09/27/2022 11:10	
2-Fluorobiphenyl	321-60-8	43.6%	40 – 110	09/27/2022 11:10	
2-Fluorophenol	367-12-4	38.6%	26 – 116	09/27/2022 11:10	
Nitrobenzene-d5	4165-60-0	39.7%	38 – 112	09/27/2022 11:10	
Phenol-d5	4165-62-2	40.6%	35 – 111	09/27/2022 11:10	
Terphenyl-d14	98904-43-9	54.1%	45 – 126	09/27/2022 11:10	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S3	ug/L			EPA 1613B	1	11/23/2022 10:46	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S3	ug/kg	3.0	0.75	SW846 8260C	1	09/27/2022 14:47	TMP	B
Ethylbenzene	ND	ND,S3	ug/kg	3.0	1.0	SW846 8260C	1	09/27/2022 14:47	TMP	B
Toluene	ND	ND,S3	ug/kg	3.0	1.0	SW846 8260C	1	09/27/2022 14:47	TMP	B
Total Xylenes	ND	ND,S3	ug/kg	9.0	2.1	SW846 8260C	1	09/27/2022 14:47	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.8%	56 – 124	09/27/2022 14:47	
4-Bromofluorobenzene	460-00-4	92%	51 – 128	09/27/2022 14:47	
Dibromofluoromethane	1868-53-7	106%	62 – 123	09/27/2022 14:47	
Toluene-d8	2037-26-5	94.9%	59 – 131	09/27/2022 14:47	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	45.3	S3	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	54.7	S3	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Results

Client Sample ID	POUGH 2B	Collected	09/23/2022 09:30
Lab Sample ID	3265451004	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	4.7	S4	mg/kg	3.4	1.1	SW846 6010D	1	10/18/2022 16:50	A1S	E1
Cadmium, Total	ND	ND,S4	mg/kg	0.85	0.28	SW846 6010D	1	10/18/2022 16:50	A1S	E1
Copper, Total	11.2	S4	mg/kg	3.4	1.1	SW846 6010D	1	10/18/2022 16:50	A1S	E1
Lead, Total	9.4	S4	mg/kg	3.4	1.1	SW846 6010D	1	10/18/2022 16:50	A1S	E1
Mercury, Total	0.035J	J,S4	mg/kg	0.077	0.025	SW846 7471B	1	10/13/2022 15:07	A1S	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S4	ug/kg	14.2	9.2	SW846 8081B	5	10/05/2022 05:37	KJH	E
4,4'-DDE	ND	ND,3,S4	ug/kg	14.2	4.6	SW846 8081B	5	10/05/2022 05:37	KJH	E
4,4'-DDT	ND	ND,4,S4	ug/kg	14.2	4.1	SW846 8081B	5	10/05/2022 05:37	KJH	E
Chlordane	ND	ND,S4	ug/kg	293	49.4	SW846 8081B	5	10/05/2022 05:37	KJH	E
Dieldrin	ND	ND,5,S4	ug/kg	14.2	5.5	SW846 8081B	5	10/05/2022 05:37	KJH	E
Mirex	ND	ND,S4	ug/kg	14.2	4.4	SW846 8081B	5	10/05/2022 05:37	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	72.1%	30 – 135	10/05/2022 05:37	
Tetrachloro-m-xylene	877-09-8	70.6%	30 – 111	10/05/2022 05:37	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Acenaphthylene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Anthracene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Benzo(a)anthracene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Benzo(a)pyrene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Benzo(b)fluoranthene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Benzo(g,h,i)perylene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Benzo(k)fluoranthene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Chrysene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Fluoranthene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Fluorene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Indeno(1,2,3-cd)pyrene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Naphthalene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Phenanthrene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E
Pyrene	ND	ND,S4	ug/kg	84.8	28.8	SW846 8270D	1	09/27/2022 11:35	S7M	E

Results

Client Sample ID	POUGH 2B	Collected	09/23/2022 09:30
Lab Sample ID	3265451004	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	71.4%	19 – 132	09/27/2022 11:35	
2-Fluorobiphenyl	321-60-8	70.5%	40 – 110	09/27/2022 11:35	
2-Fluorophenol	367-12-4	65.5%	26 – 116	09/27/2022 11:35	
Nitrobenzene-d5	4165-60-0	69.6%	38 – 112	09/27/2022 11:35	
Phenol-d5	4165-62-2	67.2%	35 – 111	09/27/2022 11:35	
Terphenyl-d14	98904-43-9	76.3%	45 – 126	09/27/2022 11:35	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S4	ug/L			EPA 1613B	1	11/23/2022 10:46	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S4	ug/kg	3.6	0.90	SW846 8260C	1	09/27/2022 15:11	TMP	B
Ethylbenzene	ND	ND,S4	ug/kg	3.6	1.2	SW846 8260C	1	09/27/2022 15:11	TMP	B
Toluene	ND	ND,S4	ug/kg	3.6	1.2	SW846 8260C	1	09/27/2022 15:11	TMP	B
Total Xylenes	ND	ND,S4	ug/kg	10.8	2.5	SW846 8260C	1	09/27/2022 15:11	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.6%	56 – 124	09/27/2022 15:11	
4-Bromofluorobenzene	460-00-4	95.1%	51 – 128	09/27/2022 15:11	
Dibromofluoromethane	1868-53-7	107%	62 – 123	09/27/2022 15:11	
Toluene-d8	2037-26-5	96.8%	59 – 131	09/27/2022 15:11	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	42.2	S4	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	57.8	S4	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3265451001	POUGH 1A	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	
3265451002	POUGH 1B	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	
3265451003	POUGH 2A	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	
3265451004	POUGH 2B	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3265451001	POUGH 1A	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	884167	09/27/2022 11:00	WDA	SW846 7471B	884713
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 11:30	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106
3265451002	POUGH 1B	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	890176	10/13/2022 13:05	WDA	SW846 7471B	890226
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 11:45	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106
3265451003	POUGH 2A	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	890176	10/13/2022 13:05	WDA	SW846 7471B	890226
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 09:20	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106
3265451004	POUGH 2B	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	890176	10/13/2022 13:05	WDA	SW846 7471B	890226
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 09:30	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3265451
Logged By: AXF
PM: SSL
ALS Quote #
1 of 1

Client Name: Normandeau Associates
Address: 400 old Reading Pike
Stowe, PA 19464

Contact: Don NAZARIO
Phone#: 717-617-7076
Project Name/#: CHPE Hudson River
Bill To: NAI - DON NAZARIO
Purchase Order #: 24711.001
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X]-Y DNAZARIO@Normandeau.com

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	VOCs, % moist	PAHs, Pest, Metals	Dioxins
						VOA Glass	Glass				
						40ml	8oz				
						Meoh	UNP	UNP	AMRF 9/24/22		
1 POUGH 1A	9/23/22	1130		G	S				4	1	1
2 1B		1145		G	S				4	1	1
3 2A		0920		G	S				4	1	1
4 2B		0930		G	S				4	1	1
5											
6											
7											
8											
9											
10											

ANALYSES/METHOD REQUESTED
Enter Number of Containers Per Sample or Field Results Below.

Temp Taken By: AMRF Therm ID: 570 WO Temp (°C) 2°
Receipt Info completed by: AMRF
WV Containers 0-6°C Y N (NA)

Cooler Custody Seals Intact	Y	N	(NA)
Sample Custody Seal Intact	Y	N	(NA)
Received on Ice	(Y)	N	NA
Coolers & Samples Intact	(Y)	N	
Correct Containers Provided	(Y)	N	
Sample Label/COC Agree	(Y)	N	
Adequate Sample Volumes	(Y)	N	
VOA only: Headspace Present	Y	(N)	NA
VOA only: Trip Blank	Y	(N)	NA

Deviations? NO YES
If YES, list below:

NJ ≤ 4 days? ~~N~~
Courier/Tracking #: 7700 1235 2009
Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?
PWSID #
Rad Screen (uCi)
New Source? Y N
New Source Contact:
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

SAMPLED BY (Please Print, if MD include Sampler #): DON NAZARIO

Comments: Please do not analyze for PCBs

Date:	Time		Relinquished By / Company Name		Received By / Company Name
9/23/22	1530	1	Normandeau	2	FedEx
		3	FedEx	4	AMRF/ALS 9/24/22 8:49
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW

EDD: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: [ ] Lab [ ] Special

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05/22

November 22, 2022 Service Request No:E2200955

Sarah Leung
ALS Environmental - Middletown
301 Fulling Mill Road
Middletown, PA 17057

Laboratory Results for: 3265451

Dear Sarah,

Enclosed are the results of the sample(s) submitted to our laboratory October 01, 2022
For your reference, these analyses have been assigned our service request number **E2200955.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental – Middletown	**Service Request No.:**	E2200955
Project:	3265451	**Date Received:**	10/01/22
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Four samples were received for analysis at ALS Environmental in Houston on 10/01/22.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200474: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch. The LCS/DLCS recoveries passed.

B flags – Method Blanks

The Method Blank EQ2200474-01 contained low levels of target compounds below the Method Reporting Limit (MRL). The associated compounds in the samples are flagged with 'B' flags where the sample result is less than ten times the level detected in the method blank.

2378-TCDF

Samples analyzed on the DB-5MSUI column were analyzed under conditions where sufficient separation between 2,3,7,8-TCDF and its closest eluter was achieved. Confirmation of this result was not required.

Y flags – Cleanup Standard

The recoveries for the cleanup standard, 37Cl-2,3,7,8-TCDD are below control limits. The sample results are not affected since this labeled standard is provided as a means of demonstrating that both the sample extraction and subsequent cleanup steps performed as expected and is not used in quantitation of target analytes.

Y flags – Labeled Standards

Quantification of the native 2,3,7,8-substituted congeners is based on isotopic dilution, which automatically corrects for variation in extraction efficiency and provides accurate values even with poor recovery. Samples that had recoveries of labeled standards outside the acceptance limits are qualified with 'Y' flags on the Labeled Compound summary pages. In all cases, the signal-to-noise ratios are greater than 10:1 and detection limits were below the Method Reporting Limits.

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by ALS/Houston to include:

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- Non-detected compounds are not included in the 'Total'

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - Middletown **Service Request:**E2200955
Project: 3265451

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200955-001	3265451-001	9/23/2022	1130
E2200955-002	3265451-002	9/23/2022	1145
E2200955-003	3265451-003	9/23/2022	0920
E2200955-004	3265451-004	9/23/2022	0930

Service Request Summary

Folder #: **E2200955**
Client Name: ALS Environmental - Middletown
Project Name: 3265451
Project Number:

Report To: Sarah Leung
ALS Environmental - Middletown
301 Fulling Mill Road
Middletown, PA 17057
USA
Phone Number: 717-944-5541
Cell Number:
Fax Number:
E-mail: sarah.leung@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 10/01/22
Internal Due Date: 11/7/2022
QAP: LAB QAP
Qualifier Set: HRMS Qualifier Set
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: 3265451
EDD: BASIC_WQC_CASNo

4 8 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 2C
Pressure Gas:

				HOUSTON	
Lab Samp No.	**Client Samp No**	**Matrix**	**Collected**	PCDD PCDF/8290A	Total Solids/ALS SOP
E2200955-001	3265451-001	Soil	09/23/22 1130	II	II
E2200955-002	3265451-002	Soil	09/23/22 1145	II	II
E2200955-003	3265451-003	Soil	09/23/22 0920	II	II
E2200955-004	3265451-004	Soil	09/23/22 0930	II	II

Service Request Summary

Folder #: **E2200955**
Client Name: ALS Environmental - Middletown
Project Name: 3265451
Project Number:

Report To: Sarah Leung
ALS Environmental - Middletown
301 Fulling Mill Road
Middletown, PA 17057
USA
Phone Number: 717-944-5541
Cell Number:
Fax Number:
E-mail: sarah.leung@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 10/01/22
Internal Due Date: 11/7/2022
QAP: LAB QAP
Qualifier Set: HRMS Qualifier Set
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: 3265451
EDD: BASIC_WQC_CASNo

4 8 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 2C
Pressure Gas:

Data Qualifiers

HRMS Qualifier Set

B Indicates the associated analyte was found in the method blank at >1/10th the reported value.

E Estimated value. The reported concentration is above the calibration range of the instrument.

H Sample extracted and/or analyzed out of suggested holding time.

J Estimated value. The reported concentration is below the MRL.

K The ion abundance ratio between the primary and secondary ions were outside of theoretical acceptance limits.The concentration of this analyte should be considered as an estimate.

P Chlorodiphenyl ether interference was present at the retention time of the target analyte. Reported result should be considered an estimate.

Q Monitored lock-mass indicates matrix-interference. Reported result is estimated.

S Signal saturated detector. Result reported from dilution.

U Compound was analyzed for, but was not detected (ND).

X See Case Narrative.

Y Isotopically Labeled Standard recovery outside of acceptance limits. In all cases, the signal-to-nois ratios are greater than 10:1, making the recoveries acceptable.

i The MDL/MRL have been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
Arkansas Department of Environmental Quality	22-041-0	3/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID: E22 00955 | DB-5MSUI | SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date:	Analyst:	Samples:
11/22/22	JC	001-004

Second Level - Data Review – to be filled by person doing peer review

Date:	Analyst:	Samples:
11/22/22	SL	001-004

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

301 Fulling Mill Road
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #:	1 of 1
ALS Quote #:	

Client Name: ALS

Address: 301 Fulling Mill Road
Middletown PA 17057

Contact: Sarah Leung

Phone#: (717) 702-2248

Project Name/#: 3265451

Bill To:

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [X] -Y namdt.subcontract@alsglobal.com

Fax? [ ] -Y No.:

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	DIOXIN METHOD 8290
	Container Type					G
	Container Size					8oz
	Perservative					None
	ANALYSES/METHOD REQUESTED					
	Enter Number of Containers Per Sample or Field Results Below.					
1	3265451001	9/23/22	1130	G	S	1
2	3265451002	9/23/22	1145	G	S	1
3	3265451003	9/23/22	0920	G	S	1
4	3265451004	9/23/22	0930	G	S	1
5						
6						
7						
8						
9						
10						

Receipt Information (completed by Receiving Lab)

W.O. Temp: 3.6 Therm ID: IR7 1

Courier/Tracking #:

Purchase Order #: 3265451

Project Comments:

Subcontract: ALS Houston

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

Sample/COC Comments

SAMPLED BY (Please Print):

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	9/23/22		2	10/7/22	0940
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [x] Level 2

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [x] NY [ ] NJ [ ] PA [ ] NC [ ] MD

Reportable to PADEP? Yes [ ] No [ ]

PWSID #

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type- Excel

other

* G=Grab; C=Composite

**Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 11/18

Cooler Receipt Form

ALS Environmental

Project Chemist JK

Client/Project ALS-MI Thermometer ID IR21

Date/Time Received: 10/11/22 Initials: CA Date/Time Logged in: 10/11/22 Initials CA

1. Method of delivery: ◯ US Mail ☒ Fed Ex ◯ UPS ◯ DHL ◯ Courier ◯ Client
2. Samples received in: ☒ Cooler ◯ Box ◯ Envelope ◯ Other
3. Were custody seals on coolers? ◯ Yes ☒ No
   Were they intact? ◯ Yes ◯ No ☒ N/A
   Were they signed and dated? ◯ Yes ◯ No ☒ N/A
   If yes, how many and where?
4. Packing Material: ◯ Inserts ☒ Baggies ☒ Bubble Wrap ◯ Gel Packs ☒ Wet Ice ◯ Sleeves ◯ Other
5. Foreign or Regulated Soil? ◯ Yes ◯ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
5857 1123 6072		10/11/22	0940	CA	3.0	☒
5857 1123 6083		10/11/22	0940	CA	3.4	☒
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ◯ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ◯ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ◯ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ◯ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ◯ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

11/23/2022 11:10 AM

Prep Run#: 408313 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped
Team: Semivoa GCMS/TWOODS **Prep Method:** Method **Prep Date/Time:** 10/18/22 11:44

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200953-001	3265886-001 (Port Ewen 2A)	.01	8290A/PCDD PCDF			Soil	10.344g	brown mud
2	E2200953-002	3265886-002 (Port Ewen 2B)	.01	8290A/PCDD PCDF			Soil	10.057g	brown mud
3	E2200953-003	3265886-003 (Port Ewen 3A)	.01	8290A/PCDD PCDF			Soil	10.067g	brown mud
4	E2200953-004	3265886-004 (Port Ewen 3B)	.01	8290A/PCDD PCDF			Soil	10.280g	brown mud
5	E2200953-005	3265886-005 (Port Ewen 4A)	.01	8290A/PCDD PCDF			Soil	10.331g	brown mud
6	E2200953-006	3265886-006 (Port Ewen 4B)	.01	8290A/PCDD PCDF			Soil	10.187g	brown mud
7	E2200953-007	3265886-007 (Port Ewen 5A)	.01	8290A/PCDD PCDF			Soil	10.242g	brown mud
8	E2200953-008	3265886-008 (Port Ewen 5B)	.01	8290A/PCDD PCDF			Soil	10.315g	brown mud
9	E2200954-001	3265452-001 (Pough 3A)	.01	8290A/PCDD PCDF			Soil	10.046g	brown mud
10	E2200954-002	3265452-002 (Pough 3B)	.01	8290A/PCDD PCDF			Soil	10.308g	brown mud
11	E2200954-003	3265452-003 (Pough 4A)	.01	8290A/PCDD PCDF			Soil	10.137g	brown mud
12	E2200954-004	3265452-004 (Pough 4B)	.01	8290A/PCDD PCDF			Soil	10.193g	brown mud
13	E2200954-005	3265452-005 (Pough 5A)	.01	8290A/PCDD PCDF			Soil	10.318g	brown mud
14	E2200954-006	3265452-006 (Pough 5B)	.01	8290A/PCDD PCDF			Soil	10.256g	brown mud
15	E2200955-001	3265451-001	.01	8290A/PCDD PCDF			Soil	10.003g	brown mud
16	E2200955-002	3265451-002	.01	8290A/PCDD PCDF			Soil	10.377g	brown mud
17	E2200955-003	3265451-003	.01	8290A/PCDD PCDF			Soil	10.329g	brown mud
18	E2200955-004	3265451-004	.01	8290A/PCDD PCDF			Soil	10.075g	brown mud
19	EQ2200474-01	MB		8290A/PCDD PCDF			Solid	10.199g	
20	EQ2200474-02	LCS		8290A/PCDD PCDF			Solid	10.137g	
21	EQ2200474-03	DLCS		8290A/PCDD PCDF			Solid	10.135g	

Spiking Solutions

Name: 1613B Matrix Working Standard Inventory ID 225447 Logbook Ref: tw 10/12/22 225447 Expires On: 04/10/2023

EQ2200474-02 100.00µL EQ2200474-03 100.00µL

Name: 8290/1613B Cleanup Working Standard Inventory ID 225486 Logbook Ref: tw 10/14/22 225486 Expires On: 02/28/2023

E2200953-001	100.00µL	E2200953-002	100.00µL	E2200953-003	100.00µL	E2200953-004	100.00µL	E2200953-005	100.00µL	E2200953-006	100.00µL
E2200953-007	100.00µL	E2200953-008	100.00µL	E2200954-001	100.00µL	E2200954-002	100.00µL	E2200954-003	100.00µL	E2200954-004	100.00µL
E2200954-005	100.00µL	E2200954-006	100.00µL	E2200955-001	100.00µL	E2200955-002	100.00µL	E2200955-003	100.00µL	E2200955-004	100.00µL
EQ2200474-01	100.00µL	EQ2200474-02	100.00µL	EQ2200474-03	100.00µL						

Name: 1613B Labeled Working Standard Inventory ID 225489 Logbook Ref: NB 10/14/2022 225489 ng/mL Expires On: 04/10/2023

Preparation Information Benchsheet

Prep Run#: 408313 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped

Team: Semivoa GCMS/TWOODS **Prep Method:** Method **Prep Date/Time:** 10/18/22 11:44

E2200953-001	1,000.00µL	E2200953-002	1,000.00µL	E2200953-003	1,000.00µL	E2200953-004	1,000.00µL	E2200953-005	1,000.00µL	E2200953-006	1,000.00µL
E2200953-007	1,000.00µL	E2200953-008	1,000.00µL	E2200954-001	1,000.00µL	E2200954-002	1,000.00µL	E2200954-003	1,000.00µL	E2200954-004	1,000.00µL
E2200954-005	1,000.00µL	E2200954-006	1,000.00µL	E2200955-001	1,000.00µL	E2200955-002	1,000.00µL	E2200955-003	1,000.00µL	E2200955-004	1,000.00µL
EQ2200474-01	1,000.00µL	EQ2200474-02	1,000.00µL	EQ2200474-03	1,000.00µL						

Preparation Materials

Carbon, High Purity	tw 08/15/22 (224550)	Ethyl Acetate 99.9% Minimum EtOAc	Ethyl Acetate 6/30/22 (223782)	Glass Wool	TW 5/20/22 (225628)
Hexanes 95%	tw 10/18/22 hexane (225613)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	tw 10/04/22 (225325)	Sodium Hydroxide 1N NaOH	SN 4/26/22 (222726)
Sodium Sulfate Anhydrous Reagent Grade Na2SO4	SN 5/18/22 (223143)	Tridecane (n-Tridecane)	tw 08/15/22 (224552)	Silica Gel	tw 10/17/22 (225501)
sulfuric acid	tw 09/09/22 sulfuric (224982)	Toluene 99.9% Minimum	tw 10/03/22 (225319)		

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	10/18/22 11:44	Started:	10/20/22 12:00	Started:	10/20/22 13:00	Started:	10/21/22 13:00
Finished:	10/19/22 09:00	Finished:	10/20/22 13:00	Finished:	10/20/22 16:00	Finished:	10/21/22 16:00
By:	TWOODS	By:	TWOODS	By:	TWOODS	By:	TWOODS
Comments		Comments		Comments		Comments	

Comments: _____

Reviewed By: TW Date: 10/18/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-001	**Units:**	ng/Kg
Lab Code:	E2200955-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 01:13
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.003g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540033	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.331	0.929			1
1,2,3,7,8-PeCDD	0.187**JK**		0.162	4.65	1.04	1.000	1
1,2,3,6,7,8-HxCDD	1.88**J**		0.0759	4.65	1.06	1.000	1
1,2,3,4,7,8-HxCDD	0.493**BJK**		0.0868	4.65	2.59	1.000	1
1,2,3,7,8,9-HxCDD	1.34**J**		0.0811	4.65	1.40	1.007	1
1,2,3,4,6,7,8-HpCDD	30.2		0.725	4.65	1.02	1.000	1
OCDD	348		3.61	9.29	0.90	1.000	1
2,3,7,8-TCDF	0.537**JK**		0.210	0.929	0.90	1.002	1
1,2,3,7,8-PeCDF	0.312**JK**		0.219	4.65	0.96	1.001	1
2,3,4,7,8-PeCDF	0.596**JK**		0.213	4.65	1.05	1.001	1
1,2,3,6,7,8-HxCDF	0.689**JK**		0.164	4.65	0.98	1.000	1
1,2,3,7,8,9-HxCDF	ND	U	0.228	4.65			1
1,2,3,4,7,8-HxCDF	0.517**JK**		0.151	4.65	0.79	1.000	1
2,3,4,6,7,8-HxCDF	0.396**JK**		0.146	4.65	1.77	1.000	1
1,2,3,4,6,7,8-HpCDF	11.9		0.120	4.65	1.05	1.000	1
1,2,3,4,7,8,9-HpCDF	0.595**BJK**		0.150	4.65	0.53	1.000	1
OCDF	35.4		1.25	9.29	0.97	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-001	**Units:**	ng/Kg
Lab Code:	E2200955-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 01:13
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.003g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540033	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.331	0.929			1
Total Penta-Dioxins	2.05**J**		0.162	4.65	1.55		1
Total Hexa-Dioxins	15.8		0.0809	4.65	1.39		1
Total Hepta-Dioxins	67.6		0.725	4.65	1.04		1
Total Tetra-Furans	1.65		0.210	0.929	0.66		1
Total Penta-Furans	ND	U	0.216	4.65			1
Total Hexa-Furans	ND	U	0.168	4.65			1
Total Hepta-Furans	23.3		0.134	4.65	1.05		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-001	**Units:**	Percent
Lab Code:	E2200955-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 01:13
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.003g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540033	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	848.436	42		40-135	0.79	1.023
13C-1,2,3,7,8-PeCDD	2000	646.766	32	**Y**	40-135	1.61	1.206
13C-1,2,3,4,7,8-HxCDD	2000	662.418	33	**Y**	40-135	1.26	0.991
13C-1,2,3,6,7,8-HxCDD	2000	781.810	39	**Y**	40-135	1.27	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	573.363	29	**Y**	40-135	1.06	1.068
13C-OCDD	4000	699.464	17	**Y**	40-135	0.91	1.140
13C-2,3,7,8-TCDF	2000	774.746	39	**Y**	40-135	0.79	0.991
13C-1,2,3,7,8-PeCDF	2000	649.393	32	**Y**	40-135	1.61	1.160
13C-2,3,4,7,8-PeCDF	2000	631.588	32	**Y**	40-135	1.57	1.195
13C-1,2,3,4,7,8-HxCDF	2000	755.450	38	**Y**	40-135	0.50	0.970
13C-1,2,3,6,7,8-HxCDF	2000	675.764	34	**Y**	40-135	0.53	0.973
13C-1,2,3,7,8,9-HxCDF	2000	620.805	31	**Y**	40-135	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	824.659	41		40-135	0.52	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	484.313	24	**Y**	40-135	0.42	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	517.373	26	**Y**	40-135	0.42	1.080
37Cl-2,3,7,8-TCDD	800	444.821	56		40-135	NA	1.025

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-001	**Units:**	ng/Kg
Lab Code:	E2200955-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.331	0.929	1	1	
1,2,3,7,8-PeCDD	**0.187**	0.162	4.65	1	1	0.187
1,2,3,6,7,8-HxCDD	**1.88**	0.0759	4.65	1	0.1	0.188
1,2,3,4,7,8-HxCDD	**0.493**	0.0868	4.65	1	0.1	0.0493
1,2,3,7,8,9-HxCDD	**1.34**	0.0811	4.65	1	0.1	0.134
1,2,3,4,6,7,8-HpCDD	**30.2**	0.725	4.65	1	0.01	0.302
OCDD	**348**	3.61	9.29	1	0.0003	0.104
2,3,7,8-TCDF	**0.537**	0.210	0.929	1	0.1	0.0537
1,2,3,7,8-PeCDF	**0.312**	0.219	4.65	1	0.03	0.00936
2,3,4,7,8-PeCDF	**0.596**	0.213	4.65	1	0.3	0.179
1,2,3,6,7,8-HxCDF	**0.689**	0.164	4.65	1	0.1	0.0689
1,2,3,7,8,9-HxCDF	ND	0.228	4.65	1	0.1	
1,2,3,4,7,8-HxCDF	**0.517**	0.151	4.65	1	0.1	0.0517
2,3,4,6,7,8-HxCDF	**0.396**	0.146	4.65	1	0.1	0.0396
1,2,3,4,6,7,8-HpCDF	**11.9**	0.120	4.65	1	0.01	0.119
1,2,3,4,7,8,9-HpCDF	**0.595**	0.150	4.65	1	0.01	0.00595
OCDF	**35.4**	1.25	9.29	1	0.0003	0.0106
		Total TEQ				1.50

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-001	**Units:**	Percent
Lab Code:	E2200955-001	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	4.9571g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	53.8		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-002	**Units:**	ng/Kg
Lab Code:	E2200955-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 02:02
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.377g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540034	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.204	0.868			1
1,2,3,7,8-PeCDD	ND	U	0.125	4.34			1
1,2,3,6,7,8-HxCDD	0.293**JK**		0.0714	4.34	0.77	1.000	1
1,2,3,4,7,8-HxCDD	0.544**BJK**		0.0817	4.34	1.50	1.000	1
1,2,3,7,8,9-HxCDD	0.175**BJK**		0.0763	4.34	2.02	1.007	1
1,2,3,4,6,7,8-HpCDD	5.25		0.164	4.34	1.09	1.000	1
OCDD	130		1.58	8.68	0.82	1.000	1
2,3,7,8-TCDF	ND	U	0.301	0.868			1
1,2,3,7,8-PeCDF	ND	U	0.141	4.34			1
2,3,4,7,8-PeCDF	ND	U	0.139	4.34			1
1,2,3,6,7,8-HxCDF	ND	U	0.0834	4.34			1
1,2,3,7,8,9-HxCDF	ND	U	0.115	4.34			1
1,2,3,4,7,8-HxCDF	ND	U	0.0778	4.34			1
2,3,4,6,7,8-HxCDF	ND	U	0.0744	4.34			1
1,2,3,4,6,7,8-HpCDF	0.453**BJK**		0.0440	4.34	1.96	1.000	1
1,2,3,4,7,8,9-HpCDF	0.220**BJK**		0.0523	4.34	0.64	1.000	1
OCDF	2.03**BJK**		0.0877	8.68	1.09	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-002	**Units:**	ng/Kg
Lab Code:	E2200955-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 02:02
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.377g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540034	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.204	0.868			1
Total Penta-Dioxins	0.378**J**		0.125	4.34	1.36		1
Total Hexa-Dioxins	4.16**J**		0.0763	4.34	1.30		1
Total Hepta-Dioxins	17.5		0.164	4.34	1.07		1
Total Tetra-Furans	ND	U	0.301	0.868			1
Total Penta-Furans	ND	U	0.140	4.34			1
Total Hexa-Furans	ND	U	0.0851	4.34			1
Total Hepta-Furans	0.873**J**		0.0478	4.34	0.92		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-002	**Units:**	Percent
Lab Code:	E2200955-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 02:02
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.377g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540034	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	887.587	44		40-135	0.80	1.023
13C-1,2,3,7,8-PeCDD	2000	761.074	38	**Y**	40-135	1.61	1.206
13C-1,2,3,4,7,8-HxCDD	2000	957.429	48		40-135	1.29	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1082.066	54		40-135	1.27	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	805.732	40		40-135	1.07	1.068
13C-OCDD	4000	1011.947	25	**Y**	40-135	0.92	1.140
13C-2,3,7,8-TCDF	2000	773.018	39	**Y**	40-135	0.79	0.991
13C-1,2,3,7,8-PeCDF	2000	743.068	37	**Y**	40-135	1.57	1.160
13C-2,3,4,7,8-PeCDF	2000	716.175	36	**Y**	40-135	1.61	1.195
13C-1,2,3,4,7,8-HxCDF	2000	1066.742	53		40-135	0.51	0.970
13C-1,2,3,6,7,8-HxCDF	2000	941.378	47		40-135	0.51	0.973
13C-1,2,3,7,8,9-HxCDF	2000	854.737	43		40-135	0.48	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1162.419	58		40-135	0.50	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	704.405	35	**Y**	40-135	0.44	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	723.352	36	**Y**	40-135	0.42	1.081
37Cl-2,3,7,8-TCDD	800	335.214	42		40-135	NA	1.024

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-002	**Units:**	ng/Kg
Lab Code:	E2200955-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.204	0.868	1	1	
1,2,3,7,8-PeCDD	ND	0.125	4.34	1	1	
1,2,3,6,7,8-HxCDD	**0.293**	0.0714	4.34	1	0.1	0.0293
1,2,3,4,7,8-HxCDD	**0.544**	0.0817	4.34	1	0.1	0.0544
1,2,3,7,8,9-HxCDD	**0.175**	0.0763	4.34	1	0.1	0.0175
1,2,3,4,6,7,8-HpCDD	**5.25**	0.164	4.34	1	0.01	0.0525
OCDD	**130**	1.58	8.68	1	0.0003	0.0390
2,3,7,8-TCDF	ND	0.301	0.868	1	0.1	
1,2,3,7,8-PeCDF	ND	0.141	4.34	1	0.03	
2,3,4,7,8-PeCDF	ND	0.139	4.34	1	0.3	
1,2,3,6,7,8-HxCDF	ND	0.0834	4.34	1	0.1	
1,2,3,7,8,9-HxCDF	ND	0.115	4.34	1	0.1	
1,2,3,4,7,8-HxCDF	ND	0.0778	4.34	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.0744	4.34	1	0.1	
1,2,3,4,6,7,8-HpCDF	**0.453**	0.0440	4.34	1	0.01	0.00453
1,2,3,4,7,8,9-HpCDF	**0.220**	0.0523	4.34	1	0.01	0.00220
OCDF	**2.03**	0.0877	8.68	1	0.0003	0.000609
		Total TEQ				0.200

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 11:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-002	**Units:**	Percent
Lab Code:	E2200955-002	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	7.2452g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	55.5		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-003	**Units:**	ng/Kg
Lab Code:	E2200955-003	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 02:50
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.329g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540035	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.258	0.848			1
1,2,3,7,8-PeCDD	0.457**JK**		0.396	4.24	0.72	1.000	1
1,2,3,6,7,8-HxCDD	2.24**JK**		0.0879	4.24	1.46	1.000	1
1,2,3,4,7,8-HxCDD	0.453**BJK**		0.0962	4.24	3.13	1.000	1
1,2,3,7,8,9-HxCDD	1.86**J**		0.0919	4.24	1.43	1.007	1
1,2,3,4,6,7,8-HpCDD	59.2		1.12	4.24	1.00	1.000	1
OCDD	685		1.49	8.48	0.88	1.000	1
2,3,7,8-TCDF	1.88		0.280	0.848	0.67	1.001	1
1,2,3,7,8-PeCDF	ND	U	0.270	4.24			1
2,3,4,7,8-PeCDF	0.958**JK**		0.259	4.24	1.19	1.001	1
1,2,3,6,7,8-HxCDF	0.748**JK**		0.218	4.24	0.94	1.000	1
1,2,3,7,8,9-HxCDF	ND	U	0.275	4.24			1
1,2,3,4,7,8-HxCDF	0.498**J**		0.197	4.24	1.08	1.001	1
2,3,4,6,7,8-HxCDF	0.482**J**		0.178	4.24	1.07	1.000	1
1,2,3,4,6,7,8-HpCDF	7.95**K**		0.0575	4.24	0.87	1.000	1
1,2,3,4,7,8,9-HpCDF	0.444**BJK**		0.0650	4.24	0.54	1.000	1
OCDF	20.5		0.642	8.48	0.85	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-003	**Units:**	ng/Kg
Lab Code:	E2200955-003	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 02:50
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.329g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540035	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	1.28		0.258	0.848	0.88		1
Total Penta-Dioxins	0.577**J**		0.396	4.24	1.47		1
Total Hexa-Dioxins	11.7		0.0918	4.24	1.13		1
Total Hepta-Dioxins	125		1.12	4.24	0.98		1
Total Tetra-Furans	20.2		0.280	0.848	0.68		1
Total Penta-Furans	5.57		0.107	4.24	1.48		1
Total Hexa-Furans	8.12		0.212	4.24	1.36		1
Total Hepta-Furans	ND	U	0.0611	4.24			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-003	**Units:**	Percent
Lab Code:	E2200955-003	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 02:50
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.329g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540035	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	708.276	35	**Y**	40-135	0.80	1.023
13C-1,2,3,7,8-PeCDD	2000	540.333	27	**Y**	40-135	1.60	1.206
13C-1,2,3,4,7,8-HxCDD	2000	503.294	25	**Y**	40-135	1.24	0.991
13C-1,2,3,6,7,8-HxCDD	2000	565.108	28	**Y**	40-135	1.28	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	462.255	23	**Y**	40-135	1.04	1.068
13C-OCDD	4000	631.189	16	**Y**	40-135	0.87	1.140
13C-2,3,7,8-TCDF	2000	655.523	33	**Y**	40-135	0.77	0.991
13C-1,2,3,7,8-PeCDF	2000	530.840	27	**Y**	40-135	1.60	1.160
13C-2,3,4,7,8-PeCDF	2000	538.242	27	**Y**	40-135	1.60	1.195
13C-1,2,3,4,7,8-HxCDF	2000	560.545	28	**Y**	40-135	0.49	0.970
13C-1,2,3,6,7,8-HxCDF	2000	478.417	24	**Y**	40-135	0.48	0.973
13C-1,2,3,7,8,9-HxCDF	2000	479.805	24	**Y**	40-135	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	653.102	33	**Y**	40-135	0.50	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	378.307	19	**Y**	40-135	0.44	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	406.455	20	**Y**	40-135	0.42	1.081
37Cl-2,3,7,8-TCDD	800	355.909	44		40-135	NA	1.024

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-003	**Units:**	ng/Kg
Lab Code:	E2200955-003	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.258	0.848	1	1	
1,2,3,7,8-PeCDD	**0.457**	0.396	4.24	1	1	0.457
1,2,3,6,7,8-HxCDD	**2.24**	0.0879	4.24	1	0.1	0.224
1,2,3,4,7,8-HxCDD	**0.453**	0.0962	4.24	1	0.1	0.0453
1,2,3,7,8,9-HxCDD	**1.86**	0.0919	4.24	1	0.1	0.186
1,2,3,4,6,7,8-HpCDD	**59.2**	1.12	4.24	1	0.01	0.592
OCDD	**685**	1.49	8.48	1	0.0003	0.206
2,3,7,8-TCDF	**1.88**	0.280	0.848	1	0.1	0.188
1,2,3,7,8-PeCDF	ND	0.270	4.24	1	0.03	
2,3,4,7,8-PeCDF	**0.958**	0.259	4.24	1	0.3	0.287
1,2,3,6,7,8-HxCDF	**0.748**	0.218	4.24	1	0.1	0.0748
1,2,3,7,8,9-HxCDF	ND	0.275	4.24	1	0.1	
1,2,3,4,7,8-HxCDF	**0.498**	0.197	4.24	1	0.1	0.0498
2,3,4,6,7,8-HxCDF	**0.482**	0.178	4.24	1	0.1	0.0482
1,2,3,4,6,7,8-HpCDF	**7.95**	0.0575	4.24	1	0.01	0.0795
1,2,3,4,7,8,9-HpCDF	**0.444**	0.0650	4.24	1	0.01	0.00444
OCDF	**20.5**	0.642	8.48	1	0.0003	0.00615
		Total TEQ				2.45

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-003	**Units:**	Percent
Lab Code:	E2200955-003	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	5.6735g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	57.1		-	-			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-004	**Units:**	ng/Kg
Lab Code:	E2200955-004	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 03:38
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.075g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540036	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.186	0.841			1
1,2,3,7,8-PeCDD	ND	U	0.215	4.21			1
1,2,3,6,7,8-HxCDD	ND	U	0.163	4.21			1
1,2,3,4,7,8-HxCDD	0.345**BJK**		0.178	4.21	1.74	1.000	1
1,2,3,7,8,9-HxCDD	ND	U	0.170	4.21			1
1,2,3,4,6,7,8-HpCDD	4.63		0.383	4.21	0.98	1.000	1
OCDD	129		1.35	8.41	0.85	1.000	1
2,3,7,8-TCDF	ND	U	0.201	0.841			1
1,2,3,7,8-PeCDF	ND	U	0.102	4.21			1
2,3,4,7,8-PeCDF	ND	U	0.107	4.21			1
1,2,3,6,7,8-HxCDF	0.0478**BJK**		0.0172	4.21	3.33	1.000	1
1,2,3,7,8,9-HxCDF	0.167**BJK**		0.0223	4.21	1.72	1.001	1
1,2,3,4,7,8-HxCDF	0.144**BJ**		0.0157	4.21	1.22	1.000	1
2,3,4,6,7,8-HxCDF	0.0698**BJ**		0.0157	4.21	1.16	1.001	1
1,2,3,4,6,7,8-HpCDF	0.319**BJK**		0.0167	4.21	1.45	1.000	1
1,2,3,4,7,8,9-HpCDF	0.0949**BJK**		0.0187	4.21	1.82	1.000	1
OCDF	1.16**BJ**		0.0906	8.41	0.89	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-004	**Units:**	ng/Kg
Lab Code:	E2200955-004	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 03:38
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.075g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540036	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.186	0.841			1
Total Penta-Dioxins	ND	U	0.215	4.21			1
Total Hexa-Dioxins	3.79**J**		0.170	4.21	1.22		1
Total Hepta-Dioxins	14.8		0.383	4.21	1.03		1
Total Tetra-Furans	ND	U	0.201	0.841			1
Total Penta-Furans	ND	U	0.104	4.21			1
Total Hexa-Furans	0.213**J**		0.0174	4.21	1.22		1
Total Hepta-Furans	ND	U	0.0177	4.21			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-004	**Units:**	Percent
Lab Code:	E2200955-004	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 03:38
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.075g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540036	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1075.149	54		40-135	0.80	1.024
13C-1,2,3,7,8-PeCDD	2000	873.538	44		40-135	1.62	1.207
13C-1,2,3,4,7,8-HxCDD	2000	950.171	48		40-135	1.30	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1038.960	52		40-135	1.30	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	805.788	40		40-135	1.05	1.068
13C-OCDD	4000	1025.928	26	**Y**	40-135	0.86	1.140
13C-2,3,7,8-TCDF	2000	947.859	47		40-135	0.79	0.991
13C-1,2,3,7,8-PeCDF	2000	879.019	44		40-135	1.58	1.160
13C-2,3,4,7,8-PeCDF	2000	805.705	40		40-135	1.58	1.196
13C-1,2,3,4,7,8-HxCDF	2000	1040.332	52		40-135	0.50	0.970
13C-1,2,3,6,7,8-HxCDF	2000	939.989	47		40-135	0.50	0.973
13C-1,2,3,7,8,9-HxCDF	2000	916.054	46		40-135	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1107.250	55		40-135	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	680.554	34	**Y**	40-135	0.42	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	749.308	37	**Y**	40-135	0.41	1.081
37Cl-2,3,7,8-TCDD	800	370.368	46		40-135	NA	1.025

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-004	**Units:**	ng/Kg
Lab Code:	E2200955-004	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.186	0.841	1	1	
1,2,3,7,8-PeCDD	ND	0.215	4.21	1	1	
1,2,3,6,7,8-HxCDD	ND	0.163	4.21	1	0.1	
1,2,3,4,7,8-HxCDD	**0.345**	0.178	4.21	1	0.1	0.0345
1,2,3,7,8,9-HxCDD	ND	0.170	4.21	1	0.1	
1,2,3,4,6,7,8-HpCDD	**4.63**	0.383	4.21	1	0.01	0.0463
OCDD	**129**	1.35	8.41	1	0.0003	0.0387
2,3,7,8-TCDF	ND	0.201	0.841	1	0.1	
1,2,3,7,8-PeCDF	ND	0.102	4.21	1	0.03	
2,3,4,7,8-PeCDF	ND	0.107	4.21	1	0.3	
1,2,3,6,7,8-HxCDF	**0.0478**	0.0172	4.21	1	0.1	0.00478
1,2,3,7,8,9-HxCDF	**0.167**	0.0223	4.21	1	0.1	0.0167
1,2,3,4,7,8-HxCDF	**0.144**	0.0157	4.21	1	0.1	0.0144
2,3,4,6,7,8-HxCDF	**0.0698**	0.0157	4.21	1	0.1	0.00698
1,2,3,4,6,7,8-HpCDF	**0.319**	0.0167	4.21	1	0.01	0.00319
1,2,3,4,7,8,9-HpCDF	**0.0949**	0.0187	4.21	1	0.01	0.000949
OCDF	**1.16**	0.0906	8.41	1	0.0003	0.000348
		Total TEQ				0.167

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	09/23/22 09:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265451-004	**Units:**	Percent
Lab Code:	E2200955-004	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	5.2874g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	59.0		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ2200474-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/13/22 21:36
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.199g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540004	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540001

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0448	0.490			1
1,2,3,7,8-PeCDD	ND	U	0.0279	2.45			1
1,2,3,6,7,8-HxCDD	0.0188**JK**		0.0180	2.45	5.33	1.000	1
1,2,3,4,7,8-HxCDD	0.147**JK**		0.0196	2.45	1.02	1.000	1
1,2,3,7,8,9-HxCDD	0.0303**JK**		0.0188	2.45	0.58	1.007	1
1,2,3,4,6,7,8-HpCDD	0.290**J**		0.00981	2.45	1.09	1.001	1
OCDD	2.76**J**		0.119	4.90	0.89	1.000	1
2,3,7,8-TCDF	ND	U	0.0580	0.490			1
1,2,3,7,8-PeCDF	ND	U	0.0354	2.45			1
2,3,4,7,8-PeCDF	ND	U	0.0358	2.45			1
1,2,3,6,7,8-HxCDF	0.0330**J**		0.0143	2.45	1.16	1.000	1
1,2,3,7,8,9-HxCDF	0.0281**JK**		0.0167	2.45	0.34	1.001	1
1,2,3,4,7,8-HxCDF	0.0436**J**		0.0128	2.45	1.20	1.000	1
2,3,4,6,7,8-HxCDF	0.0144**JK**		0.0121	2.45	0.68	1.001	1
1,2,3,4,6,7,8-HpCDF	0.123**JK**		0.00344	2.45	0.80	1.000	1
1,2,3,4,7,8,9-HpCDF	0.0891**J**		0.00353	2.45	1.10	1.000	1
OCDF	0.336**JK**		0.0429	4.90	0.75	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ2200474-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/13/22 21:36
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.199g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540004	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540001

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.0448	0.490			1
Total Penta-Dioxins	0.0675**J**		0.0279	2.45	1.35		1
Total Hexa-Dioxins	0.0545**J**		0.0188	2.45	1.41		1
Total Hepta-Dioxins	0.599**J**		0.00981	2.45	0.98		1
Total Tetra-Furans	ND	U	0.0580	0.490			1
Total Penta-Furans	ND	U	0.0356	2.45			1
Total Hexa-Furans	0.0767**J**		0.0138	2.45	1.20		1
Total Hepta-Furans	0.0891**J**		0.00353	2.45	1.10		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	EQ2200474-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/13/22 21:36
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.199g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540004	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540001

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1338.963	67		40-135	0.79	1.024
13C-1,2,3,7,8-PeCDD	2000	1180.236	59		40-135	1.58	1.206
13C-1,2,3,4,7,8-HxCDD	2000	1011.887	51		40-135	1.27	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1148.996	57		40-135	1.27	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1095.539	55		40-135	1.06	1.068
13C-OCDD	4000	1640.166	41		40-135	0.89	1.140
13C-2,3,7,8-TCDF	2000	1158.315	58		40-135	0.80	0.992
13C-1,2,3,7,8-PeCDF	2000	1170.581	59		40-135	1.58	1.160
13C-2,3,4,7,8-PeCDF	2000	1103.238	55		40-135	1.55	1.196
13C-1,2,3,4,7,8-HxCDF	2000	1130.728	57		40-135	0.50	0.970
13C-1,2,3,6,7,8-HxCDF	2000	975.985	49		40-135	0.50	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1039.819	52		40-135	0.53	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1243.776	62		40-135	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	859.279	43		40-135	0.44	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	1058.480	53		40-135	0.44	1.080
37Cl-2,3,7,8-TCDD	800	683.377	85		40-135	NA	1.024

Accuracy & Precision

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Analyzed:**	11/14/22
Sample Matrix:	Soil	**Date Extracted:**	10/18/22

Duplicate Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Units:**	ng/Kg
Prep Method:	Method	**Basis:**	Dry
		Analysis Lot:	785786

	Lab Control Sample EQ2200474-02			Duplicate Lab Control Sample EQ2200474-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,3,4,6,7,8-HpCDD	87.0	98.6	88	88.5	98.7	90	70-130	2	25
1,2,3,4,7,8-HxCDD	93.1	98.6	94	97.1	98.7	98	70-130	4	25
1,2,3,6,7,8-HxCDD	86.8	98.6	88	88.9	98.7	90	70-130	2	25
1,2,3,7,8,9-HxCDD	92.0	98.6	93	97.5	98.7	99	70-130	6	25
1,2,3,7,8-PeCDD	88.7	98.6	90	90.8	98.7	92	70-130	2	25
2,3,7,8-TCDD	15.1	19.7	76	15.3	19.7	78	70-130	2	25
OCDD	184	197	93	187	197	95	70-130	1	25
1,2,3,4,6,7,8-HpCDF	91.2	98.6	92	96.5	98.7	98	70-130	6	25
1,2,3,4,7,8,9-HpCDF	85.4	98.6	87	88.0	98.7	89	70-130	3	25
1,2,3,4,7,8-HxCDF	85.4	98.6	87	88.5	98.7	90	70-130	4	25
1,2,3,6,7,8-HxCDF	94.1	98.6	95	96.8	98.7	98	70-130	3	25
1,2,3,7,8,9-HxCDF	85.8	98.6	87	89.3	98.7	91	70-130	4	25
1,2,3,7,8-PeCDF	86.8	98.6	88	90.2	98.7	91	70-130	4	25
2,3,4,6,7,8-HxCDF	77.8	98.6	79	80.8	98.7	82	70-130	4	25
2,3,4,7,8-PeCDF	90.9	98.6	92	97.8	98.7	99	70-130	7	25
2,3,7,8-TCDF	17.4	19.7	88	18.4	19.7	93	70-130	5	25
OCDF	191	197	97	198	197	100	70-130	4	25

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2200474-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 18:31
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540025	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	15.1		0.0693	0.493	0.73	1.001	1
1,2,3,7,8-PeCDD	88.7		0.0538	2.47	1.54	1.001	1
1,2,3,6,7,8-HxCDD	86.8		0.0114	2.47	1.31	1.000	1
1,2,3,4,7,8-HxCDD	93.1		0.0129	2.47	1.24	1.000	1
1,2,3,7,8,9-HxCDD	92.0		0.0121	2.47	1.27	1.007	1
1,2,3,4,6,7,8-HpCDD	87.0		0.0360	2.47	1.04	1.000	1
OCDD	184		1.08	4.93	0.85	1.000	1
2,3,7,8-TCDF	17.4		0.0539	0.493	0.73	1.001	1
1,2,3,7,8-PeCDF	86.8		0.237	2.47	1.49	1.001	1
2,3,4,7,8-PeCDF	90.9		0.249	2.47	1.51	1.001	1
1,2,3,6,7,8-HxCDF	94.1		0.00484	2.47	1.21	1.000	1
1,2,3,7,8,9-HxCDF	85.8		0.00622	2.47	1.17	1.000	1
1,2,3,4,7,8-HxCDF	85.4		0.00444	2.47	1.21	1.000	1
2,3,4,6,7,8-HxCDF	77.8		0.00415	2.47	1.19	1.000	1
1,2,3,4,6,7,8-HpCDF	91.2		0.166	2.47	1.01	1.000	1
1,2,3,4,7,8,9-HpCDF	85.4		0.193	2.47	1.03	1.000	1
OCDF	191		0.759	4.93	0.87	1.004	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2200474-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 18:31
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540025	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	15.1		0.0693	0.493	0.73		1
Total Penta-Dioxins	88.7		0.0538	2.47	1.54		1
Total Hexa-Dioxins	272		0.0121	2.47	1.24		1
Total Hepta-Dioxins	87.0		0.0360	2.47	1.04		1
Total Tetra-Furans	17.4		0.0539	0.493	0.73		1
Total Penta-Furans	178		0.243	2.47	1.49		1
Total Hexa-Furans	343		0.00484	2.47	1.21		1
Total Hepta-Furans	177		0.179	2.47	1.01		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2200474-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 18:31
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540025	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1393.184	70		40-135	0.78	1.023
13C-1,2,3,7,8-PeCDD	2000	1111.305	56		40-135	1.60	1.206
13C-1,2,3,4,7,8-HxCDD	2000	1180.259	59		40-135	1.27	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1385.600	69		40-135	1.25	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1173.807	59		40-135	1.05	1.068
13C-OCDD	4000	1675.477	42		40-135	0.89	1.140
13C-2,3,7,8-TCDF	2000	1177.771	59		40-135	0.78	0.991
13C-1,2,3,7,8-PeCDF	2000	1121.285	56		40-135	1.57	1.160
13C-2,3,4,7,8-PeCDF	2000	1032.181	52		40-135	1.59	1.195
13C-1,2,3,4,7,8-HxCDF	2000	1310.050	66		40-135	0.52	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1165.428	58		40-135	0.51	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1208.008	60		40-135	0.48	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1437.627	72		40-135	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	978.253	49		40-135	0.42	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	1074.929	54		40-135	0.44	1.080
37Cl-2,3,7,8-TCDD	800	587.310	73		40-135	NA	1.025

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2200474-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 19:19
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.135g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540026	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	15.3		0.0757	0.493	0.76	1.001	1
1,2,3,7,8-PeCDD	90.8		0.0433	2.47	1.59	1.001	1
1,2,3,6,7,8-HxCDD	88.9		0.0250	2.47	1.29	1.000	1
1,2,3,4,7,8-HxCDD	97.1		0.0279	2.47	1.25	1.000	1
1,2,3,7,8,9-HxCDD	97.5		0.0264	2.47	1.29	1.007	1
1,2,3,4,6,7,8-HpCDD	88.5		0.0127	2.47	1.06	1.000	1
OCDD	187		0.987	4.93	0.90	1.000	1
2,3,7,8-TCDF	18.4		0.0525	0.493	0.74	1.001	1
1,2,3,7,8-PeCDF	90.2		0.326	2.47	1.49	1.001	1
2,3,4,7,8-PeCDF	97.8		0.338	2.47	1.51	1.001	1
1,2,3,6,7,8-HxCDF	96.8		0.0146	2.47	1.23	1.000	1
1,2,3,7,8,9-HxCDF	89.3		0.0188	2.47	1.16	1.000	1
1,2,3,4,7,8-HxCDF	88.5		0.0133	2.47	1.18	1.000	1
2,3,4,6,7,8-HxCDF	80.8		0.0131	2.47	1.17	1.000	1
1,2,3,4,6,7,8-HpCDF	96.5		0.195	2.47	0.98	1.000	1
1,2,3,4,7,8,9-HpCDF	88.0		0.207	2.47	0.99	1.000	1
OCDF	198		0.104	4.93	0.92	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2200474-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 19:19
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.135g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540026	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	15.3		0.0757	0.493	0.76		1
Total Penta-Dioxins	91.0		0.0433	2.47	1.59		1
Total Hexa-Dioxins	284		0.0264	2.47	1.25		1
Total Hepta-Dioxins	88.5		0.0127	2.47	1.06		1
Total Tetra-Furans	18.4		0.0525	0.493	0.74		1
Total Penta-Furans	189		0.332	2.47	1.49		1
Total Hexa-Furans	355		0.0147	2.47	1.18		1
Total Hepta-Furans	184		0.201	2.47	0.98		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200955
Project:	3265451	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2200474-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 19:19
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.135g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540026	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1588.992	79		40-135	0.79	1.023
13C-1,2,3,7,8-PeCDD	2000	1304.869	65		40-135	1.59	1.206
13C-1,2,3,4,7,8-HxCDD	2000	1328.136	66		40-135	1.25	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1501.285	75		40-135	1.26	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1221.116	61		40-135	1.03	1.068
13C-OCDD	4000	1592.697	40		40-135	0.87	1.140
13C-2,3,7,8-TCDF	2000	1325.123	66		40-135	0.78	0.991
13C-1,2,3,7,8-PeCDF	2000	1294.477	65		40-135	1.57	1.160
13C-2,3,4,7,8-PeCDF	2000	1186.517	59		40-135	1.55	1.195
13C-1,2,3,4,7,8-HxCDF	2000	1479.181	74		40-135	0.52	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1310.113	66		40-135	0.52	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1303.443	65		40-135	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1570.879	79		40-135	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	984.188	49		40-135	0.43	1.044
13C-1,2,3,4,7,8,9-HpCDF	2000	1155.790	58		40-135	0.43	1.081
37Cl-2,3,7,8-TCDD	800	696.874	87		40-135	NA	1.025

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **Normandeau Associates Inc.-Stowe**

Project CHPE Hudson River
Workorder 3265452
Report ID 208939 on 11/23/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Sep 24, 2022.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Sarah Leung (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Don Nazario - Normandeau Associates, Inc.-Stowe
Michael Mettler - Normandeau Associates, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sarah Leung

Sarah Leung *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3265452001	POUGH 3A	Solid	09/23/2022 12:30	09/24/2022 08:49	CBC	Collected By Client
3265452002	POUGH 3B	Solid	09/23/2022 12:45	09/24/2022 08:49	CBC	Collected By Client
3265452003	POUGH 4A	Solid	09/23/2022 13:30	09/24/2022 08:49	CBC	Collected By Client
3265452004	POUGH 4B	Solid	09/23/2022 13:45	09/24/2022 08:49	CBC	Collected By Client
3265452005	POUGH 5A	Solid	09/23/2022 10:20	09/24/2022 08:49	CBC	Collected By Client
3265452006	POUGH 5B	Solid	09/23/2022 10:35	09/24/2022 08:49	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID		
3265452001	POUGH 3A	**S1**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.
3265452002	POUGH 3B	**S2**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.
3265452003	POUGH 4A	**S3**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.
3265452004	POUGH 4B	**S4**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.
3265452005	POUGH 5A	**S5**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.
3265452006	POUGH 5B	**S6**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.

Result Notations

Notation Ref.	
1	See attached subcontract Dioxin results from ALS Houston. SLW 11/23/2022
2	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 56% in the bracketing CCV.
3	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 43% in the bracketing CCV.
4	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased low 62% in the bracketing CCV.
5	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 31% in the bracketing CCV.

Detected Results Summary

Client Sample ID	POUGH 3A	Collected	09/23/2022 12:30
Lab Sample ID	3265452001	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	5.0	mg/kg	2.8	0.95	SW846 6010D	#
Cadmium, Total	0.36J	mg/kg	0.71	0.24	SW846 6010D	#
Copper, Total	13.6	mg/kg	2.8	0.95	SW846 6010D	#
Lead, Total	15.5	mg/kg	2.8	0.95	SW846 6010D	#
Mercury, Total	0.066	mg/kg	0.063	0.020	SW846 7471B	#
SEMIVOLATILES						
Benzo(a)anthracene	47.6J	ug/kg	71.6	24.3	SW846 8270D	#
Benzo(a)pyrene	78.3	ug/kg	71.6	24.3	SW846 8270D	#
Benzo(b)fluoranthene	49.0J	ug/kg	71.6	24.3	SW846 8270D	#
Benzo(g,h,i)perylene	50.8J	ug/kg	71.6	24.3	SW846 8270D	#
Benzo(k)fluoranthene	46.7J	ug/kg	71.6	24.3	SW846 8270D	#
Chrysene	57.0J	ug/kg	71.6	24.3	SW846 8270D	#
Fluoranthene	54.4J	ug/kg	71.6	24.3	SW846 8270D	#
Indeno(1,2,3-cd)pyrene	47.2J	ug/kg	71.6	24.3	SW846 8270D	#
Phenanthrene	36.0J	ug/kg	71.6	24.3	SW846 8270D	#
Pyrene	71.9	ug/kg	71.6	24.3	SW846 8270D	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	34.1	%	0.1	0.01	S2540G-11	#
Total Solids	65.9	%	0.1	0.01	S2540G-11	#

Detected Results Summary

Client Sample ID	POUGH 3B	Collected	09/23/2022 12:45
Lab Sample ID	3265452002	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	4.8	mg/kg	3.3	1.1	SW846 6010D	#
Copper, Total	10.9	mg/kg	3.3	1.1	SW846 6010D	#
Lead, Total	8.8	mg/kg	3.3	1.1	SW846 6010D	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	40.6	%	0.1	0.01	S2540G-11	#
Total Solids	59.4	%	0.1	0.01	S2540G-11	#

Detected Results Summary

Client Sample ID	POUGH 4A	Collected	09/23/2022 13:30
Lab Sample ID	3265452003	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	6.7	mg/kg	3.7	1.2	SW846 6010D	#
Cadmium, Total	0.41J	mg/kg	0.93	0.31	SW846 6010D	#
Copper, Total	19.3	mg/kg	3.7	1.2	SW846 6010D	#
Lead, Total	19.8	mg/kg	3.7	1.2	SW846 6010D	#
Mercury, Total	0.13	mg/kg	0.089	0.029	SW846 7471B	#
SEMIVOLATILES						
Benzo(a)anthracene	36.4J	ug/kg	87.0	29.6	SW846 8270D	#
Benzo(a)pyrene	38.9J	ug/kg	87.0	29.6	SW846 8270D	#
Chrysene	39.9J	ug/kg	87.0	29.6	SW846 8270D	#
Fluoranthene	34.5J	ug/kg	87.0	29.6	SW846 8270D	#
Naphthalene	38.5J	ug/kg	87.0	29.6	SW846 8270D	#
Phenanthrene	30.7J	ug/kg	87.0	29.6	SW846 8270D	#
Pyrene	62.1J	ug/kg	87.0	29.6	SW846 8270D	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	46.8	%	0.1	0.01	S2540G-11	#
Total Solids	53.2	%	0.1	0.01	S2540G-11	#

Detected Results Summary

Client Sample ID	POUGH 4B	Collected	09/23/2022 13:45
Lab Sample ID	3265452004	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	6.7	mg/kg	3.3	1.1	SW846 6010D	#
Copper, Total	14.9	mg/kg	3.3	1.1	SW846 6010D	#
Lead, Total	19.0	mg/kg	3.3	1.1	SW846 6010D	#
Mercury, Total	0.043J	mg/kg	0.089	0.029	SW846 7471B	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	49.2	%	0.1	0.01	S2540G-11	#
Total Solids	50.8	%	0.1	0.01	S2540G-11	#

Detected Results Summary

Client Sample ID	POUGH 5A	Collected	09/23/2022 10:20
Lab Sample ID	3265452005	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	5.5	mg/kg	3.2	1.1	SW846 6010D	#
Cadmium, Total	1.5	mg/kg	0.80	0.27	SW846 6010D	#
Copper, Total	21.2	mg/kg	3.2	1.1	SW846 6010D	#
Lead, Total	30.9	mg/kg	3.2	1.1	SW846 6010D	#
Mercury, Total	0.11	mg/kg	0.081	0.026	SW846 7471B	#
SEMIVOLATILES						
Anthracene	32.7J	ug/kg	76.3	25.9	SW846 8270D	#
Benzo(a)anthracene	67.9J	ug/kg	76.3	25.9	SW846 8270D	#
Benzo(a)pyrene	69.7J	ug/kg	76.3	25.9	SW846 8270D	#
Benzo(b)fluoranthene	51.1J	ug/kg	76.3	25.9	SW846 8270D	#
Benzo(g,h,i)perylene	44.8J	ug/kg	76.3	25.9	SW846 8270D	#
Chrysene	75.1J	ug/kg	76.3	25.9	SW846 8270D	#
Fluoranthene	114	ug/kg	76.3	25.9	SW846 8270D	#
Indeno(1,2,3-cd)pyrene	49.3J	ug/kg	76.3	25.9	SW846 8270D	#
Phenanthrene	113	ug/kg	76.3	25.9	SW846 8270D	#
Pyrene	149	ug/kg	76.3	25.9	SW846 8270D	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	43.5	%	0.1	0.01	S2540G-11	#
Total Solids	56.5	%	0.1	0.01	S2540G-11	#

Detected Results Summary

Client Sample ID	POUGH 5B	Collected	09/23/2022 10:35
Lab Sample ID	3265452006	Lab Receipt	09/24/2022 08:49

Compound	Result	Units	RDL	MDL	Method	Flag
METALS						
Arsenic, Total	6.6	mg/kg	3.2	1.1	SW846 6010D	#
Copper, Total	12.3	mg/kg	3.2	1.1	SW846 6010D	#
Lead, Total	12.3	mg/kg	3.2	1.1	SW846 6010D	#
Mercury, Total	0.034J	mg/kg	0.072	0.023	SW846 7471B	#
Sub'd-CASH Labs						
Dioxin	See attached	ug/L			EPA 1613B	#
WET CHEMISTRY						
Moisture	40.3	%	0.1	0.01	S2540G-11	#
Total Solids	59.7	%	0.1	0.01	S2540G-11	#

Results

Client Sample ID	POUGH 3A	Collected	09/23/2022 12:30
Lab Sample ID	3265452001	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	5.0	S1	mg/kg	2.8	0.95	SW846 6010D	1	10/18/2022 16:51	A1S	E1
Cadmium, Total	0.36J	J,S1	mg/kg	0.71	0.24	SW846 6010D	1	10/18/2022 16:51	A1S	E1
Copper, Total	13.6	S1	mg/kg	2.8	0.95	SW846 6010D	1	10/18/2022 16:51	A1S	E1
Lead, Total	15.5	S1	mg/kg	2.8	0.95	SW846 6010D	1	10/18/2022 16:51	A1S	E1
Mercury, Total	0.066	S1	mg/kg	0.063	0.020	SW846 7471B	1	10/13/2022 15:11	A1S	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S1	ug/kg	12.1	7.8	SW846 8081B	5	10/05/2022 04:55	KJH	E
4,4'-DDE	ND	ND,3,S1	ug/kg	12.1	3.9	SW846 8081B	5	10/05/2022 04:55	KJH	E
4,4'-DDT	ND	ND,4,S1	ug/kg	12.1	3.5	SW846 8081B	5	10/05/2022 04:55	KJH	E
Chlordane	ND	ND,S1	ug/kg	249	42.0	SW846 8081B	5	10/05/2022 04:55	KJH	E
Dieldrin	ND	ND,5,S1	ug/kg	12.1	4.7	SW846 8081B	5	10/05/2022 04:55	KJH	E
Mirex	ND	ND,S1	ug/kg	12.1	3.8	SW846 8081B	5	10/05/2022 04:55	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	84.4%	30 – 135	10/05/2022 04:55	
Tetrachloro-m-xylene	877-09-8	81.8%	30 – 111	10/05/2022 04:55	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Acenaphthylene	ND	ND,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Anthracene	ND	ND,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Benzo(a)anthracene	47.6J	J,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Benzo(a)pyrene	78.3	S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Benzo(b)fluoranthene	49.0J	J,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Benzo(g,h,i)perylene	50.8J	J,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Benzo(k)fluoranthene	46.7J	J,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Chrysene	57.0J	J,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Fluoranthene	54.4J	J,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Fluorene	ND	ND,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Indeno(1,2,3-cd)pyrene	47.2J	J,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Naphthalene	ND	ND,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Phenanthrene	36.0J	J,S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E
Pyrene	71.9	S1	ug/kg	71.6	24.3	SW846 8270D	1	09/27/2022 11:59	S7M	E

Results

Client Sample ID	POUGH 3A	Collected	09/23/2022 12:30
Lab Sample ID	3265452001	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	70.8%	19 – 132	09/27/2022 11:59	
2-Fluorobiphenyl	321-60-8	67.5%	40 – 110	09/27/2022 11:59	
2-Fluorophenol	367-12-4	62.8%	26 – 116	09/27/2022 11:59	
Nitrobenzene-d5	4165-60-0	65.6%	38 – 112	09/27/2022 11:59	
Phenol-d5	4165-62-2	65.2%	35 – 111	09/27/2022 11:59	
Terphenyl-d14	98904-43-9	77.4%	45 – 126	09/27/2022 11:59	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S1	ug/L			EPA 1613B	1	11/23/2022 10:47	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S1	ug/kg	2.6	0.65	SW846 8260C	1	09/27/2022 15:35	TMP	B
Ethylbenzene	ND	ND,S1	ug/kg	2.6	0.88	SW846 8260C	1	09/27/2022 15:35	TMP	B
Toluene	ND	ND,S1	ug/kg	2.6	0.87	SW846 8260C	1	09/27/2022 15:35	TMP	B
Total Xylenes	ND	ND,S1	ug/kg	7.8	1.8	SW846 8260C	1	09/27/2022 15:35	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.2%	56 – 124	09/27/2022 15:35	
4-Bromofluorobenzene	460-00-4	90.1%	51 – 128	09/27/2022 15:35	
Dibromofluoromethane	1868-53-7	106%	62 – 123	09/27/2022 15:35	
Toluene-d8	2037-26-5	95.3%	59 – 131	09/27/2022 15:35	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	34.1	S1	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	65.9	S1	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Results

Client Sample ID	POUGH 3B	Collected	09/23/2022 12:45
Lab Sample ID	3265452002	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	4.8	S2	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:52	A1S	E1
Cadmium, Total	ND	ND,S2	mg/kg	0.83	0.28	SW846 6010D	1	10/18/2022 16:52	A1S	E1
Copper, Total	10.9	S2	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:52	A1S	E1
Lead, Total	8.8	S2	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:52	A1S	E1

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S2	ug/kg	14.0	9.1	SW846 8081B	5	10/05/2022 05:48	KJH	E
4,4'-DDE	ND	ND,3,S2	ug/kg	14.0	4.5	SW846 8081B	5	10/05/2022 05:48	KJH	E
4,4'-DDT	ND	ND,4,S2	ug/kg	14.0	4.0	SW846 8081B	5	10/05/2022 05:48	KJH	E
Chlordane	ND	ND,S2	ug/kg	289	48.7	SW846 8081B	5	10/05/2022 05:48	KJH	E
Dieldrin	ND	ND,5,S2	ug/kg	14.0	5.4	SW846 8081B	5	10/05/2022 05:48	KJH	E
Mirex	ND	ND,S2	ug/kg	14.0	4.4	SW846 8081B	5	10/05/2022 05:48	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	56.3%	30 – 135	10/05/2022 05:48	
Tetrachloro-m-xylene	877-09-8	57.2%	30 – 111	10/05/2022 05:48	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Acenaphthylene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Anthracene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Benzo(a)anthracene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Benzo(a)pyrene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Benzo(b)fluoranthene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Benzo(g,h,i)perylene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Benzo(k)fluoranthene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Chrysene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Fluoranthene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Fluorene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Indeno(1,2,3-cd)pyrene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Naphthalene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Phenanthrene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E
Pyrene	ND	ND,S2	ug/kg	75.1	25.5	SW846 8270D	1	09/27/2022 12:24	S7M	E

Results

Client Sample ID	POUGH 3B	Collected	09/23/2022 12:45
Lab Sample ID	3265452002	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	73%	19 – 132	09/27/2022 12:24	
2-Fluorobiphenyl	321-60-8	70.4%	40 – 110	09/27/2022 12:24	
2-Fluorophenol	367-12-4	65.8%	26 – 116	09/27/2022 12:24	
Nitrobenzene-d5	4165-60-0	68.9%	38 – 112	09/27/2022 12:24	
Phenol-d5	4165-62-2	68.7%	35 – 111	09/27/2022 12:24	
Terphenyl-d14	98904-43-9	77.5%	45 – 126	09/27/2022 12:24	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S2	ug/L			EPA 1613B	1	11/23/2022 10:47	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S2	ug/kg	2.9	0.73	SW846 8260C	1	09/27/2022 16:00	TMP	B
Ethylbenzene	ND	ND,S2	ug/kg	2.9	0.99	SW846 8260C	1	09/27/2022 16:00	TMP	B
Toluene	ND	ND,S2	ug/kg	2.9	0.98	SW846 8260C	1	09/27/2022 16:00	TMP	B
Total Xylenes	ND	ND,S2	ug/kg	8.8	2.0	SW846 8260C	1	09/27/2022 16:00	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.4%	56 – 124	09/27/2022 16:00	
4-Bromofluorobenzene	460-00-4	92%	51 – 128	09/27/2022 16:00	
Dibromofluoromethane	1868-53-7	101%	62 – 123	09/27/2022 16:00	
Toluene-d8	2037-26-5	94.8%	59 – 131	09/27/2022 16:00	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	40.6	S2	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	59.4	S2	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Results

Client Sample ID	POUGH 4A	Collected	09/23/2022 13:30
Lab Sample ID	3265452003	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	6.7	S3	mg/kg	3.7	1.2	SW846 6010D	1	10/18/2022 16:53	A1S	E1
Cadmium, Total	0.41J	J,S3	mg/kg	0.93	0.31	SW846 6010D	1	10/18/2022 16:53	A1S	E1
Copper, Total	19.3	S3	mg/kg	3.7	1.2	SW846 6010D	1	10/18/2022 16:53	A1S	E1
Lead, Total	19.8	S3	mg/kg	3.7	1.2	SW846 6010D	1	10/18/2022 16:53	A1S	E1
Mercury, Total	0.13	S3	mg/kg	0.089	0.029	SW846 7471B	1	10/13/2022 15:13	A1S	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S3	ug/kg	15.7	10.1	SW846 8081B	5	10/05/2022 05:59	KJH	E
4,4'-DDE	ND	ND,3,S3	ug/kg	15.7	5.1	SW846 8081B	5	10/05/2022 05:59	KJH	E
4,4'-DDT	ND	ND,4,S3	ug/kg	15.7	4.5	SW846 8081B	5	10/05/2022 05:59	KJH	E
Chlordane	ND	ND,S3	ug/kg	322	54.3	SW846 8081B	5	10/05/2022 05:59	KJH	E
Dieldrin	ND	ND,5,S3	ug/kg	15.7	6.1	SW846 8081B	5	10/05/2022 05:59	KJH	E
Mirex	ND	ND,S3	ug/kg	15.7	4.9	SW846 8081B	5	10/05/2022 05:59	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	50.5%	30 – 135	10/05/2022 05:59	
Tetrachloro-m-xylene	877-09-8	49.2%	30 – 111	10/05/2022 05:59	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Acenaphthylene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Anthracene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Benzo(a)anthracene	36.4J	J,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Benzo(a)pyrene	38.9J	J,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Benzo(b)fluoranthene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Benzo(g,h,i)perylene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Benzo(k)fluoranthene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Chrysene	39.9J	J,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Fluoranthene	34.5J	J,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Fluorene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Indeno(1,2,3-cd)pyrene	ND	ND,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Naphthalene	38.5J	J,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Phenanthrene	30.7J	J,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E
Pyrene	62.1J	J,S3	ug/kg	87.0	29.6	SW846 8270D	1	09/27/2022 12:49	S7M	E

Results

Client Sample ID	POUGH 4A	Collected	09/23/2022 13:30
Lab Sample ID	3265452003	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	72.8%	19 – 132	09/27/2022 12:49	
2-Fluorobiphenyl	321-60-8	69.6%	40 – 110	09/27/2022 12:49	
2-Fluorophenol	367-12-4	66.8%	26 – 116	09/27/2022 12:49	
Nitrobenzene-d5	4165-60-0	71.2%	38 – 112	09/27/2022 12:49	
Phenol-d5	4165-62-2	68.4%	35 – 111	09/27/2022 12:49	
Terphenyl-d14	98904-43-9	75.5%	45 – 126	09/27/2022 12:49	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S3	ug/L			EPA 1613B	1	11/23/2022 10:48	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S3	ug/kg	4.5	1.1	SW846 8260C	1	09/27/2022 16:24	TMP	B
Ethylbenzene	ND	ND,S3	ug/kg	4.5	1.5	SW846 8260C	1	09/27/2022 16:24	TMP	B
Toluene	ND	ND,S3	ug/kg	4.5	1.5	SW846 8260C	1	09/27/2022 16:24	TMP	B
Total Xylenes	ND	ND,S3	ug/kg	13.6	3.2	SW846 8260C	1	09/27/2022 16:24	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.8%	56 – 124	09/27/2022 16:24	
4-Bromofluorobenzene	460-00-4	91.6%	51 – 128	09/27/2022 16:24	
Dibromofluoromethane	1868-53-7	106%	62 – 123	09/27/2022 16:24	
Toluene-d8	2037-26-5	95.1%	59 – 131	09/27/2022 16:24	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	46.8	S3	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	53.2	S3	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Results

Client Sample ID	POUGH 4B	Collected	09/23/2022 13:45
Lab Sample ID	3265452004	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	6.7	S4	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:54	A1S	E1
Cadmium, Total	ND	ND,S4	mg/kg	0.84	0.28	SW846 6010D	1	10/18/2022 16:54	A1S	E1
Copper, Total	14.9	S4	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:54	A1S	E1
Lead, Total	19.0	S4	mg/kg	3.3	1.1	SW846 6010D	1	10/18/2022 16:54	A1S	E1
Mercury, Total	0.043J	J,S4	mg/kg	0.089	0.029	SW846 7471B	1	10/13/2022 15:16	A1S	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S4	ug/kg	16.7	10.8	SW846 8081B	5	10/05/2022 06:09	KJH	E
4,4'-DDE	ND	ND,3,S4	ug/kg	16.7	5.4	SW846 8081B	5	10/05/2022 06:09	KJH	E
4,4'-DDT	ND	ND,4,S4	ug/kg	16.7	4.8	SW846 8081B	5	10/05/2022 06:09	KJH	E
Chlordane	ND	ND,S4	ug/kg	345	58.1	SW846 8081B	5	10/05/2022 06:09	KJH	E
Dieldrin	ND	ND,5,S4	ug/kg	16.7	6.5	SW846 8081B	5	10/05/2022 06:09	KJH	E
Mirex	ND	ND,S4	ug/kg	16.7	5.2	SW846 8081B	5	10/05/2022 06:09	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	52.8%	30 – 135	10/05/2022 06:09	
Tetrachloro-m-xylene	877-09-8	52.8%	30 – 111	10/05/2022 06:09	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Acenaphthylene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Anthracene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Benzo(a)anthracene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Benzo(a)pyrene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Benzo(b)fluoranthene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Benzo(g,h,i)perylene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Benzo(k)fluoranthene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Chrysene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Fluoranthene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Fluorene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Indeno(1,2,3-cd)pyrene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Naphthalene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Phenanthrene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E
Pyrene	ND	ND,S4	ug/kg	86.4	29.4	SW846 8270D	1	09/27/2022 13:13	S7M	E

Results

Client Sample ID	POUGH 4B	Collected	09/23/2022 13:45
Lab Sample ID	3265452004	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	64.9%	19 – 132	09/27/2022 13:13	
2-Fluorobiphenyl	321-60-8	64.4%	40 – 110	09/27/2022 13:13	
2-Fluorophenol	367-12-4	62.2%	26 – 116	09/27/2022 13:13	
Nitrobenzene-d5	4165-60-0	65.1%	38 – 112	09/27/2022 13:13	
Phenol-d5	4165-62-2	63.8%	35 – 111	09/27/2022 13:13	
Terphenyl-d14	98904-43-9	69%	45 – 126	09/27/2022 13:13	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S4	ug/L			EPA 1613B	1	11/23/2022 10:48	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S4	ug/kg	4.2	1.1	SW846 8260C	1	09/27/2022 16:48	TMP	B
Ethylbenzene	ND	ND,S4	ug/kg	4.2	1.4	SW846 8260C	1	09/27/2022 16:48	TMP	B
Toluene	ND	ND,S4	ug/kg	4.2	1.4	SW846 8260C	1	09/27/2022 16:48	TMP	B
Total Xylenes	ND	ND,S4	ug/kg	12.7	3.0	SW846 8260C	1	09/27/2022 16:48	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.8%	56 – 124	09/27/2022 16:48	
4-Bromofluorobenzene	460-00-4	91.5%	51 – 128	09/27/2022 16:48	
Dibromofluoromethane	1868-53-7	104%	62 – 123	09/27/2022 16:48	
Toluene-d8	2037-26-5	94.7%	59 – 131	09/27/2022 16:48	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	49.2	S4	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	50.8	S4	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Results

Client Sample ID	POUGH 5A	Collected	09/23/2022 10:20
Lab Sample ID	3265452005	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	5.5	S5	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:55	A1S	E1
Cadmium, Total	1.5	S5	mg/kg	0.80	0.27	SW846 6010D	1	10/18/2022 16:55	A1S	E1
Copper, Total	21.2	S5	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:55	A1S	E1
Lead, Total	30.9	S5	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:55	A1S	E1
Mercury, Total	0.11	S5	mg/kg	0.081	0.026	SW846 7471B	1	10/13/2022 15:18	A1S	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S5	ug/kg	14.4	9.3	SW846 8081B	5	10/05/2022 06:20	KJH	E
4,4'-DDE	ND	ND,3,S5	ug/kg	14.4	4.7	SW846 8081B	5	10/05/2022 06:20	KJH	E
4,4'-DDT	ND	ND,4,S5	ug/kg	14.4	4.1	SW846 8081B	5	10/05/2022 06:20	KJH	E
Chlordane	ND	ND,S5	ug/kg	296	49.9	SW846 8081B	5	10/05/2022 06:20	KJH	E
Dieldrin	ND	ND,5,S5	ug/kg	14.4	5.6	SW846 8081B	5	10/05/2022 06:20	KJH	E
Mirex	ND	ND,S5	ug/kg	14.4	4.5	SW846 8081B	5	10/05/2022 06:20	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	57.2%	30 – 135	10/05/2022 06:20	
Tetrachloro-m-xylene	877-09-8	62%	30 – 111	10/05/2022 06:20	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Acenaphthylene	ND	ND,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Anthracene	32.7J	J,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Benzo(a)anthracene	67.9J	J,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Benzo(a)pyrene	69.7J	J,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Benzo(b)fluoranthene	51.1J	J,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Benzo(g,h,i)perylene	44.8J	J,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Benzo(k)fluoranthene	ND	ND,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Chrysene	75.1J	J,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Fluoranthene	114	S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Fluorene	ND	ND,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Indeno(1,2,3-cd)pyrene	49.3J	J,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Naphthalene	ND	ND,S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Phenanthrene	113	S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E
Pyrene	149	S5	ug/kg	76.3	25.9	SW846 8270D	1	09/27/2022 13:38	S7M	E

Results

Client Sample ID	POUGH 5A	Collected	09/23/2022 10:20
Lab Sample ID	3265452005	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	63.7%	19 – 132	09/27/2022 13:38	
2-Fluorobiphenyl	321-60-8	53.7%	40 – 110	09/27/2022 13:38	
2-Fluorophenol	367-12-4	44.4%	26 – 116	09/27/2022 13:38	
Nitrobenzene-d5	4165-60-0	48.2%	38 – 112	09/27/2022 13:38	
Phenol-d5	4165-62-2	47.9%	35 – 111	09/27/2022 13:38	
Terphenyl-d14	98904-43-9	70.2%	45 – 126	09/27/2022 13:38	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S5	ug/L			EPA 1613B	1	11/23/2022 10:48	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S5	ug/kg	3.6	0.89	SW846 8260C	1	09/27/2022 17:13	TMP	B
Ethylbenzene	ND	ND,S5	ug/kg	3.6	1.2	SW846 8260C	1	09/27/2022 17:13	TMP	B
Toluene	ND	ND,S5	ug/kg	3.6	1.2	SW846 8260C	1	09/27/2022 17:13	TMP	B
Total Xylenes	ND	ND,S5	ug/kg	10.7	2.5	SW846 8260C	1	09/27/2022 17:13	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.5%	56 – 124	09/27/2022 17:13	
4-Bromofluorobenzene	460-00-4	94.5%	51 – 128	09/27/2022 17:13	
Dibromofluoromethane	1868-53-7	107%	62 – 123	09/27/2022 17:13	
Toluene-d8	2037-26-5	96.5%	59 – 131	09/27/2022 17:13	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	43.5	S5	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	56.5	S5	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Results

Client Sample ID	POUGH 5B	Collected	09/23/2022 10:35
Lab Sample ID	3265452006	Lab Receipt	09/24/2022 08:49

METALS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	6.6	S6	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:56	A1S	E1
Cadmium, Total	ND	ND,S6	mg/kg	0.81	0.27	SW846 6010D	1	10/18/2022 16:56	A1S	E1
Copper, Total	12.3	S6	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:56	A1S	E1
Lead, Total	12.3	S6	mg/kg	3.2	1.1	SW846 6010D	1	10/18/2022 16:56	A1S	E1
Mercury, Total	0.034J	J,S6	mg/kg	0.072	0.023	SW846 7471B	1	10/13/2022 15:19	A1S	E

PESTICIDES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,2,S6	ug/kg	13.5	8.7	SW846 8081B	5	10/05/2022 06:30	KJH	E
4,4'-DDE	ND	ND,3,S6	ug/kg	13.5	4.4	SW846 8081B	5	10/05/2022 06:30	KJH	E
4,4'-DDT	ND	ND,4,S6	ug/kg	13.5	3.9	SW846 8081B	5	10/05/2022 06:30	KJH	E
Chlordane	ND	ND,S6	ug/kg	278	46.9	SW846 8081B	5	10/05/2022 06:30	KJH	E
Dieldrin	ND	ND,5,S6	ug/kg	13.5	5.2	SW846 8081B	5	10/05/2022 06:30	KJH	E
Mirex	ND	ND,S6	ug/kg	13.5	4.2	SW846 8081B	5	10/05/2022 06:30	KJH	E

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	71.2%	30 – 135	10/05/2022 06:30	
Tetrachloro-m-xylene	877-09-8	65.4%	30 – 111	10/05/2022 06:30	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Acenaphthene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Acenaphthylene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Anthracene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Benzo(a)anthracene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Benzo(a)pyrene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Benzo(b)fluoranthene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Benzo(g,h,i)perylene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Benzo(k)fluoranthene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Chrysene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Dibenzo(a,h)anthracene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Fluoranthene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Fluorene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Indeno(1,2,3-cd)pyrene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Naphthalene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Phenanthrene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E
Pyrene	ND	ND,S6	ug/kg	69.8	23.7	SW846 8270D	1	09/27/2022 14:03	S7M	E

Results

Client Sample ID	POUGH 5B	Collected	09/23/2022 10:35
Lab Sample ID	3265452006	Lab Receipt	09/24/2022 08:49

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	69.9%	19 – 132	09/27/2022 14:03	
2-Fluorobiphenyl	321-60-8	62.4%	40 – 110	09/27/2022 14:03	
2-Fluorophenol	367-12-4	52.7%	26 – 116	09/27/2022 14:03	
Nitrobenzene-d5	4165-60-0	58.5%	38 – 112	09/27/2022 14:03	
Phenol-d5	4165-62-2	57.1%	35 – 111	09/27/2022 14:03	
Terphenyl-d14	98904-43-9	72.9%	45 – 126	09/27/2022 14:03	

Sub'd-CASH Labs

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dioxin	See attached	1,S6	ug/L			EPA 1613B	1	11/23/2022 10:49	SUB	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Benzene	ND	ND,S6	ug/kg	3.5	0.88	SW846 8260C	1	09/27/2022 17:37	TMP	B
Ethylbenzene	ND	ND,S6	ug/kg	3.5	1.2	SW846 8260C	1	09/27/2022 17:37	TMP	B
Toluene	ND	ND,S6	ug/kg	3.5	1.2	SW846 8260C	1	09/27/2022 17:37	TMP	B
Total Xylenes	ND	ND,S6	ug/kg	10.6	2.5	SW846 8260C	1	09/27/2022 17:37	TMP	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.9%	56 – 124	09/27/2022 17:37	
4-Bromofluorobenzene	460-00-4	92.9%	51 – 128	09/27/2022 17:37	
Dibromofluoromethane	1868-53-7	105%	62 – 123	09/27/2022 17:37	
Toluene-d8	2037-26-5	96.3%	59 – 131	09/27/2022 17:37	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	40.3	S6	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E
Total Solids	59.7	S6	%	0.1	0.01	S2540G-11	1	09/27/2022 08:40	NXL	E

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3265452001	POUGH 3A	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	
3265452002	POUGH 3B	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	
3265452003	POUGH 4A	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	
3265452004	POUGH 4B	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	
3265452005	POUGH 5A	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	
3265452006	POUGH 5B	EPA 1613B	N/A	
		SW846 6010D	SW846 3051A	
		SW846 7471B	SW846 7471B	
		SW846 8081B	SW846 3546	
		SW846 8270D	SW846 3546	
		SW846 8260C	SW846 5035A	
		S2540G-11	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3265452001	POUGH 3A	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	890176	10/13/2022 13:05	WDA	SW846 7471B	890226
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 12:30	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106
3265452002	POUGH 3B	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 12:45	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106
3265452003	POUGH 4A	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	890176	10/13/2022 13:05	WDA	SW846 7471B	890226
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 13:30	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106
3265452004	POUGH 4B	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	890176	10/13/2022 13:05	WDA	SW846 7471B	890226
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 13:45	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106
3265452005	POUGH 5A	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	890176	10/13/2022 13:05	WDA	SW846 7471B	890226
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 10:20	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106
3265452006	POUGH 5B	N/A	N/A	N/A		EPA 1613B	
		SW846 3051A	884489	09/29/2022 01:32	ANN	SW846 6010D	891358
		SW846 7471B	890176	10/13/2022 13:05	WDA	SW846 7471B	890226
		SW846 3546	884089	09/26/2022 14:45	RXS	SW846 8081B	884332
		SW846 3546	884091	09/26/2022 14:40	SRL	SW846 8270D	884321
		SW846 5035A	884276	09/23/2022 10:35	TMP	SW846 8260C	884278
		N/A	N/A	N/A		S2540G-11	884106

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3265452
Logged By: AXF
PM: SSL
ALS Quote #:
1 of 1

Client Name: Normandeau Assoc.
Address: 400 Old Reading Pike Bldg. A; Ste 101 Stowe PA 19464
Contact: Don Nazario
Phone#: 717-617-7076
Project Name/#: CHPE Hudson River
Bill To: Don Nazario
Purchase Order #: 24711.001
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] Y DNAZARIO@Normandeau.com

	Container Type	VOA	Glass	Glass							
	Container Size	40ml	8oz	8oz							
	Preservative	MeOH	—	—							

ANALYSES/METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOC, % moist	PAHs, Pest, Metals	Dioxins							
							Enter Number of Containers Per Sample or Field Results Below.									
1	POUGH 3A	9/23/22	1230		G	S	4	1	1							
2	3B		1245		G	S	4	1	1							
3	4A		1330		G	S	4	1	1							
4	4B		1345		G	S	4	1	1							
5	5A		1020		G	S	4	1	1							
6	5B		1035		G	S	4	1	1							
7																
8																
9																
10																

Receipt Information (completed by Receiving Lab)
Temp Taken By: AMRF Therm ID: 570 WO Temp (°C) 2°
Receipt Info completed by: AMRF
WV Containers 0-6°C Y N (NA)

Cooler Custody Seals Intact	Y	N	(NA)
Sample Custody Seal Intact	Y	N	(NA)
Received on Ice	(Y)	N	NA
Coolers & Samples Intact	(Y)	N*	
Correct Containers Provided	(Y)	N	
Sample Label/COC Agree	(Y)	N	
Adequate Sample Volumes	(Y)	N	
VOA only: Headspace Present	Y	(N)	NA
VOA only: Trip Blank	Y	(N)	NA

Deviations? NO YES
If YES, list below: *Sample 4A 1/2 soil Jars has a broken lid same with samples 3B, 4B
Client contact:
Date/Tech:

NJ ≤ 4 days?
Courier/Tracking #: 7700 1325 1870

Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?
PWSID #
Rad Screen (uCi)
New Source? Y N
New Source Contact:
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

SAMPLED BY (Please Print, if MD include Sampler #): DON NAZARIO

Comments: Please do not analyze for PCBs

Date:	Time		Relinquished By / Company Name		Received By / Company Name
9/23/22	1530	1	JNazario/Normandeau	2	FedEx
		3	FedEx	4	AMRF/ALS 9/24/22 8:49
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDD: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05/22

November 22, 2022 Service Request No:E2200954

Sarah Leung
ALS Environmental - Middletown
301 Fulling Mill Road
Middletown, PA 17057

Laboratory Results for: 3265452

Dear Sarah,

Enclosed are the results of the sample(s) submitted to our laboratory October 01, 2022
For your reference, these analyses have been assigned our service request number **E2200954.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental – Middletown	**Service Request No.:**	E2200954
Project:	3265452	**Date Received:**	10/01/22
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Six samples were received for analysis at ALS Environmental in Houston on 10/01/22.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200474: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch. The LCS/DLCS recoveries passed.

B flags – Method Blanks

The Method Blank EQ2200474-01 contained low levels of target compounds below the Method Reporting Limit (MRL). The associated compounds in the samples are flagged with 'B' flags where the sample result is less than ten times the level detected in the method blank.

2378-TCDF

Samples analyzed on the DB-5MSUI column were analyzed under conditions where sufficient separation between 2,3,7,8-TCDF and its closest eluter was achieved. Confirmation of this result was not required.

Y flags – Cleanup Standard

The recoveries for the cleanup standard, 37Cl-2,3,7,8-TCDD are below control limits. The sample results are not affected since this labeled standard is provided as a means of demonstrating that both the sample extraction and subsequent cleanup steps performed as expected and is not used in quantitation of target analytes.

Y flags – Labeled Standards

Quantification of the native 2,3,7,8-substituted congeners is based on isotopic dilution, which automatically corrects for variation in extraction efficiency and provides accurate values even with poor recovery. Samples that had recoveries of labeled standards outside the acceptance limits are qualified with 'Y' flags on the Labeled Compound summary pages. In all cases, the signal-to-noise ratios are greater than 10:1 and detection limits were below the Method Reporting Limits.

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by ALS/Houston to include:

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- Non-detected compounds are not included in the 'Total'

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - Middletown **Service Request:**E2200954
Project: 3265452

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200954-001	3265452-001 (Pough 3A)	9/23/2022	1230
E2200954-002	3265452-002 (Pough 3B)	9/23/2022	1245
E2200954-003	3265452-003 (Pough 4A)	9/23/2022	1330
E2200954-004	3265452-004 (Pough 4B)	9/23/2022	1345
E2200954-005	3265452-005 (Pough 5A)	9/23/2022	1020
E2200954-006	3265452-006 (Pough 5B)	9/23/2022	1035

Service Request Summary

Folder #: **E2200954**
Client Name: ALS Environmental - Middletown
Project Name: 3265452
Project Number:

Report To: Sarah Leung
ALS Environmental - Middletown
301 Fulling Mill Road
Middletown, PA 17057
USA
Phone Number: 717-944-5541
Cell Number:
Fax Number:
E-mail: sarah.leung@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 10/01/22
Internal Due Date: 11/7/2022
QAP: LAB QAP
Qualifier Set: HRMS Qualifier Set
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: 3265452
EDD: BASIC_WQC_CASNo

6 8 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 2C
Pressure Gas:

				HOUSTON	
Lab Samp No.	**Client Samp No**	**Matrix**	**Collected**	PCDD PCDF/8290A	Total Solids/ALS SOP
E2200954-001	3265452-001 (Pough 3A)	Soil	09/23/22 1230	II	II
E2200954-002	3265452-002 (Pough 3B)	Soil	09/23/22 1245	II	II
E2200954-003	3265452-003 (Pough 4A)	Soil	09/23/22 1330	II	II
E2200954-004	3265452-004 (Pough 4B)	Soil	09/23/22 1345	II	II
E2200954-005	3265452-005 (Pough 5A)	Soil	09/23/22 1020	II	II
E2200954-006	3265452-006 (Pough 5B)	Soil	09/23/22 1035	II	II

Printed 11/22/2022 2:55:42 PM

Service Request Summary

Folder #:	**E2200954**
Client Name:	ALS Environmental - Middletown
Project Name:	3265452
Project Number:	
Report To:	Sarah Leung ALS Environmental - Middletown 301 Fulling Mill Road Middletown, PA 17057 USA
Phone Number:	717-944-5541
Cell Number:	
Fax Number:	
E-mail:	sarah.leung@alsglobal.com

Project Chemist:	James Guin
Originating Lab:	HOUSTON
Logged By:	CGRANDITS
Date Received:	10/01/22
Internal Due Date:	11/7/2022
QAP:	LAB QAP
Qualifier Set:	HRMS Qualifier Set
Formset:	Lab Standard
Merged?:	Y
Report to MDL?:	Y
P.O. Number:	3265452
EDD:	BASIC_WQC_CASNo

6 8 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved

Location: EHRMS-WIC 2C

Pressure Gas:

Data Qualifiers

HRMS Qualifier Set

B Indicates the associated analyte was found in the method blank at >1/10th the reported value.

E Estimated value. The reported concentration is above the calibration range of the instrument.

H Sample extracted and/or analyzed out of suggested holding time.

J Estimated value. The reported concentration is below the MRL.

K The ion abundance ratio between the primary and secondary ions were outside of theoretical acceptance limits.The concentration of this analyte should be considered as an estimate.

P Chlorodiphenyl ether interference was present at the retention time of the target analyte. Reported result should be considered an estimate.

Q Monitored lock-mass indicates matrix-interference. Reported result is estimated.

S Signal saturated detector. Result reported from dilution.

U Compound was analyzed for, but was not detected (ND).

X See Case Narrative.

Y Isotopically Labeled Standard recovery outside of acceptance limits. In all cases, the signal-to-nois ratios are greater than 10:1, making the recoveries acceptable.

i The MDL/MRL have been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
Arkansas Department of Environmental Quality	22-041-0	3/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID: E2200954 | (DB-5MSUI) | SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date:	Analyst:	Samples:
11/18/22	LKL	001–005

Second Level - Data Review – to be filled by person doing peer review

Date:	Analyst:	Samples:
11/18/22	SL	001–005

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID: E22O0954 (DB-5MSUI) SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date:	Analyst:	Samples:
11/22/22	YC	006

Second Level - Data Review – to be filled by person doing peer review

Date:	Analyst:	Samples:
11/22/22	SL	006

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

301 Fulling Mill Road
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #:	1 of 1
ALS Quote #:	

Client Name: ALS

Address: 301 Fulling Mill Road
Middletown PA 17057

Contact: Sarah Leung

Phone#: (717) 702-2248

Project Name/#: 3265452

Bill To:

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [X] -Y namdt.subcontract@alsglobal.com

Fax? [ ] -Y No.:

Receipt Information (completed by Receiving Lab)

W.O. Temp: 3.6 Therm ID: 103

Courier/Tracking #:

Purchase Order #: 3265452

Project Comments:

Subcontract: ALS Houston

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	DIOXIN METHOD 8290	Sample/COC Comments
	Container Type					G	
	Container Size					8oz	
	Perservative					None	
	ANALYSES/METHOD REQUESTED						
	Enter Number of Containers Per Sample or Field Results Below.						
1	3265452001 (Pough 3A)	9/23/22	1230	G	S	1	
2	3265452002 (Pough 3B)	9/23/22	1245	G	S	1	
3	3265452003 (Pough 4A)	9/23/22	1330	G	S	1	
4	3265452004 (Pough 4B)	9/23/22	1345	G	S	1	
5	3265452005 (Pough 5A)	9/23/22	1020	G	S	1	
6	3265452006 (Pough 5B)	9/23/22	1035	G	S	1	
7							
8							
9							
10							

SAMPLED BY (Please Print):

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	9/23/22	1640	2	9/23/22	0940
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [x] Level 2

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [x] NY [ ] NJ [ ] PA [ ] NC [ ] MD [ ] other

Reportable to PADEP? Yes [ ] No [ ]

PWSID #

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type- Excel

* G=Grab; C=Composite

**Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 11/18

Cooler Receipt Form

ALS Environmental

Project Chemist JK

Client/Project ALS-MI Thermometer ID IR1

Date/Time Received: 10/11/22 Initials: CA Date/Time Logged in: 10/11/22 Initials CA

1. Method of delivery: ◯ US Mail ☒ Fed Ex ◯ UPS ◯ DHL ◯ Courier ◯ Client

2. Samples received in: ☒ Cooler ◯ Box ◯ Envelope ◯ Other

3. Were custody seals on coolers? ◯ Yes ☒ No
   Were they intact? ◯ Yes ◯ No ☒ N/A
   Were they signed and dated? ◯ Yes ◯ No ☒ N/A
   If yes, how many and where?

4. Packing Material: ◯ Inserts ☒ Baggies ☒ Bubble Wrap ◯ Gel Packs ☒ Wet Ice ◯ Sleeves ◯ Other

5. Foreign or Regulated Soil? ◯ Yes ◯ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
5857 1123 6072		10/11/22	0940	CA	3.0	☒
5857 1123 6083		10/11/22	0940	CA	3.4	☒
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ◯ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ◯ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ◯ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ◯ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ◯ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

11/23/2022 11:15 AM

Prep Run#: 408313 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped
Team: Semivoa GCMS/TWOODS **Prep Method:** Method **Prep Date/Time:** 10/18/22 11:44

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200953-001	3265886-001 (Port Ewen 2A)	.01	8290A/PCDD PCDF			Soil	10.344g	brown mud
2	E2200953-002	3265886-002 (Port Ewen 2B)	.01	8290A/PCDD PCDF			Soil	10.057g	brown mud
3	E2200953-003	3265886-003 (Port Ewen 3A)	.01	8290A/PCDD PCDF			Soil	10.067g	brown mud
4	E2200953-004	3265886-004 (Port Ewen 3B)	.01	8290A/PCDD PCDF			Soil	10.280g	brown mud
5	E2200953-005	3265886-005 (Port Ewen 4A)	.01	8290A/PCDD PCDF			Soil	10.331g	brown mud
6	E2200953-006	3265886-006 (Port Ewen 4B)	.01	8290A/PCDD PCDF			Soil	10.187g	brown mud
7	E2200953-007	3265886-007 (Port Ewen 5A)	.01	8290A/PCDD PCDF			Soil	10.242g	brown mud
8	E2200953-008	3265886-008 (Port Ewen 5B)	.01	8290A/PCDD PCDF			Soil	10.315g	brown mud
9	E2200954-001	3265452-001 (Pough 3A)	.01	8290A/PCDD PCDF			Soil	10.046g	brown mud
10	E2200954-002	3265452-002 (Pough 3B)	.01	8290A/PCDD PCDF			Soil	10.308g	brown mud
11	E2200954-003	3265452-003 (Pough 4A)	.01	8290A/PCDD PCDF			Soil	10.137g	brown mud
12	E2200954-004	3265452-004 (Pough 4B)	.01	8290A/PCDD PCDF			Soil	10.193g	brown mud
13	E2200954-005	3265452-005 (Pough 5A)	.01	8290A/PCDD PCDF			Soil	10.318g	brown mud
14	E2200954-006	3265452-006 (Pough 5B)	.01	8290A/PCDD PCDF			Soil	10.256g	brown mud
15	E2200955-001	3265451-001	.01	8290A/PCDD PCDF			Soil	10.003g	brown mud
16	E2200955-002	3265451-002	.01	8290A/PCDD PCDF			Soil	10.377g	brown mud
17	E2200955-003	3265451-003	.01	8290A/PCDD PCDF			Soil	10.329g	brown mud
18	E2200955-004	3265451-004	.01	8290A/PCDD PCDF			Soil	10.075g	brown mud
19	EQ2200474-01	MB		8290A/PCDD PCDF			Solid	10.199g	
20	EQ2200474-02	LCS		8290A/PCDD PCDF			Solid	10.137g	
21	EQ2200474-03	DLCS		8290A/PCDD PCDF			Solid	10.135g	

Spiking Solutions

Name: 1613B Matrix Working Standard Inventory ID 225447 Logbook Ref: tw 10/12/22 225447 Expires On: 04/10/2023

EQ2200474-02 100.00µL EQ2200474-03 100.00µL

Name: 8290/1613B Cleanup Working Standard Inventory ID 225486 Logbook Ref: tw 10/14/22 225486 Expires On: 02/28/2023

E2200953-001	100.00µL	E2200953-002	100.00µL	E2200953-003	100.00µL	E2200953-004	100.00µL	E2200953-005	100.00µL	E2200953-006	100.00µL
E2200953-007	100.00µL	E2200953-008	100.00µL	E2200954-001	100.00µL	E2200954-002	100.00µL	E2200954-003	100.00µL	E2200954-004	100.00µL
E2200954-005	100.00µL	E2200954-006	100.00µL	E2200955-001	100.00µL	E2200955-002	100.00µL	E2200955-003	100.00µL	E2200955-004	100.00µL
EQ2200474-01	100.00µL	EQ2200474-02	100.00µL	EQ2200474-03	100.00µL						

Name: 1613B Labeled Working Standard Inventory ID 225489 Logbook Ref: NB 10/14/2022 225489 ng/mL Expires On: 04/10/2023

Preparation Information Benchsheet

Prep Run#: 408313 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped

Team: Semivoa GCMS/TWOODS **Prep Method:** Method **Prep Date/Time:** 10/18/22 11:44

E2200953-001	1,000.00µL	E2200953-002	1,000.00µL	E2200953-003	1,000.00µL	E2200953-004	1,000.00µL	E2200953-005	1,000.00µL	E2200953-006	1,000.00µL
E2200953-007	1,000.00µL	E2200953-008	1,000.00µL	E2200954-001	1,000.00µL	E2200954-002	1,000.00µL	E2200954-003	1,000.00µL	E2200954-004	1,000.00µL
E2200954-005	1,000.00µL	E2200954-006	1,000.00µL	E2200955-001	1,000.00µL	E2200955-002	1,000.00µL	E2200955-003	1,000.00µL	E2200955-004	1,000.00µL
EQ2200474-01	1,000.00µL	EQ2200474-02	1,000.00µL	EQ2200474-03	1,000.00µL						

Preparation Materials

Carbon, High Purity	tw 08/15/22 (224550)	Ethyl Acetate 99.9% Minimum EtOAc	Ethyl Acetate 6/30/22 (223782)	Glass Wool	TW 5/20/22 (225628)
Hexanes 95%	tw 10/18/22 hexane (225613)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	tw 10/04/22 (225325)	Sodium Hydroxide 1N NaOH	SN 4/26/22 (222726)
Sodium Sulfate Anhydrous Reagent Grade Na2SO4	SN 5/18/22 (223143)	Tridecane (n-Tridecane)	tw 08/15/22 (224552)	Silica Gel	tw 10/17/22 (225501)
sulfuric acid	tw 09/09/22 sulfuric (224982)	Toluene 99.9% Minimum	tw 10/03/22 (225319)		

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	10/18/22 11:44	Started:	10/20/22 12:00	Started:	10/20/22 13:00	Started:	10/21/22 13:00
Finished:	10/19/22 09:00	Finished:	10/20/22 13:00	Finished:	10/20/22 16:00	Finished:	10/21/22 16:00
By:	TWOODS	By:	TWOODS	By:	TWOODS	By:	TWOODS
Comments		Comments		Comments		Comments	

Comments: _____

Reviewed By: TW Date: 10/18/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-001 (Pough 3A)	**Units:**	ng/Kg
Lab Code:	E2200954-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 14:29
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540020	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.543	0.828			1
1,2,3,7,8-PeCDD	ND	U	0.262	4.14			1
1,2,3,6,7,8-HxCDD	0.916**J**		0.179	4.14	1.31	1.000	1
1,2,3,4,7,8-HxCDD	0.606**JK**		0.193	4.14	1.52	1.000	1
1,2,3,7,8,9-HxCDD	0.384**JK**		0.186	4.14	0.59	1.007	1
1,2,3,4,6,7,8-HpCDD	15.7**K**		0.619	4.14	1.21	1.000	1
OCDD	209		4.20	8.28	0.95	1.000	1
2,3,7,8-TCDF	ND	U	0.383	0.828			1
1,2,3,7,8-PeCDF	ND	U	0.304	4.14			1
2,3,4,7,8-PeCDF	ND	U	0.278	4.14			1
1,2,3,6,7,8-HxCDF	0.396**JK**		0.161	4.14	1.44	1.000	1
1,2,3,7,8,9-HxCDF	ND	U	0.219	4.14			1
1,2,3,4,7,8-HxCDF	ND	U	0.149	4.14			1
2,3,4,6,7,8-HxCDF	ND	U	0.125	4.14			1
1,2,3,4,6,7,8-HpCDF	2.92**J**		0.272	4.14	1.10	1.000	1
1,2,3,4,7,8,9-HpCDF	0.655**JK**		0.324	4.14	0.66	1.000	1
OCDF	8.31		0.722	8.28	0.81	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-001 (Pough 3A)	**Units:**	ng/Kg
Lab Code:	E2200954-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 14:29
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540020	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.543	0.828			1
Total Penta-Dioxins	ND	U	0.262	4.14			1
Total Hexa-Dioxins	7.76		0.185	4.14	1.26		1
Total Hepta-Dioxins	22.6		0.619	4.14	0.89		1
Total Tetra-Furans	1.22		0.383	0.828	0.88		1
Total Penta-Furans	ND	U	0.291	4.14			1
Total Hexa-Furans	1.03**J**		0.157	4.14	1.20		1
Total Hepta-Furans	2.92**J**		0.297	4.14	1.10		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-001 (Pough 3A)	**Units:**	Percent
Lab Code:	E2200954-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 14:29
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.046g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540020	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	652.241	33	**Y**	40-135	0.78	1.024
13C-1,2,3,7,8-PeCDD	2000	464.942	23	**Y**	40-135	1.62	1.206
13C-1,2,3,4,7,8-HxCDD	2000	421.463	21	**Y**	40-135	1.35	0.991
13C-1,2,3,6,7,8-HxCDD	2000	483.478	24	**Y**	40-135	1.28	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	298.471	15	**Y**	40-135	1.14	1.068
13C-OCDD	4000	348.224	9	**Y**	40-135	0.91	1.140
13C-2,3,7,8-TCDF	2000	619.866	31	**Y**	40-135	0.79	0.991
13C-1,2,3,7,8-PeCDF	2000	462.628	23	**Y**	40-135	1.56	1.160
13C-2,3,4,7,8-PeCDF	2000	483.535	24	**Y**	40-135	1.60	1.196
13C-1,2,3,4,7,8-HxCDF	2000	438.302	22	**Y**	40-135	0.52	0.970
13C-1,2,3,6,7,8-HxCDF	2000	400.887	20	**Y**	40-135	0.48	0.973
13C-1,2,3,7,8,9-HxCDF	2000	366.162	18	**Y**	40-135	0.49	1.008
13C-2,3,4,6,7,8-HxCDF	2000	555.935	28	**Y**	40-135	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	239.638	12	**Y**	40-135	0.43	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	261.510	13	**Y**	40-135	0.42	1.080
37Cl-2,3,7,8-TCDD	800	451.569	56		40-135	NA	1.025

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-001 (Pough 3A)	**Units:**	ng/Kg
Lab Code:	E2200954-001	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.543	0.828	1	1	
1,2,3,7,8-PeCDD	ND	0.262	4.14	1	1	
1,2,3,6,7,8-HxCDD	**0.916**	0.179	4.14	1	0.1	0.0916
1,2,3,4,7,8-HxCDD	**0.606**	0.193	4.14	1	0.1	0.0606
1,2,3,7,8,9-HxCDD	**0.384**	0.186	4.14	1	0.1	0.0384
1,2,3,4,6,7,8-HpCDD	**15.7**	0.619	4.14	1	0.01	0.157
OCDD	**209**	4.20	8.28	1	0.0003	0.0627
2,3,7,8-TCDF	ND	0.383	0.828	1	0.1	
1,2,3,7,8-PeCDF	ND	0.304	4.14	1	0.03	
2,3,4,7,8-PeCDF	ND	0.278	4.14	1	0.3	
1,2,3,6,7,8-HxCDF	**0.396**	0.161	4.14	1	0.1	0.0396
1,2,3,7,8,9-HxCDF	ND	0.219	4.14	1	0.1	
1,2,3,4,7,8-HxCDF	ND	0.149	4.14	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.125	4.14	1	0.1	
1,2,3,4,6,7,8-HpCDF	**2.92**	0.272	4.14	1	0.01	0.0292
1,2,3,4,7,8,9-HpCDF	**0.655**	0.324	4.14	1	0.01	0.00655
OCDF	**8.31**	0.722	8.28	1	0.0003	0.00249
		Total TEQ				0.488

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-001 (Pough 3A)	**Units:**	Percent
Lab Code:	E2200954-001	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	8.7505g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	60.1		-	-			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-002 (Pough 3B)	**Units:**	ng/Kg
Lab Code:	E2200954-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 15:17
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.308g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540021	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.301	0.825			1
1,2,3,7,8-PeCDD	0.217**J**		0.164	4.12	1.50	1.001	1
1,2,3,6,7,8-HxCDD	0.229**JK**		0.172	4.12	0.71	1.000	1
1,2,3,4,7,8-HxCDD	0.405**J**		0.192	4.12	1.14	1.000	1
1,2,3,7,8,9-HxCDD	0.315**JK**		0.181	4.12	1.65	1.007	1
1,2,3,4,6,7,8-HpCDD	7.93		0.211	4.12	1.04	1.000	1
OCDD	154		0.857	8.25	0.86	1.000	1
2,3,7,8-TCDF	ND	U	0.256	0.825			1
1,2,3,7,8-PeCDF	ND	U	0.242	4.12			1
2,3,4,7,8-PeCDF	ND	U	0.238	4.12			1
1,2,3,6,7,8-HxCDF	0.226**J**		0.0512	4.12	1.17	1.000	1
1,2,3,7,8,9-HxCDF	0.209**JK**		0.0674	4.12	1.93	1.001	1
1,2,3,4,7,8-HxCDF	0.193**JK**		0.0472	4.12	1.66	1.001	1
2,3,4,6,7,8-HxCDF	0.230**J**		0.0429	4.12	1.12	1.000	1
1,2,3,4,6,7,8-HpCDF	2.29**JK**		0.126	4.12	0.86	1.000	1
1,2,3,4,7,8,9-HpCDF	0.309**JK**		0.146	4.12	1.60	1.000	1
OCDF	57.5		0.457	8.25	0.90	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-002 (Pough 3B)	**Units:**	ng/Kg
Lab Code:	E2200954-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 15:17
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.308g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540021	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.301	0.825			1
Total Penta-Dioxins	0.484**J**		0.164	4.12	1.33		1
Total Hexa-Dioxins	4.12**J**		0.181	4.12	1.23		1
Total Hepta-Dioxins	20.1		0.211	4.12	0.98		1
Total Tetra-Furans	ND	U	0.256	0.825			1
Total Penta-Furans	ND	U	0.240	4.12			1
Total Hexa-Furans	2.10**J**		0.0510	4.12	1.21		1
Total Hepta-Furans	8.72		0.135	4.12	1.06		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-002 (Pough 3B)	**Units:**	Percent
Lab Code:	E2200954-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 15:17
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.308g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540021	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	955.659	48		40-135	0.80	1.024
13C-1,2,3,7,8-PeCDD	2000	865.649	43		40-135	1.62	1.206
13C-1,2,3,4,7,8-HxCDD	2000	978.919	49		40-135	1.24	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1148.314	57		40-135	1.25	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	936.821	47		40-135	1.05	1.068
13C-OCDD	4000	1252.458	31	**Y**	40-135	0.92	1.139
13C-2,3,7,8-TCDF	2000	815.402	41		40-135	0.79	0.992
13C-1,2,3,7,8-PeCDF	2000	822.953	41		40-135	1.60	1.160
13C-2,3,4,7,8-PeCDF	2000	805.957	40		40-135	1.60	1.196
13C-1,2,3,4,7,8-HxCDF	2000	1052.856	53		40-135	0.50	0.970
13C-1,2,3,6,7,8-HxCDF	2000	949.867	47		40-135	0.51	0.972
13C-1,2,3,7,8,9-HxCDF	2000	938.879	47		40-135	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1198.855	60		40-135	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	768.994	38	**Y**	40-135	0.42	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	877.485	44		40-135	0.42	1.080
37Cl-2,3,7,8-TCDD	800	357.329	45		40-135	NA	1.025

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-002 (Pough 3B)	**Units:**	ng/Kg
Lab Code:	E2200954-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.301	0.825	1	1	
1,2,3,7,8-PeCDD	**0.217**	0.164	4.12	1	1	0.217
1,2,3,6,7,8-HxCDD	**0.229**	0.172	4.12	1	0.1	0.0229
1,2,3,4,7,8-HxCDD	**0.405**	0.192	4.12	1	0.1	0.0405
1,2,3,7,8,9-HxCDD	**0.315**	0.181	4.12	1	0.1	0.0315
1,2,3,4,6,7,8-HpCDD	**7.93**	0.211	4.12	1	0.01	0.0793
OCDD	**154**	0.857	8.25	1	0.0003	0.0462
2,3,7,8-TCDF	ND	0.256	0.825	1	0.1	
1,2,3,7,8-PeCDF	ND	0.242	4.12	1	0.03	
2,3,4,7,8-PeCDF	ND	0.238	4.12	1	0.3	
1,2,3,6,7,8-HxCDF	**0.226**	0.0512	4.12	1	0.1	0.0226
1,2,3,7,8,9-HxCDF	**0.209**	0.0674	4.12	1	0.1	0.0209
1,2,3,4,7,8-HxCDF	**0.193**	0.0472	4.12	1	0.1	0.0193
2,3,4,6,7,8-HxCDF	**0.230**	0.0429	4.12	1	0.1	0.0230
1,2,3,4,6,7,8-HpCDF	**2.29**	0.126	4.12	1	0.01	0.0229
1,2,3,4,7,8,9-HpCDF	**0.309**	0.146	4.12	1	0.01	0.00309
OCDF	**57.5**	0.457	8.25	1	0.0003	0.0173
		Total TEQ				0.566

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 12:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-002 (Pough 3B)	**Units:**	Percent
Lab Code:	E2200954-002	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	5.272g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	58.8		-	-			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-003 (Pough 4A)	**Units:**	ng/Kg
Lab Code:	E2200954-003	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 16:05
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540022	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.198	0.890			1
1,2,3,7,8-PeCDD	0.180**J**		0.139	4.45	1.66	1.001	1
1,2,3,6,7,8-HxCDD	0.963**J**		0.117	4.45	1.23	1.000	1
1,2,3,4,7,8-HxCDD	0.612**JK**		0.126	4.45	1.72	1.000	1
1,2,3,7,8,9-HxCDD	0.491**J**		0.121	4.45	1.41	1.007	1
1,2,3,4,6,7,8-HpCDD	20.9		0.226	4.45	1.09	1.000	1
OCDD	283		1.73	8.90	0.90	1.000	1
2,3,7,8-TCDF	0.829**J**		0.213	0.890	0.72	0.999	1
1,2,3,7,8-PeCDF	ND	U	0.194	4.45			1
2,3,4,7,8-PeCDF	0.440**JK**		0.200	4.45	0.85	1.001	1
1,2,3,6,7,8-HxCDF	0.399**J**		0.0700	4.45	1.20	1.000	1
1,2,3,7,8,9-HxCDF	0.189**JK**		0.0893	4.45	0.99	1.000	1
1,2,3,4,7,8-HxCDF	0.505**J**		0.0643	4.45	1.12	1.000	1
2,3,4,6,7,8-HxCDF	0.268**JK**		0.0620	4.45	0.83	1.000	1
1,2,3,4,6,7,8-HpCDF	7.57		0.0821	4.45	0.96	1.000	1
1,2,3,4,7,8,9-HpCDF	0.220**JK**		0.0960	4.45	0.71	1.000	1
OCDF	9.72		0.652	8.90	0.84	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-003 (Pough 4A)	**Units:**	ng/Kg
Lab Code:	E2200954-003	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 16:05
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540022	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	0.345**J**		0.198	0.890	0.70		1
Total Penta-Dioxins	1.03**J**		0.139	4.45	1.73		1
Total Hexa-Dioxins	11.7		0.121	4.45	1.26		1
Total Hepta-Dioxins	50.8		0.226	4.45	1.01		1
Total Tetra-Furans	8.35		0.213	0.890	0.88		1
Total Penta-Furans	ND	U	0.197	4.45			1
Total Hexa-Furans	4.60		0.0702	4.45	1.21		1
Total Hepta-Furans	7.57		0.0887	4.45	0.96		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-003 (Pough 4A)	**Units:**	Percent
Lab Code:	E2200954-003	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 16:05
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540022	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1381.144	69		40-135	0.79	1.024
13C-1,2,3,7,8-PeCDD	2000	1050.753	53		40-135	1.60	1.206
13C-1,2,3,4,7,8-HxCDD	2000	1113.101	56		40-135	1.29	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1229.816	61		40-135	1.29	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	992.001	50		40-135	1.07	1.068
13C-OCDD	4000	1380.340	35	**Y**	40-135	0.87	1.140
13C-2,3,7,8-TCDF	2000	1217.907	61		40-135	0.79	0.992
13C-1,2,3,7,8-PeCDF	2000	1080.149	54		40-135	1.59	1.160
13C-2,3,4,7,8-PeCDF	2000	991.837	50		40-135	1.56	1.196
13C-1,2,3,4,7,8-HxCDF	2000	1201.509	60		40-135	0.50	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1116.145	56		40-135	0.49	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1101.772	55		40-135	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1342.087	67		40-135	0.52	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	854.345	43		40-135	0.43	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	909.129	45		40-135	0.42	1.080
37Cl-2,3,7,8-TCDD	800	525.597	66		40-135	NA	1.025

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-003 (Pough 4A)	**Units:**	ng/Kg
Lab Code:	E2200954-003	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.198	0.890	1	1	
1,2,3,7,8-PeCDD	**0.180**	0.139	4.45	1	1	0.180
1,2,3,6,7,8-HxCDD	**0.963**	0.117	4.45	1	0.1	0.0963
1,2,3,4,7,8-HxCDD	**0.612**	0.126	4.45	1	0.1	0.0612
1,2,3,7,8,9-HxCDD	**0.491**	0.121	4.45	1	0.1	0.0491
1,2,3,4,6,7,8-HpCDD	**20.9**	0.226	4.45	1	0.01	0.209
OCDD	**283**	1.73	8.90	1	0.0003	0.0849
2,3,7,8-TCDF	**0.829**	0.213	0.890	1	0.1	0.0829
1,2,3,7,8-PeCDF	ND	0.194	4.45	1	0.03	
2,3,4,7,8-PeCDF	**0.440**	0.200	4.45	1	0.3	0.132
1,2,3,6,7,8-HxCDF	**0.399**	0.0700	4.45	1	0.1	0.0399
1,2,3,7,8,9-HxCDF	**0.189**	0.0893	4.45	1	0.1	0.0189
1,2,3,4,7,8-HxCDF	**0.505**	0.0643	4.45	1	0.1	0.0505
2,3,4,6,7,8-HxCDF	**0.268**	0.0620	4.45	1	0.1	0.0268
1,2,3,4,6,7,8-HpCDF	**7.57**	0.0821	4.45	1	0.01	0.0757
1,2,3,4,7,8,9-HpCDF	**0.220**	0.0960	4.45	1	0.01	0.00220
OCDF	**9.72**	0.652	8.90	1	0.0003	0.00292
		Total TEQ				1.11

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:30
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-003 (Pough 4A)	**Units:**	Percent
Lab Code:	E2200954-003	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	6.2583g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	55.4		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-004 (Pough 4B)	**Units:**	ng/Kg
Lab Code:	E2200954-004	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 16:54
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.193g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540023	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.460	0.856			1
1,2,3,7,8-PeCDD	ND	U	0.418	4.28			1
1,2,3,6,7,8-HxCDD	ND	U	0.286	4.28			1
1,2,3,4,7,8-HxCDD	ND	U	0.318	4.28			1
1,2,3,7,8,9-HxCDD	ND	U	0.301	4.28			1
1,2,3,4,6,7,8-HpCDD	4.96		0.413	4.28	1.02	1.000	1
OCDD	81.6		2.04	8.56	0.89	1.000	1
2,3,7,8-TCDF	ND	U	0.384	0.856			1
1,2,3,7,8-PeCDF	ND	U	0.360	4.28			1
2,3,4,7,8-PeCDF	ND	U	0.339	4.28			1
1,2,3,6,7,8-HxCDF	0.116**JK**		0.0940	4.28	0.55	1.000	1
1,2,3,7,8,9-HxCDF	0.379**JK**		0.135	4.28	0.88	1.000	1
1,2,3,4,7,8-HxCDF	0.167**JK**		0.0867	4.28	2.07	1.000	1
2,3,4,6,7,8-HxCDF	0.133**JK**		0.0805	4.28	1.57	1.001	1
1,2,3,4,6,7,8-HpCDF	1.32**JK**		0.0922	4.28	1.47	1.000	1
1,2,3,4,7,8,9-HpCDF	0.204**JK**		0.114	4.28	2.76	1.000	1
OCDF	5.71**J**		0.633	8.56	0.95	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-004 (Pough 4B)	**Units:**	ng/Kg
Lab Code:	E2200954-004	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 16:54
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.193g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540023	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.460	0.856			1
Total Penta-Dioxins	ND	U	0.418	4.28			1
Total Hexa-Dioxins	2.08**J**		0.301	4.28	1.30		1
Total Hepta-Dioxins	12.3		0.413	4.28	1.08		1
Total Tetra-Furans	ND	U	0.384	0.856			1
Total Penta-Furans	ND	U	0.349	4.28			1
Total Hexa-Furans	0.534**J**		0.0958	4.28	1.35		1
Total Hepta-Furans	1.90**J**		0.103	4.28	1.03		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-004 (Pough 4B)	**Units:**	Percent
Lab Code:	E2200954-004	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 16:54
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.193g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540023	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	492.062	25	**Y**	40-135	0.78	1.023
13C-1,2,3,7,8-PeCDD	2000	393.126	20	**Y**	40-135	1.58	1.206
13C-1,2,3,4,7,8-HxCDD	2000	375.383	19	**Y**	40-135	1.30	0.991
13C-1,2,3,6,7,8-HxCDD	2000	432.767	22	**Y**	40-135	1.27	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	330.427	17	**Y**	40-135	1.07	1.068
13C-OCDD	4000	420.971	11	**Y**	40-135	0.88	1.140
13C-2,3,7,8-TCDF	2000	452.153	23	**Y**	40-135	0.78	0.991
13C-1,2,3,7,8-PeCDF	2000	378.120	19	**Y**	40-135	1.62	1.160
13C-2,3,4,7,8-PeCDF	2000	390.216	20	**Y**	40-135	1.66	1.195
13C-1,2,3,4,7,8-HxCDF	2000	422.170	21	**Y**	40-135	0.50	0.970
13C-1,2,3,6,7,8-HxCDF	2000	381.958	19	**Y**	40-135	0.50	0.973
13C-1,2,3,7,8,9-HxCDF	2000	347.314	17	**Y**	40-135	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	468.738	23	**Y**	40-135	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	268.479	13	**Y**	40-135	0.42	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	290.919	15	**Y**	40-135	0.43	1.080
37Cl-2,3,7,8-TCDD	800	413.841	52		40-135	NA	1.025

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-004 (Pough 4B)	**Units:**	ng/Kg
Lab Code:	E2200954-004	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.460	0.856	1	1	
1,2,3,7,8-PeCDD	ND	0.418	4.28	1	1	
1,2,3,6,7,8-HxCDD	ND	0.286	4.28	1	0.1	
1,2,3,4,7,8-HxCDD	ND	0.318	4.28	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.301	4.28	1	0.1	
1,2,3,4,6,7,8-HpCDD	**4.96**	0.413	4.28	1	0.01	0.0496
OCDD	**81.6**	2.04	8.56	1	0.0003	0.0245
2,3,7,8-TCDF	ND	0.384	0.856	1	0.1	
1,2,3,7,8-PeCDF	ND	0.360	4.28	1	0.03	
2,3,4,7,8-PeCDF	ND	0.339	4.28	1	0.3	
1,2,3,6,7,8-HxCDF	**0.116**	0.0940	4.28	1	0.1	0.0116
1,2,3,7,8,9-HxCDF	**0.379**	0.135	4.28	1	0.1	0.0379
1,2,3,4,7,8-HxCDF	**0.167**	0.0867	4.28	1	0.1	0.0167
2,3,4,6,7,8-HxCDF	**0.133**	0.0805	4.28	1	0.1	0.0133
1,2,3,4,6,7,8-HpCDF	**1.32**	0.0922	4.28	1	0.01	0.0132
1,2,3,4,7,8,9-HpCDF	**0.204**	0.114	4.28	1	0.01	0.00204
OCDF	**5.71**	0.633	8.56	1	0.0003	0.00171
		Total TEQ				0.171

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 13:45
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-004 (Pough 4B)	**Units:**	Percent
Lab Code:	E2200954-004	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	6.1746g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	57.3		-	-			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-005 (Pough 5A)	**Units:**	ng/Kg
Lab Code:	E2200954-005	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 17:42
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.318g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540024	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	0.342**JK**		0.226	0.841	0.33	1.002	1
1,2,3,7,8-PeCDD	0.504**JK**		0.176	4.21	0.93	1.000	1
1,2,3,6,7,8-HxCDD	4.90		0.0916	4.21	1.41	1.000	1
1,2,3,4,7,8-HxCDD	1.39**JK**		0.0990	4.21	0.97	1.000	1
1,2,3,7,8,9-HxCDD	2.70**J**		0.0953	4.21	1.41	1.007	1
1,2,3,4,6,7,8-HpCDD	182		0.329	4.21	1.04	1.000	1
OCDD	1810		13.6	13.6	0.87	1.000	1
2,3,7,8-TCDF	2.80**K**		0.228	0.841	0.51	1.001	1
1,2,3,7,8-PeCDF	ND	U	0.278	4.21			1
2,3,4,7,8-PeCDF	1.34**JK**		0.270	4.21	1.95	1.001	1
1,2,3,6,7,8-HxCDF	1.30**JK**		0.284	4.21	1.45	1.000	1
1,2,3,7,8,9-HxCDF	0.613**JK**		0.360	4.21	0.79	1.001	1
1,2,3,4,7,8-HxCDF	2.88**J**		0.255	4.21	1.22	1.000	1
2,3,4,6,7,8-HxCDF	0.868**JK**		0.217	4.21	1.48	1.000	1
1,2,3,4,6,7,8-HpCDF	39.2		0.521	4.21	1.01	1.000	1
1,2,3,4,7,8,9-HpCDF	3.44**J**		0.585	4.21	0.95	1.001	1
OCDF	502		1.79	8.41	0.84	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-005 (Pough 5A)	**Units:**	ng/Kg
Lab Code:	E2200954-005	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 17:42
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.318g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540024	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	1.32		0.226	0.841	0.68		1
Total Penta-Dioxins	1.27**J**		0.176	4.21	1.52		1
Total Hexa-Dioxins	41.6		0.0951	4.21	1.16		1
Total Hepta-Dioxins	383		0.329	4.21	1.01		1
Total Tetra-Furans	48.4		0.228	0.841	0.67		1
Total Penta-Furans	1.06**J**		0.274	4.21	1.52		1
Total Hexa-Furans	25.8		0.271	4.21	1.16		1
Total Hepta-Furans	129		0.552	4.21	1.01		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-005 (Pough 5A)	**Units:**	Percent
Lab Code:	E2200954-005	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 17:42
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.318g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540024	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	819.345	41		40-135	0.79	1.023
13C-1,2,3,7,8-PeCDD	2000	557.833	28	**Y**	40-135	1.58	1.206
13C-1,2,3,4,7,8-HxCDD	2000	506.656	25	**Y**	40-135	1.27	0.991
13C-1,2,3,6,7,8-HxCDD	2000	555.635	28	**Y**	40-135	1.23	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	383.739	19	**Y**	40-135	1.07	1.068
13C-OCDD	4000	481.990	12	**Y**	40-135	0.90	1.140
13C-2,3,7,8-TCDF	2000	801.837	40		40-135	0.79	0.991
13C-1,2,3,7,8-PeCDF	2000	580.756	29	**Y**	40-135	1.60	1.160
13C-2,3,4,7,8-PeCDF	2000	585.894	29	**Y**	40-135	1.60	1.195
13C-1,2,3,4,7,8-HxCDF	2000	528.638	26	**Y**	40-135	0.51	0.970
13C-1,2,3,6,7,8-HxCDF	2000	468.629	23	**Y**	40-135	0.50	0.973
13C-1,2,3,7,8,9-HxCDF	2000	480.370	24	**Y**	40-135	0.49	1.009
13C-2,3,4,6,7,8-HxCDF	2000	662.339	33	**Y**	40-135	0.49	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	309.422	15	**Y**	40-135	0.42	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	346.039	17	**Y**	40-135	0.40	1.080
37Cl-2,3,7,8-TCDD	800	477.183	60		40-135	NA	1.025

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-005 (Pough 5A)	**Units:**	ng/Kg
Lab Code:	E2200954-005	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	**0.342**	0.226	0.841	1	1	0.342
1,2,3,7,8-PeCDD	**0.504**	0.176	4.21	1	1	0.504
1,2,3,6,7,8-HxCDD	**4.90**	0.0916	4.21	1	0.1	0.490
1,2,3,4,7,8-HxCDD	**1.39**	0.0990	4.21	1	0.1	0.139
1,2,3,7,8,9-HxCDD	**2.70**	0.0953	4.21	1	0.1	0.270
1,2,3,4,6,7,8-HpCDD	**182**	0.329	4.21	1	0.01	1.82
OCDD	**1810**	13.6	13.6	1	0.0003	0.543
2,3,7,8-TCDF	**2.80**	0.228	0.841	1	0.1	0.280
1,2,3,7,8-PeCDF	ND	0.278	4.21	1	0.03	
2,3,4,7,8-PeCDF	**1.34**	0.270	4.21	1	0.3	0.402
1,2,3,6,7,8-HxCDF	**1.30**	0.284	4.21	1	0.1	0.130
1,2,3,7,8,9-HxCDF	**0.613**	0.360	4.21	1	0.1	0.0613
1,2,3,4,7,8-HxCDF	**2.88**	0.255	4.21	1	0.1	0.288
2,3,4,6,7,8-HxCDF	**0.868**	0.217	4.21	1	0.1	0.0868
1,2,3,4,6,7,8-HpCDF	**39.2**	0.521	4.21	1	0.01	0.392
1,2,3,4,7,8,9-HpCDF	**3.44**	0.585	4.21	1	0.01	0.0344
OCDF	**502**	1.79	8.41	1	0.0003	0.151
		Total TEQ				5.93

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:20
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-005 (Pough 5A)	**Units:**	Percent
Lab Code:	E2200954-005	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	6.0841g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	57.6		-	-			1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:35
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-006 (Pough 5B)	**Units:**	ng/Kg
Lab Code:	E2200954-006	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 00:25
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.256g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540032	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.195	0.826			1
1,2,3,7,8-PeCDD	0.371**JK**		0.161	4.13	1.01	1.000	1
1,2,3,6,7,8-HxCDD	0.493**JK**		0.166	4.13	0.94	1.000	1
1,2,3,4,7,8-HxCDD	0.453**BJK**		0.181	4.13	1.64	1.000	1
1,2,3,7,8,9-HxCDD	0.604**J**		0.173	4.13	1.06	1.007	1
1,2,3,4,6,7,8-HpCDD	7.12		0.103	4.13	1.00	1.000	1
OCDD	142**K**		1.88	8.26	1.04	1.000	1
2,3,7,8-TCDF	ND	U	0.126	0.826			1
1,2,3,7,8-PeCDF	ND	U	0.228	4.13			1
2,3,4,7,8-PeCDF	ND	U	0.221	4.13			1
1,2,3,6,7,8-HxCDF	0.322**BJK**		0.0584	4.13	0.75	1.000	1
1,2,3,7,8,9-HxCDF	0.518**J**		0.0820	4.13	1.07	1.001	1
1,2,3,4,7,8-HxCDF	0.164**BJK**		0.0529	4.13	0.54	1.000	1
2,3,4,6,7,8-HxCDF	0.313**JK**		0.0462	4.13	0.78	1.000	1
1,2,3,4,6,7,8-HpCDF	3.44**JK**		0.241	4.13	0.74	1.000	1
1,2,3,4,7,8,9-HpCDF	0.679**BJK**		0.291	4.13	2.25	1.000	1
OCDF	19.5**K**		0.416	8.26	1.05	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:35
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-006 (Pough 5B)	**Units:**	ng/Kg
Lab Code:	E2200954-006	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 00:25
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.256g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540032	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.195	0.826			1
Total Penta-Dioxins	0.490**J**		0.161	4.13	1.39		1
Total Hexa-Dioxins	4.04**J**		0.173	4.13	1.18		1
Total Hepta-Dioxins	21.9		0.103	4.13	0.98		1
Total Tetra-Furans	0.719**J**		0.126	0.826	0.66		1
Total Penta-Furans	ND	U	0.225	4.13			1
Total Hexa-Furans	0.518**J**		0.0576	4.13	1.07		1
Total Hepta-Furans	2.61**J**		0.265	4.13	0.94		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:35
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-006 (Pough 5B)	**Units:**	Percent
Lab Code:	E2200954-006	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/15/22 00:25
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.256g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540032	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540028

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	840.653	42		40-135	0.79	1.023
13C-1,2,3,7,8-PeCDD	2000	617.522	31	**Y**	40-135	1.57	1.206
13C-1,2,3,4,7,8-HxCDD	2000	610.227	31	**Y**	40-135	1.25	0.991
13C-1,2,3,6,7,8-HxCDD	2000	698.844	35	**Y**	40-135	1.24	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	507.171	25	**Y**	40-135	1.05	1.068
13C-OCDD	4000	612.892	15	**Y**	40-135	0.91	1.140
13C-2,3,7,8-TCDF	2000	796.270	40		40-135	0.79	0.991
13C-1,2,3,7,8-PeCDF	2000	616.805	31	**Y**	40-135	1.59	1.160
13C-2,3,4,7,8-PeCDF	2000	618.758	31	**Y**	40-135	1.60	1.195
13C-1,2,3,4,7,8-HxCDF	2000	662.832	33	**Y**	40-135	0.52	0.970
13C-1,2,3,6,7,8-HxCDF	2000	602.148	30	**Y**	40-135	0.50	0.973
13C-1,2,3,7,8,9-HxCDF	2000	548.040	27	**Y**	40-135	0.49	1.008
13C-2,3,4,6,7,8-HxCDF	2000	804.540	40		40-135	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	404.317	20	**Y**	40-135	0.43	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	435.133	22	**Y**	40-135	0.43	1.080
37Cl-2,3,7,8-TCDD	800	405.710	51		40-135	NA	1.025

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:35
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-006 (Pough 5B)	**Units:**	ng/Kg
Lab Code:	E2200954-006	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 8290A
Prep Method: Method

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.195	0.826	1	1	
1,2,3,7,8-PeCDD	**0.371**	0.161	4.13	1	1	0.371
1,2,3,6,7,8-HxCDD	**0.493**	0.166	4.13	1	0.1	0.0493
1,2,3,4,7,8-HxCDD	**0.453**	0.181	4.13	1	0.1	0.0453
1,2,3,7,8,9-HxCDD	**0.604**	0.173	4.13	1	0.1	0.0604
1,2,3,4,6,7,8-HpCDD	**7.12**	0.103	4.13	1	0.01	0.0712
OCDD	**142**	1.88	8.26	1	0.0003	0.0426
2,3,7,8-TCDF	ND	0.126	0.826	1	0.1	
1,2,3,7,8-PeCDF	ND	0.228	4.13	1	0.03	
2,3,4,7,8-PeCDF	ND	0.221	4.13	1	0.3	
1,2,3,6,7,8-HxCDF	**0.322**	0.0584	4.13	1	0.1	0.0322
1,2,3,7,8,9-HxCDF	**0.518**	0.0820	4.13	1	0.1	0.0518
1,2,3,4,7,8-HxCDF	**0.164**	0.0529	4.13	1	0.1	0.0164
2,3,4,6,7,8-HxCDF	**0.313**	0.0462	4.13	1	0.1	0.0313
1,2,3,4,6,7,8-HpCDF	**3.44**	0.241	4.13	1	0.01	0.0344
1,2,3,4,7,8,9-HpCDF	**0.679**	0.291	4.13	1	0.01	0.00679
OCDF	**19.5**	0.416	8.26	1	0.0003	0.00585
		Total TEQ				0.819

2005 WHO TEFs, ND = 0

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	09/23/22 10:35
Sample Matrix:	Soil	**Date Received:**	10/01/22 09:40
Sample Name:	3265452-006 (Pough 5B)	**Units:**	Percent
Lab Code:	E2200954-006	**Basis:**	As Received

Total Solids

Analysis Method:	ALS SOP	**Date Analyzed:**	10/17/22 17:28
	5.239g		NA
			E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	59.0		-	-			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ2200474-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/13/22 21:36
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.199g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540004	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540001

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0448	0.490			1
1,2,3,7,8-PeCDD	ND	U	0.0279	2.45			1
1,2,3,6,7,8-HxCDD	0.0188**JK**		0.0180	2.45	5.33	1.000	1
1,2,3,4,7,8-HxCDD	0.147**JK**		0.0196	2.45	1.02	1.000	1
1,2,3,7,8,9-HxCDD	0.0303**JK**		0.0188	2.45	0.58	1.007	1
1,2,3,4,6,7,8-HpCDD	0.290**J**		0.00981	2.45	1.09	1.001	1
OCDD	2.76**J**		0.119	4.90	0.89	1.000	1
2,3,7,8-TCDF	ND	U	0.0580	0.490			1
1,2,3,7,8-PeCDF	ND	U	0.0354	2.45			1
2,3,4,7,8-PeCDF	ND	U	0.0358	2.45			1
1,2,3,6,7,8-HxCDF	0.0330**J**		0.0143	2.45	1.16	1.000	1
1,2,3,7,8,9-HxCDF	0.0281**JK**		0.0167	2.45	0.34	1.001	1
1,2,3,4,7,8-HxCDF	0.0436**J**		0.0128	2.45	1.20	1.000	1
2,3,4,6,7,8-HxCDF	0.0144**JK**		0.0121	2.45	0.68	1.001	1
1,2,3,4,6,7,8-HpCDF	0.123**JK**		0.00344	2.45	0.80	1.000	1
1,2,3,4,7,8,9-HpCDF	0.0891**J**		0.00353	2.45	1.10	1.000	1
OCDF	0.336**JK**		0.0429	4.90	0.75	1.005	1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ2200474-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/13/22 21:36
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.199g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540004	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540001

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.0448	0.490			1
Total Penta-Dioxins	0.0675**J**		0.0279	2.45	1.35		1
Total Hexa-Dioxins	0.0545**J**		0.0188	2.45	1.41		1
Total Hepta-Dioxins	0.599**J**		0.00981	2.45	0.98		1
Total Tetra-Furans	ND	U	0.0580	0.490			1
Total Penta-Furans	ND	U	0.0356	2.45			1
Total Hexa-Furans	0.0767**J**		0.0138	2.45	1.20		1
Total Hepta-Furans	0.0891**J**		0.00353	2.45	1.10		1

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	EQ2200474-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/13/22 21:36
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.199g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540004	**Blank File Name:**	P540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540001

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1338.963	67		40-135	0.79	1.024
13C-1,2,3,7,8-PeCDD	2000	1180.236	59		40-135	1.58	1.206
13C-1,2,3,4,7,8-HxCDD	2000	1011.887	51		40-135	1.27	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1148.996	57		40-135	1.27	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1095.539	55		40-135	1.06	1.068
13C-OCDD	4000	1640.166	41		40-135	0.89	1.140
13C-2,3,7,8-TCDF	2000	1158.315	58		40-135	0.80	0.992
13C-1,2,3,7,8-PeCDF	2000	1170.581	59		40-135	1.58	1.160
13C-2,3,4,7,8-PeCDF	2000	1103.238	55		40-135	1.55	1.196
13C-1,2,3,4,7,8-HxCDF	2000	1130.728	57		40-135	0.50	0.970
13C-1,2,3,6,7,8-HxCDF	2000	975.985	49		40-135	0.50	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1039.819	52		40-135	0.53	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1243.776	62		40-135	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	859.279	43		40-135	0.44	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	1058.480	53		40-135	0.44	1.080
37Cl-2,3,7,8-TCDD	800	683.377	85		40-135	NA	1.024

Accuracy & Precision

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Analyzed:**	11/14/22
Sample Matrix:	Soil	**Date Extracted:**	10/18/22

Duplicate Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Units:**	ng/Kg
Prep Method:	Method	**Basis:**	Dry
		Analysis Lot:	785786

	Lab Control Sample EQ2200474-02			Duplicate Lab Control Sample EQ2200474-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,3,4,6,7,8-HpCDD	87.0	98.6	88	88.5	98.7	90	70-130	2	25
1,2,3,4,7,8-HxCDD	93.1	98.6	94	97.1	98.7	98	70-130	4	25
1,2,3,6,7,8-HxCDD	86.8	98.6	88	88.9	98.7	90	70-130	2	25
1,2,3,7,8,9-HxCDD	92.0	98.6	93	97.5	98.7	99	70-130	6	25
1,2,3,7,8-PeCDD	88.7	98.6	90	90.8	98.7	92	70-130	2	25
2,3,7,8-TCDD	15.1	19.7	76	15.3	19.7	78	70-130	2	25
OCDD	184	197	93	187	197	95	70-130	1	25
1,2,3,4,6,7,8-HpCDF	91.2	98.6	92	96.5	98.7	98	70-130	6	25
1,2,3,4,7,8,9-HpCDF	85.4	98.6	87	88.0	98.7	89	70-130	3	25
1,2,3,4,7,8-HxCDF	85.4	98.6	87	88.5	98.7	90	70-130	4	25
1,2,3,6,7,8-HxCDF	94.1	98.6	95	96.8	98.7	98	70-130	3	25
1,2,3,7,8,9-HxCDF	85.8	98.6	87	89.3	98.7	91	70-130	4	25
1,2,3,7,8-PeCDF	86.8	98.6	88	90.2	98.7	91	70-130	4	25
2,3,4,6,7,8-HxCDF	77.8	98.6	79	80.8	98.7	82	70-130	4	25
2,3,4,7,8-PeCDF	90.9	98.6	92	97.8	98.7	99	70-130	7	25
2,3,7,8-TCDF	17.4	19.7	88	18.4	19.7	93	70-130	5	25
OCDF	191	197	97	198	197	100	70-130	4	25

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2200474-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 18:31
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540025	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	15.1		0.0693	0.493	0.73	1.001	1
1,2,3,7,8-PeCDD	88.7		0.0538	2.47	1.54	1.001	1
1,2,3,6,7,8-HxCDD	86.8		0.0114	2.47	1.31	1.000	1
1,2,3,4,7,8-HxCDD	93.1		0.0129	2.47	1.24	1.000	1
1,2,3,7,8,9-HxCDD	92.0		0.0121	2.47	1.27	1.007	1
1,2,3,4,6,7,8-HpCDD	87.0		0.0360	2.47	1.04	1.000	1
OCDD	184		1.08	4.93	0.85	1.000	1
2,3,7,8-TCDF	17.4		0.0539	0.493	0.73	1.001	1
1,2,3,7,8-PeCDF	86.8		0.237	2.47	1.49	1.001	1
2,3,4,7,8-PeCDF	90.9		0.249	2.47	1.51	1.001	1
1,2,3,6,7,8-HxCDF	94.1		0.00484	2.47	1.21	1.000	1
1,2,3,7,8,9-HxCDF	85.8		0.00622	2.47	1.17	1.000	1
1,2,3,4,7,8-HxCDF	85.4		0.00444	2.47	1.21	1.000	1
2,3,4,6,7,8-HxCDF	77.8		0.00415	2.47	1.19	1.000	1
1,2,3,4,6,7,8-HpCDF	91.2		0.166	2.47	1.01	1.000	1
1,2,3,4,7,8,9-HpCDF	85.4		0.193	2.47	1.03	1.000	1
OCDF	191		0.759	4.93	0.87	1.004	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2200474-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 18:31
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540025	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	15.1		0.0693	0.493	0.73		1
Total Penta-Dioxins	88.7		0.0538	2.47	1.54		1
Total Hexa-Dioxins	272		0.0121	2.47	1.24		1
Total Hepta-Dioxins	87.0		0.0360	2.47	1.04		1
Total Tetra-Furans	17.4		0.0539	0.493	0.73		1
Total Penta-Furans	178		0.243	2.47	1.49		1
Total Hexa-Furans	343		0.00484	2.47	1.21		1
Total Hepta-Furans	177		0.179	2.47	1.01		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2200474-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 18:31
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.137g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540025	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1393.184	70		40-135	0.78	1.023
13C-1,2,3,7,8-PeCDD	2000	1111.305	56		40-135	1.60	1.206
13C-1,2,3,4,7,8-HxCDD	2000	1180.259	59		40-135	1.27	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1385.600	69		40-135	1.25	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1173.807	59		40-135	1.05	1.068
13C-OCDD	4000	1675.477	42		40-135	0.89	1.140
13C-2,3,7,8-TCDF	2000	1177.771	59		40-135	0.78	0.991
13C-1,2,3,7,8-PeCDF	2000	1121.285	56		40-135	1.57	1.160
13C-2,3,4,7,8-PeCDF	2000	1032.181	52		40-135	1.59	1.195
13C-1,2,3,4,7,8-HxCDF	2000	1310.050	66		40-135	0.52	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1165.428	58		40-135	0.51	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1208.008	60		40-135	0.48	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1437.627	72		40-135	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	978.253	49		40-135	0.42	1.043
13C-1,2,3,4,7,8,9-HpCDF	2000	1074.929	54		40-135	0.44	1.080
37Cl-2,3,7,8-TCDD	800	587.310	73		40-135	NA	1.025

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2200474-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 19:19
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.135g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540026	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	15.3		0.0757	0.493	0.76	1.001	1
1,2,3,7,8-PeCDD	90.8		0.0433	2.47	1.59	1.001	1
1,2,3,6,7,8-HxCDD	88.9		0.0250	2.47	1.29	1.000	1
1,2,3,4,7,8-HxCDD	97.1		0.0279	2.47	1.25	1.000	1
1,2,3,7,8,9-HxCDD	97.5		0.0264	2.47	1.29	1.007	1
1,2,3,4,6,7,8-HpCDD	88.5		0.0127	2.47	1.06	1.000	1
OCDD	187		0.987	4.93	0.90	1.000	1
2,3,7,8-TCDF	18.4		0.0525	0.493	0.74	1.001	1
1,2,3,7,8-PeCDF	90.2		0.326	2.47	1.49	1.001	1
2,3,4,7,8-PeCDF	97.8		0.338	2.47	1.51	1.001	1
1,2,3,6,7,8-HxCDF	96.8		0.0146	2.47	1.23	1.000	1
1,2,3,7,8,9-HxCDF	89.3		0.0188	2.47	1.16	1.000	1
1,2,3,4,7,8-HxCDF	88.5		0.0133	2.47	1.18	1.000	1
2,3,4,6,7,8-HxCDF	80.8		0.0131	2.47	1.17	1.000	1
1,2,3,4,6,7,8-HpCDF	96.5		0.195	2.47	0.98	1.000	1
1,2,3,4,7,8,9-HpCDF	88.0		0.207	2.47	0.99	1.000	1
OCDF	198		0.104	4.93	0.92	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ2200474-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 19:19
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.135g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540026	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	15.3		0.0757	0.493	0.76		1
Total Penta-Dioxins	91.0		0.0433	2.47	1.59		1
Total Hexa-Dioxins	284		0.0264	2.47	1.25		1
Total Hepta-Dioxins	88.5		0.0127	2.47	1.06		1
Total Tetra-Furans	18.4		0.0525	0.493	0.74		1
Total Penta-Furans	189		0.332	2.47	1.49		1
Total Hexa-Furans	355		0.0147	2.47	1.18		1
Total Hepta-Furans	184		0.201	2.47	0.98		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Middletown	**Service Request:**	E2200954
Project:	3265452	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2200474-03	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	8290A	**Date Analyzed:**	11/14/22 19:19
Prep Method:	Method	**Date Extracted:**	10/18/22
Sample Amount:	10.135g	**Instrument Name:**	E-HRMS-07
		GC Column:	DB-5MSUI
Data File Name:	P540026	**Blank File Name:**	p540004
ICAL Date:	01/18/22	**Cal Ver. File Name:**	P540015

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1588.992	79		40-135	0.79	1.023
13C-1,2,3,7,8-PeCDD	2000	1304.869	65		40-135	1.59	1.206
13C-1,2,3,4,7,8-HxCDD	2000	1328.136	66		40-135	1.25	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1501.285	75		40-135	1.26	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1221.116	61		40-135	1.03	1.068
13C-OCDD	4000	1592.697	40		40-135	0.87	1.140
13C-2,3,7,8-TCDF	2000	1325.123	66		40-135	0.78	0.991
13C-1,2,3,7,8-PeCDF	2000	1294.477	65		40-135	1.57	1.160
13C-2,3,4,7,8-PeCDF	2000	1186.517	59		40-135	1.55	1.195
13C-1,2,3,4,7,8-HxCDF	2000	1479.181	74		40-135	0.52	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1310.113	66		40-135	0.52	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1303.443	65		40-135	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1570.879	79		40-135	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	984.188	49		40-135	0.43	1.044
13C-1,2,3,4,7,8,9-HpCDF	2000	1155.790	58		40-135	0.43	1.081
37Cl-2,3,7,8-TCDD	800	696.874	87		40-135	NA	1.025

ANALYTICAL REPORT

Lab Number:	L2253003
Client:	Normandeau Associates, Inc. 600 Beach Road West Haverstraw, NY 10993
ATTN:	Mike Taylor
Phone:	(603) 637-1193
Project Name:	CHPE HUDSON RIVER
Project Number:	24711.001
Report Date:	10/06/22

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2253003-01	POUGH 1A	SEDIMENT	KINGSTON, NY	09/23/22 11:30	09/27/22
L2253003-02	POUGH 1B	SEDIMENT	KINGSTON, NY	09/23/22 11:45	09/27/22
L2253003-03	POUGH 2A	SEDIMENT	KINGSTON, NY	09/23/22 09:20	09/27/22
L2253003-04	POUGH 2B	SEDIMENT	KINGSTON, NY	09/23/22 09:30	09/27/22
L2253003-05	POUGH 3A	SEDIMENT	KINGSTON, NY	09/23/22 12:30	09/27/22
L2253003-06	POUGH 3B	SEDIMENT	KINGSTON, NY	09/23/22 12:45	09/27/22
L2253003-07	POUGH 4A	SEDIMENT	KINGSTON, NY	09/23/22 13:30	09/27/22
L2253003-08	POUGH 4B	SEDIMENT	KINGSTON, NY	09/23/22 13:45	09/27/22
L2253003-09	POUGH 5A	SEDIMENT	KINGSTON, NY	09/23/22 10:20	09/27/22
L2253003-10	POUGH 5B	SEDIMENT	KINGSTON, NY	09/23/22 10:35	09/27/22
L2253003-11	HYDE PARK 1A	SEDIMENT	KINGSTON, NY	09/25/22 12:30	09/27/22
L2253003-12	HYDE PARK 1B	SEDIMENT	KINGSTON, NY	09/25/22 12:40	09/27/22
L2253003-13	HYDE PARK 2A	SEDIMENT	KINGSTON, NY	09/25/22 11:40	09/27/22
L2253003-14	HYDE PARK 2B	SEDIMENT	KINGSTON, NY	09/25/22 11:45	09/27/22
L2253003-15	HYDE PARK 3A	SEDIMENT	KINGSTON, NY	09/25/22 09:55	09/27/22
L2253003-16	HYDE PARK 3B	SEDIMENT	KINGSTON, NY	09/25/22 10:05	09/27/22
L2253003-17	HYDE PARK 4A	SEDIMENT	KINGSTON, NY	09/25/22 09:05	09/27/22
L2253003-18	HYDE PARK 4B	SEDIMENT	KINGSTON, NY	09/25/22 09:15	09/27/22
L2253003-19	HYDE PARK 5A	SEDIMENT	KINGSTON, NY	09/25/22 10:40	09/27/22
L2253003-20	HYDE PARK 5B	SEDIMENT	KINGSTON, NY	09/25/22 10:50	09/27/22

Project Name:	CHPE HUDSON RIVER	**Lab Number:**	L2253003
Project Number:	24711.001	**Report Date:**	10/06/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	CHPE HUDSON RIVER	**Lab Number:**	L2253003
Project Number:	24711.001	**Report Date:**	10/06/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 10/06/22

ORGANICS

PCBS

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-01
Client ID: POUGH 1A
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 11:30
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 18:04
Analyst: PS
Percent Solids: 53%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 09:58
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	0.712	J	ug/kg	0.756	0.378	1
Cl3-BZ#18	1.35		ug/kg	0.756	0.378	1
Cl3-BZ#28	1.67		ug/kg	0.756	0.378	1
Cl4-BZ#44	0.906		ug/kg	0.756	0.378	1
Cl4-BZ#49	1.11		ug/kg	0.756	0.378	1
Cl4-BZ#52	1.74		ug/kg	0.756	0.378	1
Cl4-BZ#66	0.723	J	ug/kg	0.756	0.378	1
Cl5-BZ#87	ND		ug/kg	0.756	0.378	1
Cl5-BZ#101	1.29		ug/kg	0.756	0.378	1
Cl5-BZ#105	ND		ug/kg	0.756	0.378	1
Cl5-BZ#118	0.412	J	ug/kg	0.756	0.378	1
Cl6-BZ#128	ND		ug/kg	0.756	0.378	1
Cl6-BZ#138	0.555	J	ug/kg	0.756	0.378	1
Cl6-BZ#153	0.503	J	ug/kg	0.756	0.378	1
Cl7-BZ#170	ND		ug/kg	0.756	0.378	1
Cl7-BZ#180	ND		ug/kg	0.756	0.378	1
Cl7-BZ#183	ND		ug/kg	0.756	0.378	1
Cl7-BZ#184	ND		ug/kg	0.756	0.378	1
Cl7-BZ#187	ND		ug/kg	0.756	0.378	1
Cl8-BZ#195	ND		ug/kg	0.756	0.378	1
Cl9-BZ#206	0.413	J	ug/kg	0.756	0.378	1
Cl10-BZ#209	0.572	J	ug/kg	0.756	0.378	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	51		50-125
BZ 198	75		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-02
Client ID: POUGH 1B
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 11:45
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 18:35
Analyst: PS
Percent Solids: 56%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 09:58
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	ND		ug/kg	0.704	0.352	1
Cl3-BZ#18	ND		ug/kg	0.704	0.352	1
Cl3-BZ#28	ND		ug/kg	0.704	0.352	1
Cl4-BZ#44	ND		ug/kg	0.704	0.352	1
Cl4-BZ#49	ND		ug/kg	0.704	0.352	1
Cl4-BZ#52	ND		ug/kg	0.704	0.352	1
Cl4-BZ#66	ND		ug/kg	0.704	0.352	1
Cl5-BZ#87	ND		ug/kg	0.704	0.352	1
Cl5-BZ#101	ND		ug/kg	0.704	0.352	1
Cl5-BZ#105	ND		ug/kg	0.704	0.352	1
Cl5-BZ#118	ND		ug/kg	0.704	0.352	1
Cl6-BZ#128	ND		ug/kg	0.704	0.352	1
Cl6-BZ#138	ND		ug/kg	0.704	0.352	1
Cl6-BZ#153	ND		ug/kg	0.704	0.352	1
Cl7-BZ#170	ND		ug/kg	0.704	0.352	1
Cl7-BZ#180	ND		ug/kg	0.704	0.352	1
Cl7-BZ#183	ND		ug/kg	0.704	0.352	1
Cl7-BZ#184	ND		ug/kg	0.704	0.352	1
Cl7-BZ#187	ND		ug/kg	0.704	0.352	1
Cl8-BZ#195	ND		ug/kg	0.704	0.352	1
Cl9-BZ#206	ND		ug/kg	0.704	0.352	1
Cl10-BZ#209	ND		ug/kg	0.704	0.352	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	67		50-125
BZ 198	96		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-03
Client ID: POUGH 2A
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 09:20
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 19:06
Analyst: PS
Percent Solids: 61%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 09:58
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	20.8		ug/kg	0.644	0.322	1
Cl3-BZ#18	38.8		ug/kg	0.644	0.322	1
Cl3-BZ#28	26.7		ug/kg	0.644	0.322	1
Cl4-BZ#44	10.4		ug/kg	0.644	0.322	1
Cl4-BZ#49	32.1		ug/kg	0.644	0.322	1
Cl4-BZ#52	33.5		ug/kg	0.644	0.322	1
Cl4-BZ#66	12.8		ug/kg	0.644	0.322	1
Cl5-BZ#87	2.28		ug/kg	0.644	0.322	1
Cl5-BZ#101	10.2		ug/kg	0.644	0.322	1
Cl5-BZ#105	2.14		ug/kg	0.644	0.322	1
Cl5-BZ#118	6.20		ug/kg	0.644	0.322	1
Cl6-BZ#128	1.16		ug/kg	0.644	0.322	1
Cl6-BZ#138	7.37		ug/kg	0.644	0.322	1
Cl6-BZ#153	3.76		ug/kg	0.644	0.322	1
Cl7-BZ#170	1.16		ug/kg	0.644	0.322	1
Cl7-BZ#180	1.67		ug/kg	0.644	0.322	1
Cl7-BZ#183	0.403	J	ug/kg	0.644	0.322	1
Cl7-BZ#184	ND		ug/kg	0.644	0.322	1
Cl7-BZ#187	1.31		ug/kg	0.644	0.322	1
Cl8-BZ#195	ND		ug/kg	0.644	0.322	1
Cl9-BZ#206	0.828		ug/kg	0.644	0.322	1
Cl10-BZ#209	0.533	J	ug/kg	0.644	0.322	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	74		50-125
BZ 198	96		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-04
Client ID: POUGH 2B
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 09:30
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 19:38
Analyst: PS
Percent Solids: 56%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 09:58
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	0.478	J	ug/kg	0.690	0.345	1
Cl3-BZ#18	0.925		ug/kg	0.690	0.345	1
Cl3-BZ#28	0.495	J	ug/kg	0.690	0.345	1
Cl4-BZ#44	ND		ug/kg	0.690	0.345	1
Cl4-BZ#49	0.881		ug/kg	0.690	0.345	1
Cl4-BZ#52	0.852		ug/kg	0.690	0.345	1
Cl4-BZ#66	ND		ug/kg	0.690	0.345	1
Cl5-BZ#87	ND		ug/kg	0.690	0.345	1
Cl5-BZ#101	ND		ug/kg	0.690	0.345	1
Cl5-BZ#105	ND		ug/kg	0.690	0.345	1
Cl5-BZ#118	ND		ug/kg	0.690	0.345	1
Cl6-BZ#128	ND		ug/kg	0.690	0.345	1
Cl6-BZ#138	ND		ug/kg	0.690	0.345	1
Cl6-BZ#153	ND		ug/kg	0.690	0.345	1
Cl7-BZ#170	ND		ug/kg	0.690	0.345	1
Cl7-BZ#180	ND		ug/kg	0.690	0.345	1
Cl7-BZ#183	ND		ug/kg	0.690	0.345	1
Cl7-BZ#184	ND		ug/kg	0.690	0.345	1
Cl7-BZ#187	ND		ug/kg	0.690	0.345	1
Cl8-BZ#195	ND		ug/kg	0.690	0.345	1
Cl9-BZ#206	ND		ug/kg	0.690	0.345	1
Cl10-BZ#209	ND		ug/kg	0.690	0.345	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	70		50-125
BZ 198	99		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-05
Client ID: POUGH 3A
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 12:30
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 20:09
Analyst: PS
Percent Solids: 58%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 09:58
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	3.58		ug/kg	0.683	0.341	1
Cl3-BZ#18	6.76		ug/kg	0.683	0.341	1
Cl3-BZ#28	7.84		ug/kg	0.683	0.341	1
Cl4-BZ#44	3.27		ug/kg	0.683	0.341	1
Cl4-BZ#49	7.51		ug/kg	0.683	0.341	1
Cl4-BZ#52	8.06		ug/kg	0.683	0.341	1
Cl4-BZ#66	3.65		ug/kg	0.683	0.341	1
Cl5-BZ#87	0.709		ug/kg	0.683	0.341	1
Cl5-BZ#101	2.82		ug/kg	0.683	0.341	1
Cl5-BZ#105	0.804		ug/kg	0.683	0.341	1
Cl5-BZ#118	1.65		ug/kg	0.683	0.341	1
Cl6-BZ#128	ND		ug/kg	0.683	0.341	1
Cl6-BZ#138	1.36		ug/kg	0.683	0.341	1
Cl6-BZ#153	0.908		ug/kg	0.683	0.341	1
Cl7-BZ#170	0.351	J	ug/kg	0.683	0.341	1
Cl7-BZ#180	0.377	J	ug/kg	0.683	0.341	1
Cl7-BZ#183	ND		ug/kg	0.683	0.341	1
Cl7-BZ#184	ND		ug/kg	0.683	0.341	1
Cl7-BZ#187	ND		ug/kg	0.683	0.341	1
Cl8-BZ#195	ND		ug/kg	0.683	0.341	1
Cl9-BZ#206	ND		ug/kg	0.683	0.341	1
Cl10-BZ#209	ND		ug/kg	0.683	0.341	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	61		50-125
BZ 198	84		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-06
Client ID: POUGH 3B
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 12:45
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 20:40
Analyst: PS
Percent Solids: 58%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	ND		ug/kg	0.654	0.327	1
Cl3-BZ#18	ND		ug/kg	0.654	0.327	1
Cl3-BZ#28	ND		ug/kg	0.654	0.327	1
Cl4-BZ#44	ND		ug/kg	0.654	0.327	1
Cl4-BZ#49	ND		ug/kg	0.654	0.327	1
Cl4-BZ#52	ND		ug/kg	0.654	0.327	1
Cl4-BZ#66	ND		ug/kg	0.654	0.327	1
Cl5-BZ#87	ND		ug/kg	0.654	0.327	1
Cl5-BZ#101	ND		ug/kg	0.654	0.327	1
Cl5-BZ#105	ND		ug/kg	0.654	0.327	1
Cl5-BZ#118	ND		ug/kg	0.654	0.327	1
Cl6-BZ#128	ND		ug/kg	0.654	0.327	1
Cl6-BZ#138	ND		ug/kg	0.654	0.327	1
Cl6-BZ#153	ND		ug/kg	0.654	0.327	1
Cl7-BZ#170	ND		ug/kg	0.654	0.327	1
Cl7-BZ#180	ND		ug/kg	0.654	0.327	1
Cl7-BZ#183	ND		ug/kg	0.654	0.327	1
Cl7-BZ#184	ND		ug/kg	0.654	0.327	1
Cl7-BZ#187	ND		ug/kg	0.654	0.327	1
Cl8-BZ#195	ND		ug/kg	0.654	0.327	1
Cl9-BZ#206	ND		ug/kg	0.654	0.327	1
Cl10-BZ#209	ND		ug/kg	0.654	0.327	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	66		50-125
BZ 198	91		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-07
Client ID: POUGH 4A
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 13:30
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 21:12
Analyst: PS
Percent Solids: 55%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	3.82		ug/kg	0.715	0.358	1
Cl3-BZ#18	3.19		ug/kg	0.715	0.358	1
Cl3-BZ#28	3.46		ug/kg	0.715	0.358	1
Cl4-BZ#44	1.53		ug/kg	0.715	0.358	1
Cl4-BZ#49	2.78		ug/kg	0.715	0.358	1
Cl4-BZ#52	2.84		ug/kg	0.715	0.358	1
Cl4-BZ#66	1.94		ug/kg	0.715	0.358	1
Cl5-BZ#87	0.666	J	ug/kg	0.715	0.358	1
Cl5-BZ#101	1.58		ug/kg	0.715	0.358	1
Cl5-BZ#105	0.552	J	ug/kg	0.715	0.358	1
Cl5-BZ#118	0.987		ug/kg	0.715	0.358	1
Cl6-BZ#128	0.388	J	ug/kg	0.715	0.358	1
Cl6-BZ#138	1.40		ug/kg	0.715	0.358	1
Cl6-BZ#153	0.678	J	ug/kg	0.715	0.358	1
Cl7-BZ#170	ND		ug/kg	0.715	0.358	1
Cl7-BZ#180	ND		ug/kg	0.715	0.358	1
Cl7-BZ#183	ND		ug/kg	0.715	0.358	1
Cl7-BZ#184	ND		ug/kg	0.715	0.358	1
Cl7-BZ#187	ND		ug/kg	0.715	0.358	1
Cl8-BZ#195	ND		ug/kg	0.715	0.358	1
Cl9-BZ#206	ND		ug/kg	0.715	0.358	1
Cl10-BZ#209	ND		ug/kg	0.715	0.358	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	51		50-125
BZ 198	73		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-08
Client ID: POUGH 4B
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 13:45
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 21:43
Analyst: PS
Percent Solids: 53%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	ND		ug/kg	0.714	0.357	1
Cl3-BZ#18	ND		ug/kg	0.714	0.357	1
Cl3-BZ#28	ND		ug/kg	0.714	0.357	1
Cl4-BZ#44	ND		ug/kg	0.714	0.357	1
Cl4-BZ#49	ND		ug/kg	0.714	0.357	1
Cl4-BZ#52	ND		ug/kg	0.714	0.357	1
Cl4-BZ#66	ND		ug/kg	0.714	0.357	1
Cl5-BZ#87	ND		ug/kg	0.714	0.357	1
Cl5-BZ#101	ND		ug/kg	0.714	0.357	1
Cl5-BZ#105	ND		ug/kg	0.714	0.357	1
Cl5-BZ#118	ND		ug/kg	0.714	0.357	1
Cl6-BZ#128	ND		ug/kg	0.714	0.357	1
Cl6-BZ#138	ND		ug/kg	0.714	0.357	1
Cl6-BZ#153	ND		ug/kg	0.714	0.357	1
Cl7-BZ#170	ND		ug/kg	0.714	0.357	1
Cl7-BZ#180	ND		ug/kg	0.714	0.357	1
Cl7-BZ#183	ND		ug/kg	0.714	0.357	1
Cl7-BZ#184	ND		ug/kg	0.714	0.357	1
Cl7-BZ#187	ND		ug/kg	0.714	0.357	1
Cl8-BZ#195	ND		ug/kg	0.714	0.357	1
Cl9-BZ#206	ND		ug/kg	0.714	0.357	1
Cl10-BZ#209	ND		ug/kg	0.714	0.357	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	91		50-125
BZ 198	95		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-09
Client ID: POUGH 5A
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 10:20
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 22:14
Analyst: PS
Percent Solids: 60%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	74.8		ug/kg	0.625	0.312	1
Cl3-BZ#18	142		ug/kg	0.625	0.312	1
Cl3-BZ#28	65.4		ug/kg	0.625	0.312	1
Cl4-BZ#44	26.2		ug/kg	0.625	0.312	1
Cl4-BZ#49	85.2		ug/kg	0.625	0.312	1
Cl4-BZ#52	97.6		ug/kg	0.625	0.312	1
Cl4-BZ#66	19.5		ug/kg	0.625	0.312	1
Cl5-BZ#87	3.93		ug/kg	0.625	0.312	1
Cl5-BZ#101	17.6		ug/kg	0.625	0.312	1
Cl5-BZ#105	4.13		ug/kg	0.625	0.312	1
Cl5-BZ#118	9.80		ug/kg	0.625	0.312	1
Cl6-BZ#128	1.70		ug/kg	0.625	0.312	1
Cl6-BZ#138	8.51		ug/kg	0.625	0.312	1
Cl6-BZ#153	5.30		ug/kg	0.625	0.312	1
Cl7-BZ#170	1.58		ug/kg	0.625	0.312	1
Cl7-BZ#180	2.40		ug/kg	0.625	0.312	1
Cl7-BZ#183	0.599	J	ug/kg	0.625	0.312	1
Cl7-BZ#184	ND		ug/kg	0.625	0.312	1
Cl7-BZ#187	2.18		ug/kg	0.625	0.312	1
Cl8-BZ#195	ND		ug/kg	0.625	0.312	1
Cl9-BZ#206	1.14		ug/kg	0.625	0.312	1
Cl10-BZ#209	0.378	J	ug/kg	0.625	0.312	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	77		50-125
BZ 198	83		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-10
Client ID: POUGH 5B
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 10:35
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 22:45
Analyst: PS
Percent Solids: 58%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	1.32		ug/kg	0.662	0.331	1
Cl3-BZ#18	2.78		ug/kg	0.662	0.331	1
Cl3-BZ#28	1.23		ug/kg	0.662	0.331	1
Cl4-BZ#44	0.660	J	ug/kg	0.662	0.331	1
Cl4-BZ#49	1.74		ug/kg	0.662	0.331	1
Cl4-BZ#52	1.72		ug/kg	0.662	0.331	1
Cl4-BZ#66	0.368	J	ug/kg	0.662	0.331	1
Cl5-BZ#87	ND		ug/kg	0.662	0.331	1
Cl5-BZ#101	0.383	J	ug/kg	0.662	0.331	1
Cl5-BZ#105	ND		ug/kg	0.662	0.331	1
Cl5-BZ#118	ND		ug/kg	0.662	0.331	1
Cl6-BZ#128	ND		ug/kg	0.662	0.331	1
Cl6-BZ#138	ND		ug/kg	0.662	0.331	1
Cl6-BZ#153	ND		ug/kg	0.662	0.331	1
Cl7-BZ#170	ND		ug/kg	0.662	0.331	1
Cl7-BZ#180	ND		ug/kg	0.662	0.331	1
Cl7-BZ#183	ND		ug/kg	0.662	0.331	1
Cl7-BZ#184	ND		ug/kg	0.662	0.331	1
Cl7-BZ#187	ND		ug/kg	0.662	0.331	1
Cl8-BZ#195	ND		ug/kg	0.662	0.331	1
Cl9-BZ#206	ND		ug/kg	0.662	0.331	1
Cl10-BZ#209	ND		ug/kg	0.662	0.331	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	76		50-125
BZ 198	86		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-11
Client ID: HYDE PARK 1A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 12:30
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 23:17
Analyst: PS
Percent Solids: 59%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	21.2		ug/kg	0.655	0.327	1
Cl3-BZ#18	74.1		ug/kg	0.655	0.327	1
Cl3-BZ#28	82.6		ug/kg	0.655	0.327	1
Cl4-BZ#44	31.1		ug/kg	0.655	0.327	1
Cl4-BZ#49	57.2		ug/kg	0.655	0.327	1
Cl4-BZ#52	67.7		ug/kg	0.655	0.327	1
Cl4-BZ#66	39.6		ug/kg	0.655	0.327	1
Cl5-BZ#87	7.79		ug/kg	0.655	0.327	1
Cl5-BZ#101	35.9		ug/kg	0.655	0.327	1
Cl5-BZ#105	7.51		ug/kg	0.655	0.327	1
Cl5-BZ#118	23.9		ug/kg	0.655	0.327	1
Cl6-BZ#128	6.48		ug/kg	0.655	0.327	1
Cl6-BZ#138	24.6		ug/kg	0.655	0.327	1
Cl6-BZ#153	19.4		ug/kg	0.655	0.327	1
Cl7-BZ#170	4.79		ug/kg	0.655	0.327	1
Cl7-BZ#180	6.24		ug/kg	0.655	0.327	1
Cl7-BZ#183	1.85		ug/kg	0.655	0.327	1
Cl7-BZ#184	ND		ug/kg	0.655	0.327	1
Cl7-BZ#187	4.30		ug/kg	0.655	0.327	1
Cl8-BZ#195	0.789		ug/kg	0.655	0.327	1
Cl9-BZ#206	1.62		ug/kg	0.655	0.327	1
Cl10-BZ#209	1.36		ug/kg	0.655	0.327	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	51		50-125
BZ 198	57		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-12
Client ID: HYDE PARK 1B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 12:40
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 23:48
Analyst: PS
Percent Solids: 63%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	ND		ug/kg	0.605	0.303	1
Cl3-BZ#18	0.745		ug/kg	0.605	0.303	1
Cl3-BZ#28	0.634		ug/kg	0.605	0.303	1
Cl4-BZ#44	0.353	J	ug/kg	0.605	0.303	1
Cl4-BZ#49	0.741		ug/kg	0.605	0.303	1
Cl4-BZ#52	0.591	J	ug/kg	0.605	0.303	1
Cl4-BZ#66	0.319	J	ug/kg	0.605	0.303	1
Cl5-BZ#87	ND		ug/kg	0.605	0.303	1
Cl5-BZ#101	0.433	J	ug/kg	0.605	0.303	1
Cl5-BZ#105	ND		ug/kg	0.605	0.303	1
Cl5-BZ#118	0.310	J	ug/kg	0.605	0.303	1
Cl6-BZ#128	ND		ug/kg	0.605	0.303	1
Cl6-BZ#138	0.354	J	ug/kg	0.605	0.303	1
Cl6-BZ#153	ND		ug/kg	0.605	0.303	1
Cl7-BZ#170	ND		ug/kg	0.605	0.303	1
Cl7-BZ#180	ND		ug/kg	0.605	0.303	1
Cl7-BZ#183	ND		ug/kg	0.605	0.303	1
Cl7-BZ#184	ND		ug/kg	0.605	0.303	1
Cl7-BZ#187	ND		ug/kg	0.605	0.303	1
Cl8-BZ#195	ND		ug/kg	0.605	0.303	1
Cl9-BZ#206	ND		ug/kg	0.605	0.303	1
Cl10-BZ#209	ND		ug/kg	0.605	0.303	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	59		50-125
BZ 198	61		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-13
Client ID: HYDE PARK 2A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 11:40
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/06/22 00:19
Analyst: PS
Percent Solids: 63%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	6.00		ug/kg	0.620	0.310	1
Cl3-BZ#18	9.60		ug/kg	0.620	0.310	1
Cl3-BZ#28	14.2		ug/kg	0.620	0.310	1
Cl4-BZ#44	9.49		ug/kg	0.620	0.310	1
Cl4-BZ#49	12.5		ug/kg	0.620	0.310	1
Cl4-BZ#52	14.7		ug/kg	0.620	0.310	1
Cl4-BZ#66	10.4		ug/kg	0.620	0.310	1
Cl5-BZ#87	3.84		ug/kg	0.620	0.310	1
Cl5-BZ#101	14.8		ug/kg	0.620	0.310	1
Cl5-BZ#105	3.15		ug/kg	0.620	0.310	1
Cl5-BZ#118	9.19		ug/kg	0.620	0.310	1
Cl6-BZ#128	2.86		ug/kg	0.620	0.310	1
Cl6-BZ#138	10.1		ug/kg	0.620	0.310	1
Cl6-BZ#153	7.67		ug/kg	0.620	0.310	1
Cl7-BZ#170	1.95		ug/kg	0.620	0.310	1
Cl7-BZ#180	2.76		ug/kg	0.620	0.310	1
Cl7-BZ#183	0.809		ug/kg	0.620	0.310	1
Cl7-BZ#184	ND		ug/kg	0.620	0.310	1
Cl7-BZ#187	1.82		ug/kg	0.620	0.310	1
Cl8-BZ#195	ND		ug/kg	0.620	0.310	1
Cl9-BZ#206	3.71		ug/kg	0.620	0.310	1
Cl10-BZ#209	6.81		ug/kg	0.620	0.310	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	74		50-125
BZ 198	76		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-14
Client ID: HYDE PARK 2B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 11:45
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/06/22 00:50
Analyst: PS
Percent Solids: 64%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	ND		ug/kg	0.608	0.304	1
Cl3-BZ#18	ND		ug/kg	0.608	0.304	1
Cl3-BZ#28	ND		ug/kg	0.608	0.304	1
Cl4-BZ#44	ND		ug/kg	0.608	0.304	1
Cl4-BZ#49	ND		ug/kg	0.608	0.304	1
Cl4-BZ#52	ND		ug/kg	0.608	0.304	1
Cl4-BZ#66	ND		ug/kg	0.608	0.304	1
Cl5-BZ#87	ND		ug/kg	0.608	0.304	1
Cl5-BZ#101	ND		ug/kg	0.608	0.304	1
Cl5-BZ#105	ND		ug/kg	0.608	0.304	1
Cl5-BZ#118	ND		ug/kg	0.608	0.304	1
Cl6-BZ#128	ND		ug/kg	0.608	0.304	1
Cl6-BZ#138	ND		ug/kg	0.608	0.304	1
Cl6-BZ#153	ND		ug/kg	0.608	0.304	1
Cl7-BZ#170	ND		ug/kg	0.608	0.304	1
Cl7-BZ#180	ND		ug/kg	0.608	0.304	1
Cl7-BZ#183	ND		ug/kg	0.608	0.304	1
Cl7-BZ#184	ND		ug/kg	0.608	0.304	1
Cl7-BZ#187	ND		ug/kg	0.608	0.304	1
Cl8-BZ#195	ND		ug/kg	0.608	0.304	1
Cl9-BZ#206	ND		ug/kg	0.608	0.304	1
Cl10-BZ#209	ND		ug/kg	0.608	0.304	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	82		50-125
BZ 198	83		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-15
Client ID: HYDE PARK 3A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 09:55
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/06/22 01:22
Analyst: PS
Percent Solids: 65%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	12.1		ug/kg	0.600	0.300	1
Cl3-BZ#18	42.4		ug/kg	0.600	0.300	1
Cl3-BZ#28	52.4		ug/kg	0.600	0.300	1
Cl4-BZ#44	20.0		ug/kg	0.600	0.300	1
Cl4-BZ#49	37.8		ug/kg	0.600	0.300	1
Cl4-BZ#52	47.3		ug/kg	0.600	0.300	1
Cl4-BZ#66	25.5		ug/kg	0.600	0.300	1
Cl5-BZ#87	6.02		ug/kg	0.600	0.300	1
Cl5-BZ#101	27.8		ug/kg	0.600	0.300	1
Cl5-BZ#105	5.43		ug/kg	0.600	0.300	1
Cl5-BZ#118	17.7		ug/kg	0.600	0.300	1
Cl6-BZ#128	4.90		ug/kg	0.600	0.300	1
Cl6-BZ#138	19.4		ug/kg	0.600	0.300	1
Cl6-BZ#153	15.1		ug/kg	0.600	0.300	1
Cl7-BZ#170	3.20		ug/kg	0.600	0.300	1
Cl7-BZ#180	4.99		ug/kg	0.600	0.300	1
Cl7-BZ#183	1.51		ug/kg	0.600	0.300	1
Cl7-BZ#184	ND		ug/kg	0.600	0.300	1
Cl7-BZ#187	3.21		ug/kg	0.600	0.300	1
Cl8-BZ#195	0.535	J	ug/kg	0.600	0.300	1
Cl9-BZ#206	3.79		ug/kg	0.600	0.300	1
Cl10-BZ#209	4.47		ug/kg	0.600	0.300	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	58		50-125
BZ 198	64		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-16
Client ID: HYDE PARK 3B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 10:05
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/06/22 01:53
Analyst: PS
Percent Solids: 63%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	0.311	J	ug/kg	0.619	0.310	1
Cl3-BZ#18	0.494	J	ug/kg	0.619	0.310	1
Cl3-BZ#28	0.513	J	ug/kg	0.619	0.310	1
Cl4-BZ#44	ND		ug/kg	0.619	0.310	1
Cl4-BZ#49	0.541	J	ug/kg	0.619	0.310	1
Cl4-BZ#52	0.818		ug/kg	0.619	0.310	1
Cl4-BZ#66	ND		ug/kg	0.619	0.310	1
Cl5-BZ#87	ND		ug/kg	0.619	0.310	1
Cl5-BZ#101	0.471	J	ug/kg	0.619	0.310	1
Cl5-BZ#105	ND		ug/kg	0.619	0.310	1
Cl5-BZ#118	ND		ug/kg	0.619	0.310	1
Cl6-BZ#128	ND		ug/kg	0.619	0.310	1
Cl6-BZ#138	0.730		ug/kg	0.619	0.310	1
Cl6-BZ#153	ND		ug/kg	0.619	0.310	1
Cl7-BZ#170	ND		ug/kg	0.619	0.310	1
Cl7-BZ#180	ND		ug/kg	0.619	0.310	1
Cl7-BZ#183	ND		ug/kg	0.619	0.310	1
Cl7-BZ#184	ND		ug/kg	0.619	0.310	1
Cl7-BZ#187	ND		ug/kg	0.619	0.310	1
Cl8-BZ#195	ND		ug/kg	0.619	0.310	1
Cl9-BZ#206	ND		ug/kg	0.619	0.310	1
Cl10-BZ#209	ND		ug/kg	0.619	0.310	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	53		50-125
BZ 198	53		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-17
Client ID: HYDE PARK 4A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 09:05
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/06/22 02:24
Analyst: PS
Percent Solids: 60%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	61.4		ug/kg	0.642	0.321	1
Cl3-BZ#18	181		ug/kg	0.642	0.321	1
Cl3-BZ#28	193		ug/kg	0.642	0.321	1
Cl4-BZ#44	55.8		ug/kg	0.642	0.321	1
Cl4-BZ#49	137		ug/kg	0.642	0.321	1
Cl4-BZ#52	152		ug/kg	0.642	0.321	1
Cl4-BZ#66	71.2		ug/kg	0.642	0.321	1
Cl5-BZ#87	11.7		ug/kg	0.642	0.321	1
Cl5-BZ#101	55.0		ug/kg	0.642	0.321	1
Cl5-BZ#105	11.8		ug/kg	0.642	0.321	1
Cl5-BZ#118	36.0		ug/kg	0.642	0.321	1
Cl6-BZ#128	8.67		ug/kg	0.642	0.321	1
Cl6-BZ#138	33.0		ug/kg	0.642	0.321	1
Cl6-BZ#153	26.2		ug/kg	0.642	0.321	1
Cl7-BZ#170	6.82		ug/kg	0.642	0.321	1
Cl7-BZ#180	8.60		ug/kg	0.642	0.321	1
Cl7-BZ#183	2.26		ug/kg	0.642	0.321	1
Cl7-BZ#184	ND		ug/kg	0.642	0.321	1
Cl7-BZ#187	6.84		ug/kg	0.642	0.321	1
Cl8-BZ#195	1.21		ug/kg	0.642	0.321	1
Cl9-BZ#206	2.69		ug/kg	0.642	0.321	1
Cl10-BZ#209	1.71		ug/kg	0.642	0.321	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	69		50-125
BZ 198	67		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-18
Client ID: HYDE PARK 4B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 09:15
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/06/22 02:55
Analyst: PS
Percent Solids: 62%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	1.14		ug/kg	0.598	0.299	1
Cl3-BZ#18	3.35		ug/kg	0.598	0.299	1
Cl3-BZ#28	3.10		ug/kg	0.598	0.299	1
Cl4-BZ#44	1.27		ug/kg	0.598	0.299	1
Cl4-BZ#49	2.79		ug/kg	0.598	0.299	1
Cl4-BZ#52	2.78		ug/kg	0.598	0.299	1
Cl4-BZ#66	1.21		ug/kg	0.598	0.299	1
Cl5-BZ#87	ND		ug/kg	0.598	0.299	1
Cl5-BZ#101	1.27		ug/kg	0.598	0.299	1
Cl5-BZ#105	ND		ug/kg	0.598	0.299	1
Cl5-BZ#118	1.08		ug/kg	0.598	0.299	1
Cl6-BZ#128	ND		ug/kg	0.598	0.299	1
Cl6-BZ#138	0.867		ug/kg	0.598	0.299	1
Cl6-BZ#153	0.610		ug/kg	0.598	0.299	1
Cl7-BZ#170	ND		ug/kg	0.598	0.299	1
Cl7-BZ#180	ND		ug/kg	0.598	0.299	1
Cl7-BZ#183	ND		ug/kg	0.598	0.299	1
Cl7-BZ#184	ND		ug/kg	0.598	0.299	1
Cl7-BZ#187	ND		ug/kg	0.598	0.299	1
Cl8-BZ#195	ND		ug/kg	0.598	0.299	1
Cl9-BZ#206	ND		ug/kg	0.598	0.299	1
Cl10-BZ#209	ND		ug/kg	0.598	0.299	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	72		50-125
BZ 198	71		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-19
Client ID: HYDE PARK 5A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 10:40
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/06/22 03:27
Analyst: PS
Percent Solids: 61%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	ND		ug/kg	0.652	0.326	1
Cl3-BZ#18	ND		ug/kg	0.652	0.326	1
Cl3-BZ#28	ND		ug/kg	0.652	0.326	1
Cl4-BZ#44	ND		ug/kg	0.652	0.326	1
Cl4-BZ#49	ND		ug/kg	0.652	0.326	1
Cl4-BZ#52	ND		ug/kg	0.652	0.326	1
Cl4-BZ#66	ND		ug/kg	0.652	0.326	1
Cl5-BZ#87	ND		ug/kg	0.652	0.326	1
Cl5-BZ#101	ND		ug/kg	0.652	0.326	1
Cl5-BZ#105	ND		ug/kg	0.652	0.326	1
Cl5-BZ#118	ND		ug/kg	0.652	0.326	1
Cl6-BZ#128	ND		ug/kg	0.652	0.326	1
Cl6-BZ#138	ND		ug/kg	0.652	0.326	1
Cl6-BZ#153	ND		ug/kg	0.652	0.326	1
Cl7-BZ#170	ND		ug/kg	0.652	0.326	1
Cl7-BZ#180	ND		ug/kg	0.652	0.326	1
Cl7-BZ#183	ND		ug/kg	0.652	0.326	1
Cl7-BZ#184	ND		ug/kg	0.652	0.326	1
Cl7-BZ#187	ND		ug/kg	0.652	0.326	1
Cl8-BZ#195	ND		ug/kg	0.652	0.326	1
Cl9-BZ#206	ND		ug/kg	0.652	0.326	1
Cl10-BZ#209	ND		ug/kg	0.652	0.326	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	71		50-125
BZ 198	73		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-20
Client ID: HYDE PARK 5B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 10:50
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment
Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/06/22 11:29
Analyst: PS
Percent Solids: 60%

Extraction Method: EPA 3570
Extraction Date: 10/02/22 13:30
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Congeners (NOAA List) - Mansfield Lab						
Cl2-BZ#8	ND		ug/kg	0.612	0.306	1
Cl3-BZ#18	ND		ug/kg	0.612	0.306	1
Cl3-BZ#28	ND		ug/kg	0.612	0.306	1
Cl4-BZ#44	ND		ug/kg	0.612	0.306	1
Cl4-BZ#49	ND		ug/kg	0.612	0.306	1
Cl4-BZ#52	ND		ug/kg	0.612	0.306	1
Cl4-BZ#66	ND		ug/kg	0.612	0.306	1
Cl5-BZ#87	ND		ug/kg	0.612	0.306	1
Cl5-BZ#101	ND		ug/kg	0.612	0.306	1
Cl5-BZ#105	ND		ug/kg	0.612	0.306	1
Cl5-BZ#118	ND		ug/kg	0.612	0.306	1
Cl6-BZ#128	ND		ug/kg	0.612	0.306	1
Cl6-BZ#138	ND		ug/kg	0.612	0.306	1
Cl6-BZ#153	ND		ug/kg	0.612	0.306	1
Cl7-BZ#170	ND		ug/kg	0.612	0.306	1
Cl7-BZ#180	ND		ug/kg	0.612	0.306	1
Cl7-BZ#183	ND		ug/kg	0.612	0.306	1
Cl7-BZ#184	ND		ug/kg	0.612	0.306	1
Cl7-BZ#187	ND		ug/kg	0.612	0.306	1
Cl8-BZ#195	ND		ug/kg	0.612	0.306	1
Cl9-BZ#206	ND		ug/kg	0.612	0.306	1
Cl10-BZ#209	ND		ug/kg	0.612	0.306	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
DBOB	75		50-125
BZ 198	68		50-125

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 105,8270E-SIM/680(M)
Analytical Date: 10/05/22 16:31
Analyst: PS

Extraction Method: EPA 3570
Extraction Date: 10/02/22 09:58
Cleanup Method: EPA 3630
Cleanup Date: 10/03/22

Parameter	Result	Qualifier	Units	RL	MDL
PCB Congeners (NOAA List) - Mansfield Lab for sample(s): 01-20 Batch: WG1694522-1					
Cl2-BZ#8	ND		ug/kg	0.400	0.200
Cl3-BZ#18	ND		ug/kg	0.400	0.200
Cl3-BZ#28	ND		ug/kg	0.400	0.200
Cl4-BZ#44	ND		ug/kg	0.400	0.200
Cl4-BZ#49	ND		ug/kg	0.400	0.200
Cl4-BZ#52	ND		ug/kg	0.400	0.200
Cl4-BZ#66	ND		ug/kg	0.400	0.200
Cl5-BZ#87	ND		ug/kg	0.400	0.200
Cl5-BZ#101	ND		ug/kg	0.400	0.200
Cl5-BZ#105	ND		ug/kg	0.400	0.200
Cl5-BZ#118	ND		ug/kg	0.400	0.200
Cl6-BZ#128	ND		ug/kg	0.400	0.200
Cl6-BZ#138	ND		ug/kg	0.400	0.200
Cl6-BZ#153	ND		ug/kg	0.400	0.200
Cl7-BZ#170	ND		ug/kg	0.400	0.200
Cl7-BZ#180	ND		ug/kg	0.400	0.200
Cl7-BZ#183	ND		ug/kg	0.400	0.200
Cl7-BZ#184	ND		ug/kg	0.400	0.200
Cl7-BZ#187	ND		ug/kg	0.400	0.200
Cl8-BZ#195	ND		ug/kg	0.400	0.200
Cl9-BZ#206	ND		ug/kg	0.400	0.200
Cl10-BZ#209	ND		ug/kg	0.400	0.200

Surrogate	%Recovery	Qualifier	Acceptance Criteria
DBOB	66		50-125
BZ 198	107		50-125

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s): 01-20 Batch: WG1694522-2 WG1694522-3							
Cl2-BZ#8	82		77		40-140	6		30
Cl3-BZ#18	81		76		40-140	6		30
Cl3-BZ#28	87		82		40-140	6		30
Cl4-BZ#44	89		84		40-140	6		30
Cl4-BZ#49	87		79		40-140	10		30
Cl4-BZ#52	87		83		40-140	5		30
Cl4-BZ#66	89		83		40-140	7		30
Cl5-BZ#87	89		83		40-140	7		30
Cl5-BZ#101	88		82		40-140	7		30
Cl5-BZ#105	92		84		40-140	9		30
Cl5-BZ#118	88		82		40-140	7		30
Cl6-BZ#128	92		86		40-140	7		30
Cl6-BZ#138	90		83		40-140	8		30
Cl6-BZ#153	90		84		40-140	7		30
Cl7-BZ#170	94		88		40-140	7		30
Cl7-BZ#180	86		78		40-140	10		30
Cl7-BZ#183	87		80		40-140	8		30
Cl7-BZ#184	87		80		40-140	8		30
Cl7-BZ#187	89		83		40-140	7		30
Cl8-BZ#195	93		86		40-140	8		30
Cl9-BZ#206	92		85		40-140	8		30
Cl10-BZ#209	95		89		40-140	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Congeners (NOAA List) - Mansfield Lab	Associated sample(s): 01-20 Batch: WG1694522-2 WG1694522-3							

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
DBOB	69		70		50-125
BZ 198	120		107		50-125

INORGANICS
&
MISCELLANEOUS

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-01
Client ID: POUGH 1A
Sample Location: KINGSTON, NY

Sample Depth:
Matrix: Sediment

Date Collected: 09/23/22 11:30
Date Received: 09/27/22
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	52.7		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-02
Client ID: POUGH 1B
Sample Location: KINGSTON, NY
Sample Depth:
Matrix: Sediment

Date Collected: 09/23/22 11:45
Date Received: 09/27/22
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	56.0		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-03
Client ID: POUGH 2A
Sample Location: KINGSTON, NY
Sample Depth:
Matrix: Sediment

Date Collected: 09/23/22 09:20
Date Received: 09/27/22
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	61.4		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-04
Client ID: POUGH 2B
Sample Location: KINGSTON, NY

Sample Depth:
Matrix: Sediment

Date Collected: 09/23/22 09:30
Date Received: 09/27/22
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	56.4		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-05
Client ID: POUGH 3A
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 12:30
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	58.3		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-06
Client ID: POUGH 3B
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 12:45
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	58.2		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-07
Client ID: POUGH 4A
Sample Location: KINGSTON, NY
Sample Depth:
Matrix: Sediment

Date Collected: 09/23/22 13:30
Date Received: 09/27/22
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	55.0		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-08
Client ID: POUGH 4B
Sample Location: KINGSTON, NY

Date Collected: 09/23/22 13:45
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	53.2		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-09
Client ID: POUGH 5A
Sample Location: KINGSTON, NY
Sample Depth:
Matrix: Sediment

Date Collected: 09/23/22 10:20
Date Received: 09/27/22
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	60.2		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-10
Client ID: POUGH 5B
Sample Location: KINGSTON, NY
Sample Depth:
Matrix: Sediment

Date Collected: 09/23/22 10:35
Date Received: 09/27/22
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	57.8		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-11
Client ID: HYDE PARK 1A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 12:30
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	59.2		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-12
Client ID: HYDE PARK 1B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 12:40
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	63.0		%	0.100	0.100	1	-	09/30/22 16:10	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-13
Client ID: HYDE PARK 2A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 11:40
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	62.7		%	0.100	0.100	1	-	10/04/22 14:35	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-14
Client ID: HYDE PARK 2B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 11:45
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	63.6		%	0.100	0.100	1	-	10/04/22 14:35	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-15
Client ID: HYDE PARK 3A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 09:55
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	65.0		%	0.100	0.100	1	-	10/04/22 14:35	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-16
Client ID: HYDE PARK 3B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 10:05
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	63.0		%	0.100	0.100	1	-	10/04/22 14:35	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001
Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-17
Client ID: HYDE PARK 4A
Sample Location: KINGSTON, NY
Sample Depth:
Matrix: Sediment

Date Collected: 09/25/22 09:05
Date Received: 09/27/22
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	60.0		%	0.100	0.100	1	-	10/04/22 14:35	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-18
Client ID: HYDE PARK 4B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 09:15
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	62.2		%	0.100	0.100	1	-	10/04/22 14:35	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-19
Client ID: HYDE PARK 5A
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 10:40
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	60.8		%	0.100	0.100	1	-	10/04/22 14:35	121,2540G	VM

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2253003-20
Client ID: HYDE PARK 5B
Sample Location: KINGSTON, NY

Date Collected: 09/25/22 10:50
Date Received: 09/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	59.9		%	0.100	0.100	1	-	10/04/22 14:35	121,2540G	VM

Lab Duplicate Analysis
Batch Quality Control

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG1694176-1 QC Sample: L2253003-03 Client ID: POUGH 2A						
Solids, Total	61.4	61.4	%	0		10
General Chemistry - Mansfield Lab Associated sample(s): 13-20 QC Batch ID: WG1695304-1 QC Sample: L2253636-10 Client ID: DUP Sample						
Solids, Total	91.1	90.0	%	1		10

Project Name: CHPE HUDSON RIVER
Project Number: 24711.001

Lab Number: L2253003
Report Date: 10/06/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2253003-01A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-02A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-03A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-04A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-05A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-06A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-07A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-08A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-09A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-10A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-11A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-12A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-13A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-14A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-15A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-16A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-17A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-18A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-19A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)
L2253003-20A	Glass 250ml/8oz unpreserved	A	NA		6.0	Y	Present/Intact		A2-TS(7),A2-PCBCONG-8270-NOAA(14)

*Values in parentheses indicate holding time in days

Project Name:	CHPE HUDSON RIVER	**Lab Number:**	L2253003
Project Number:	24711.001	**Report Date:**	10/06/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CHPE HUDSON RIVER	**Lab Number:**	L2253003
Project Number:	24711.001	**Report Date:**	10/06/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	CHPE HUDSON RIVER	**Lab Number:**	L2253003
Project Number:	24711.001	**Report Date:**	10/06/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	CHPE HUDSON RIVER	**Lab Number:**	L2253003
Project Number:	24711.001	**Report Date:**	10/06/22

REFERENCES

105 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997 in conjunction with NOAA Technical Memorandum NMFS-NWFSC-59: Extraction, Cleanup and GC/MS Analysis of Sediments and Tissues for Organic Contaminants, March 2004 and the Determination of Pesticides and PCBs in Water and Oil/Sediment by GC/MS: Method 680, EPA 01A0005295, November 1985.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

ALPHA

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

NEW YORK CHAIN OF CUSTODY

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd In Lab: 9/27/22

ALPHA Job #: L2253603

Client Information
Client: Normandeau
Address: 400 Old Reading Pike Stowe, PA 19464
Phone: 717-617-7076
Fax:
Email: DNAZARIO@Normandeau.com
These samples have been previously analyzed by Alpha ☐

Project Information
Project Name: CHPE Hudson River
Project Location: Kingston, NY
Project #: 24711.001 Task 10
(Use Project name as Project #) ☐
Project Manager: Mike Mettler
ALPHAQuote #: 16943

Turn-Around Time
Standard ☒
Rush (only if pre approved) ☐
Due Date:
# of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #: 24711.001

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other

Other project specific requirements/comments:
PCB Cong (22) NOAA by 8270 (M)

Please specify Metals or TAL.

ANALYSIS
PCB Congeners 22
NOAA 8270 D-SIM (M)

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Bottles	Sample Specific Comments
2003-01	POUGH 1A	9/23/22	1130	SO1	NAF	1	
-02	1B		1145			1	
-03	2A		0920			1	
-04	2B		0930			1	
-05	3A		1230			1	
-06	3B		1245			1	
-07	4A		1330			1	
-08	4B		1345			1	
-09	5A		1020			1	
-10	5B		1035			1	

Container Type: GL
Preservative: —

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code:
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/26/22 1530		9/27/22 10:09
	9-27-22 14:54		9/27/22 1454
	9/27/22 1556		9/27/22 15:56

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ALPHA

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr
TEL 508-898-9220
FAX 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL 508-822-9300
FAX 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd In Lab: 9/27/22

ALPHA Job #: L2253053

Client Information
Client: Normandeau
Address: 400 Old Reading Pike Stowe, PA 19464
Phone: 717-617-7076
Fax:
Email: DNazar@Normandeau

Project Information
Project Name: CHPE Hudson River
Project Location: Kingston, NY
Project #: 24711.001 Task 10
(Use Project name as Project #)
Project Manager: Mike Methler
ALPHAQuote #: 16943

Turn-Around Time
Standard: X
Rush (only if pre approved):
Due Date:
# of Days:

Deliverables
ASP-A / ASP-B / EQuIS (1 File) / EQuIS (4 File) / Other

Billing Information
X Same as Client Info
PO #: 24711.001

Regulatory Requirement
NY TOGS / NY Part 375 / AWQ Standards / NY CP-51 / NY Restricted Use / Other / NY Unrestricted Use / NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility: NJ / NY / Other

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:
PCB Congeners NOAA 22 8270D-SIM/680 (M)

Please specify Metals or TAL.

ANALYSIS
PCB Congeners NOAA 22 8270D-SIM 1680 (M)

Sample Filtration
Done / Lab to do
Preservation
Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Bottles	Sample Specific Comments
53053-01	Hyde Park 1A	9/25/22	1230	Soil	NAF	1	
-02	1B		1240			1	
-03	2A		1140			1	
-04	2B		1145			1	
-05	3A		0955			1	
-06	3B		1005			1	
-07	4A		0905			1	
-08	4B		0915			1	
-09	5A		1040			1	
-10	5B		1050			1	

Container Type: GL
Preservative: —

Preservative Code: A = None, B = HCl, C = HNO_3, D = H_2SO_4, E = NaOH, F = MeOH, G = $NaHSO_4$, H = $Na_2S_2O_3$, K/E = Zn Ac/NaOH, O = Other

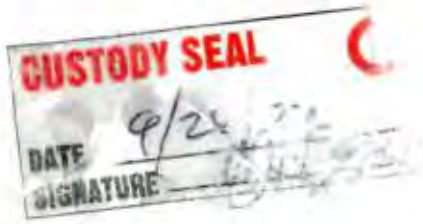
Container Code: P = Plastic, A = Amber Glass, V = Vial, G = Glass, B = Bacteria Cup, C = Cube, O = Other, E = Encore, D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/26/22 1530		9/27/22 1005
	9-27-22 14:59		9/27/22 1454
	9/27/22 1556		9/27/22 18:56

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)


CUSTODY SEAL
DATE 9/24
SIGNATURE


REC
Quality Environmental Contai
800-255-3950 • www.qecusa.c

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of the label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Field Data Sheets