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ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

DNREC Sediments Indian River Inlet

JOB NUMBER

410-191197-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

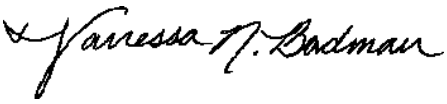
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
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Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

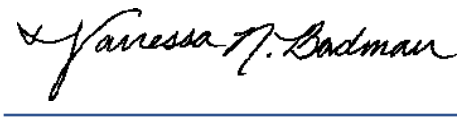


Table of Contents

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.

HPLC/IC

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Dioxin

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-191197-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/5/2024 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C.

Receipt Exceptions
The Chain of Custody listed Metals by 6020B; however, client allowed 6010D so results would be available quicker.

241003-IRI-3-TOP (410-191197-1), 241003-IRI-4-BOTTOM (410-191197-3), 241004-IRI-1-TOP (410-191197-8) and 241004-IRI-2-BOTTOM (410-191197-9)

Moisture, Ammonia, and Total Nitrogen were not visible on the Chain of Custody (COC) but were logged per project setup. While all requested methods were in the Excel spreadsheet version of the COC, due to a limitation of the LIMS not all of the methods were displayed on the printed COC.

241003-IRI-3-TOP (410-191197-1), 241003-IRI-4-BOTTOM (410-191197-3), 241004-IRI-1-TOP (410-191197-8) and 241004-IRI-2-BOTTOM (410-191197-9)

The Chain-of-Custody (COC) was incomplete as received. The COC is missing Sample State. This does not meet regulatory requirements. Client indicated that the samples were collected in Delaware.

GC/MS Semi VOA
Method 8270E_SIM_ALK: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 410-561309 and analytical batch 410-561440: 2-Methylnaphthalene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270E_SIM_ALK: The continuing calibration verification (CCV) associated with batch 410-561440 exhibited % difference of > 20% for the following analyte(s): Benzo[b]fluoranthene. These results are within the laboratory acceptance limits.

Method 8270E_SIM_ALK: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 410-561309 and analytical batch 410-561959: 2-Methylnaphthalene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B: Reporting limits were raised for gamma-BHC (Lindane) due to high disparity between columns.

241003-IRI-4-BOTTOM (410-191197-3)

Method 8081B: Reporting limits were raised for beta-BHC and gamma-BHC (Lindane) due to high disparity between columns.

241004-IRI-2-BOTTOM (410-191197-9)

Method 8081B: The following samples were diluted due to the nature of the sample matrix: 241003-IRI-3-TOP (410-191197-1), 241003-IRI-4-BOTTOM (410-191197-3), 241004-IRI-1-TOP (410-191197-8), 241004-IRI-2-BOTTOM (410-191197-9), (410-191197-B-1-I MS) and (410-191197-B-1-J MSD). Elevated reporting limits (RLs) are provided.

Method 8081B: Surrogate recovery for the following sample was outside the upper control limit: 241003-IRI-4-BOTTOM (410-191197-3). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFMS - Soluble: Reanalysis of the following samples were performed outside of the analytical holding time due to out of range QC : 241003-IRI-3-TOP (410-191197-1), 241003-IRI-4-BOTTOM (410-191197-3), 241004-IRI-1-TOP (410-191197-8) and 241004-IRI-2-BOTTOM (410-191197-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Dioxin
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method SM4500NH3_C_Mod: Due to the matrix, the initial volume(s) used for the following samples deviated from the standard procedure: 241003-IRI-3-TOP (410-191197-1), 241003-IRI-4-BOTTOM (410-191197-3), 241004-IRI-1-TOP (410-191197-8) and 241004-IRI-2-BOTTOM (410-191197-9). The reporting limits (RLs) have been adjusted proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Geotechnical
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Anchor QEA LLC
Project/Site: DNREC Sediments Indian River Inlet

Job ID: 410-191197-1

Client Sample ID: 241003-IRI-3-TOP

Lab Sample ID: 410-191197-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	1.1	J	2.0	0.39	ug/Kg	1	☼	8270E SIM	Total/NA
Pyrene	1.0	J	2.0	0.78	ug/Kg	1	☼	8270E SIM	Total/NA
Fluoranthene	1.2	J	2.0	0.78	ug/Kg	1	☼	8270E SIM	Total/NA
Acenaphthylene	0.49	J	2.0	0.39	ug/Kg	1	☼	8270E SIM	Total/NA
Chrysene	0.71	J	2.0	0.39	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[a]anthracene	0.84	J	2.0	0.78	ug/Kg	1	☼	8270E SIM	Total/NA
Phenanthrene	1.3	J	2.0	0.78	ug/Kg	1	☼	8270E SIM	Total/NA
Nitrate as N	1.6	J H cn	1.8	1.2	mg/Kg	1	☼	EPA 300.0 R2.1	Soluble
Nitrate Nitrite as N	1.6	J H cn	1.8	0.60	mg/Kg	1	☼	EPA 300.0 R2.1	Soluble
OCDD	12		12	2.4	ng/Kg	1	☼	1613B	Total/NA
Aluminum	920		25	7.6	mg/Kg	1	☼	6010D	Total/NA
Barium	4.2		0.42	0.13	mg/Kg	1	☼	6010D	Total/NA
Calcium	1100		42	18	mg/Kg	1	☼	6010D	Total/NA
Chromium	1.5		1.3	0.51	mg/Kg	1	☼	6010D	Total/NA
Cobalt	0.24	J	0.42	0.12	mg/Kg	1	☼	6010D	Total/NA
Iron	600		17	6.8	mg/Kg	1	☼	6010D	Total/NA
Lead	0.58	J	1.3	0.51	mg/Kg	1	☼	6010D	Total/NA
Magnesium	280		17	3.4	mg/Kg	1	☼	6010D	Total/NA
Manganese	6.4		0.85	0.34	mg/Kg	1	☼	6010D	Total/NA
Nickel	0.75	J	0.85	0.34	mg/Kg	1	☼	6010D	Total/NA
Potassium	200		85	30	mg/Kg	1	☼	6010D	Total/NA
Sodium	1800		85	34	mg/Kg	1	☼	6010D	Total/NA
Vanadium	1.8		0.85	0.36	mg/Kg	1	☼	6010D	Total/NA
Zinc	1.7		1.7	0.68	mg/Kg	1	☼	6010D	Total/NA
Total Solids	84		0.10	0.10	%	1		2540G-2015	Total/NA
Total Phosphorus as P	19	J	22	11	mg/Kg	1	☼	365.1	Total/NA
Total Phosphorus as PO4	58	J	68	34	mg/Kg	1	☼	365.1	Total/NA
Total Organic Carbon	830		360	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA
Nitrogen, Total	1.6		1.6	0.50	mg/Kg	1	☼	Total Nitrogen	Total/NA
50 mm (Sieve Size 2 inch)	100.0				% Finer	1		D422	Total/NA
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer	1		D422	Total/NA
25 mm (Sieve Size 1 inch)	100.0				% Finer	1		D422	Total/NA
19 mm (Sieve Size 0.75 inch)	100.0				% Finer	1		D422	Total/NA
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer	1		D422	Total/NA
4.75 mm (Sieve Size #4)	99.4				% Finer	1		D422	Total/NA
2 mm (Sieve Size #10)	98.4				% Finer	1		D422	Total/NA
0.85 mm (Sieve Size #20)	92.3				% Finer	1		D422	Total/NA
0.425 mm (Sieve Size #40)	65.3				% Finer	1		D422	Total/NA
0.25 mm (Sieve Size #60)	11.5				% Finer	1		D422	Total/NA
0.18 mm (Sieve Size #80)	0.6				% Finer	1		D422	Total/NA
0.15 mm (Sieve Size #100)	0.0				% Finer	1		D422	Total/NA
0.075 mm (Sieve Size #200)	0.0				% Finer	1		D422	Total/NA
36.1 um (Hydrometer Reading 1)	0.0				% Finer	1		D422	Total/NA
22.9 um (Hydrometer Reading 2)	0.0				% Finer	1		D422	Total/NA
13.4 um (Hydrometer Reading 3)	0.0				% Finer	1		D422	Total/NA
9.8 um (Hydrometer Reading 4)	0.0				% Finer	1		D422	Total/NA
6.7 um (Hydrometer Reading 5)	0.0				% Finer	1		D422	Total/NA
3.3 um (Hydrometer Reading 6)	0.0				% Finer	1		D422	Total/NA
1.4 um (Hydrometer Reading 7)	0.0				% Finer	1		D422	Total/NA
Clay	0.0				%	1		D422	Total/NA
Gravel	0.6				%	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 241003-IRI-3-TOP (Continued) — Lab Sample ID: 410-191197-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Coarse Sand	1				%	1		D422	Total/NA
Fine Sand	65.3				%	1		D422	Total/NA
Medium Sand	33.1				%	1		D422	Total/NA
Sand	99.4				%	1		D422	Total/NA
Silt	0.0				%	1		D422	Total/NA

Client Sample ID: 241004-IRI-3-TOP — Lab Sample ID: 410-191197-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
50 mm (Sieve Size 2 inch)	100.0				% Finer	1		D422	Total/NA
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer	1		D422	Total/NA
25 mm (Sieve Size 1 inch)	100.0				% Finer	1		D422	Total/NA
19 mm (Sieve Size 0.75 inch)	100.0				% Finer	1		D422	Total/NA
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer	1		D422	Total/NA
4.75 mm (Sieve Size #4)	99.3				% Finer	1		D422	Total/NA
2 mm (Sieve Size #10)	98.6				% Finer	1		D422	Total/NA
0.85 mm (Sieve Size #20)	92.8				% Finer	1		D422	Total/NA
0.425 mm (Sieve Size #40)	69.7				% Finer	1		D422	Total/NA
0.25 mm (Sieve Size #60)	12.6				% Finer	1		D422	Total/NA
0.18 mm (Sieve Size #80)	1.6				% Finer	1		D422	Total/NA
0.15 mm (Sieve Size #100)	0.0				% Finer	1		D422	Total/NA
0.075 mm (Sieve Size #200)	0.0				% Finer	1		D422	Total/NA
36.1 um (Hydrometer Reading 1)	0.0				% Finer	1		D422	Total/NA
22.9 um (Hydrometer Reading 2)	0.0				% Finer	1		D422	Total/NA
13.4 um (Hydrometer Reading 3)	0.0				% Finer	1		D422	Total/NA
9.8 um (Hydrometer Reading 4)	0.0				% Finer	1		D422	Total/NA
6.7 um (Hydrometer Reading 5)	0.0				% Finer	1		D422	Total/NA
3.3 um (Hydrometer Reading 6)	0.0				% Finer	1		D422	Total/NA
1.4 um (Hydrometer Reading 7)	0.0				% Finer	1		D422	Total/NA
Clay	0.0				%	1		D422	Total/NA
Gravel	0.7				%	1		D422	Total/NA
Coarse Sand	0.7				%	1		D422	Total/NA
Fine Sand	69.7				%	1		D422	Total/NA
Medium Sand	28.9				%	1		D422	Total/NA
Sand	99.3				%	1		D422	Total/NA
Silt	0.0				%	1		D422	Total/NA

Client Sample ID: 241003-IRI-4-BOTTOM — Lab Sample ID: 410-191197-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	1.0	J	2.0	0.40	ug/Kg	1	☼	8270E SIM	Total/NA
Pyrene	17		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[g,h,i]perylene	10		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[e]pyrene	12		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	12		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Perylene	4.6		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[b]fluoranthene	17	cn	2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Fluoranthene	21		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[k]fluoranthene	17		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Acenaphthylene	0.56	J	2.0	0.40	ug/Kg	1	☼	8270E SIM	Total/NA
Chrysene	14		2.0	0.40	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[a]pyrene	16		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 241003-IRI-4-BOTTOM (Continued)
Lab Sample ID: 410-191197-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	2.7		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[a]anthracene	15		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
Phenanthrene	3.2		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
C1-Benzo(a)anthracenes/Chrysenes	4.1		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
C1-Fluoranthene/Pyrenes	5.5		2.0	0.80	ug/Kg	1	☼	8270E SIM	Total/NA
OCDD	16		12	2.4	ng/Kg	1	☼	1613B	Total/NA
Aluminum	970	F1	32	9.6	mg/Kg	1	☼	6010D	Total/NA
Barium	4.2		0.54	0.16	mg/Kg	1	☼	6010D	Total/NA
Calcium	3900		54	22	mg/Kg	1	☼	6010D	Total/NA
Chromium	1.8		1.6	0.64	mg/Kg	1	☼	6010D	Total/NA
Cobalt	0.28	J	0.54	0.16	mg/Kg	1	☼	6010D	Total/NA
Iron	690	F1	21	8.6	mg/Kg	1	☼	6010D	Total/NA
Lead	0.70	J F1 F2	1.6	0.64	mg/Kg	1	☼	6010D	Total/NA
Magnesium	290		21	4.3	mg/Kg	1	☼	6010D	Total/NA
Manganese	6.2		1.1	0.43	mg/Kg	1	☼	6010D	Total/NA
Nickel	0.89	J	1.1	0.43	mg/Kg	1	☼	6010D	Total/NA
Potassium	220	F1	110	37	mg/Kg	1	☼	6010D	Total/NA
Sodium	1700	F1 F2	110	43	mg/Kg	1	☼	6010D	Total/NA
Vanadium	2.0		1.1	0.46	mg/Kg	1	☼	6010D	Total/NA
Zinc	2.4	F1 F2	2.1	0.86	mg/Kg	1	☼	6010D	Total/NA
Total Solids	81		0.10	0.10	%	1		2540G-2015	Total/NA
Total Phosphorus as P	15	J	23	11	mg/Kg	1	☼	365.1	Total/NA
Total Phosphorus as PO4	47	J	70	35	mg/Kg	1	☼	365.1	Total/NA

Client Sample ID: 2024-IRI-CORE-01_GS
Lab Sample ID: 410-191197-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
50 mm (Sieve Size 2 inch)	100.0				% Finer	1		D422	Total/NA
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer	1		D422	Total/NA
25 mm (Sieve Size 1 inch)	100.0				% Finer	1		D422	Total/NA
19 mm (Sieve Size 0.75 inch)	100.0				% Finer	1		D422	Total/NA
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer	1		D422	Total/NA
4.75 mm (Sieve Size #4)	96.8				% Finer	1		D422	Total/NA
2 mm (Sieve Size #10)	96.0				% Finer	1		D422	Total/NA
0.85 mm (Sieve Size #20)	92.3				% Finer	1		D422	Total/NA
0.425 mm (Sieve Size #40)	71.3				% Finer	1		D422	Total/NA
0.25 mm (Sieve Size #60)	8.3				% Finer	1		D422	Total/NA
0.18 mm (Sieve Size #80)	0.0				% Finer	1		D422	Total/NA
0.15 mm (Sieve Size #100)	0.0				% Finer	1		D422	Total/NA
0.075 mm (Sieve Size #200)	0.0				% Finer	1		D422	Total/NA
36.1 um (Hydrometer Reading 1)	0.0				% Finer	1		D422	Total/NA
22.9 um (Hydrometer Reading 2)	0.0				% Finer	1		D422	Total/NA
13.4 um (Hydrometer Reading 3)	0.0				% Finer	1		D422	Total/NA
9.8 um (Hydrometer Reading 4)	0.0				% Finer	1		D422	Total/NA
6.7 um (Hydrometer Reading 5)	0.0				% Finer	1		D422	Total/NA
3.3 um (Hydrometer Reading 6)	0.0				% Finer	1		D422	Total/NA
1.4 um (Hydrometer Reading 7)	0.0				% Finer	1		D422	Total/NA
Clay	0.0				%	1		D422	Total/NA
Gravel	3.2				%	1		D422	Total/NA
Coarse Sand	0.8				%	1		D422	Total/NA
Fine Sand	71.3				%	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2024-IRI-CORE-01_GS (Continued)
Lab Sample ID: 410-191197-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Medium Sand	24.7				%	1		D422	Total/NA
Sand	96.8				%	1		D422	Total/NA
Silt	0.0				%	1		D422	Total/NA

Client Sample ID: 2024-IRI-CORE-02_GS
Lab Sample ID: 410-191197-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
50 mm (Sieve Size 2 inch)	100.0				% Finer	1		D422	Total/NA
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer	1		D422	Total/NA
25 mm (Sieve Size 1 inch)	100.0				% Finer	1		D422	Total/NA
19 mm (Sieve Size 0.75 inch)	100.0				% Finer	1		D422	Total/NA
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer	1		D422	Total/NA
4.75 mm (Sieve Size #4)	99.6				% Finer	1		D422	Total/NA
2 mm (Sieve Size #10)	99.0				% Finer	1		D422	Total/NA
0.85 mm (Sieve Size #20)	94.2				% Finer	1		D422	Total/NA
0.425 mm (Sieve Size #40)	48.2				% Finer	1		D422	Total/NA
0.25 mm (Sieve Size #60)	0.0				% Finer	1		D422	Total/NA
0.18 mm (Sieve Size #80)	0.0				% Finer	1		D422	Total/NA
0.15 mm (Sieve Size #100)	0.0				% Finer	1		D422	Total/NA
0.075 mm (Sieve Size #200)	0.0				% Finer	1		D422	Total/NA
36.1 um (Hydrometer Reading 1)	0.0				% Finer	1		D422	Total/NA
22.9 um (Hydrometer Reading 2)	0.0				% Finer	1		D422	Total/NA
13.4 um (Hydrometer Reading 3)	0.0				% Finer	1		D422	Total/NA
9.8 um (Hydrometer Reading 4)	0.0				% Finer	1		D422	Total/NA
6.7 um (Hydrometer Reading 5)	0.0				% Finer	1		D422	Total/NA
3.3 um (Hydrometer Reading 6)	0.0				% Finer	1		D422	Total/NA
1.4 um (Hydrometer Reading 7)	0.0				% Finer	1		D422	Total/NA
Clay	0.0				%	1		D422	Total/NA
Gravel	0.4				%	1		D422	Total/NA
Coarse Sand	0.6				%	1		D422	Total/NA
Fine Sand	48.2				%	1		D422	Total/NA
Medium Sand	50.8				%	1		D422	Total/NA
Sand	99.6				%	1		D422	Total/NA
Silt	0.0				%	1		D422	Total/NA

Client Sample ID: 2024-IRI-CORE-19_GS
Lab Sample ID: 410-191197-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
50 mm (Sieve Size 2 inch)	100.0				% Finer	1		D422	Total/NA
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer	1		D422	Total/NA
25 mm (Sieve Size 1 inch)	100.0				% Finer	1		D422	Total/NA
19 mm (Sieve Size 0.75 inch)	100.0				% Finer	1		D422	Total/NA
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer	1		D422	Total/NA
4.75 mm (Sieve Size #4)	99.8				% Finer	1		D422	Total/NA
2 mm (Sieve Size #10)	99.6				% Finer	1		D422	Total/NA
0.85 mm (Sieve Size #20)	96.1				% Finer	1		D422	Total/NA
0.425 mm (Sieve Size #40)	71.7				% Finer	1		D422	Total/NA
0.25 mm (Sieve Size #60)	45.0				% Finer	1		D422	Total/NA
0.18 mm (Sieve Size #80)	36.6				% Finer	1		D422	Total/NA
0.15 mm (Sieve Size #100)	33.2				% Finer	1		D422	Total/NA
0.075 mm (Sieve Size #200)	16.7				% Finer	1		D422	Total/NA
36.1 um (Hydrometer Reading 1)	1.0				% Finer	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2024-IRI-CORE-19_GS (Continued) — Lab Sample ID: 410-191197-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
22.9 um (Hydrometer Reading 2)	0.0				% Finer	1		D422	Total/NA
13.4 um (Hydrometer Reading 3)	0.0				% Finer	1		D422	Total/NA
9.8 um (Hydrometer Reading 4)	0.0				% Finer	1		D422	Total/NA
6.7 um (Hydrometer Reading 5)	0.0				% Finer	1		D422	Total/NA
3.3 um (Hydrometer Reading 6)	0.0				% Finer	1		D422	Total/NA
1.4 um (Hydrometer Reading 7)	0.0				% Finer	1		D422	Total/NA
Clay	0.0				%	1		D422	Total/NA
Gravel	0.2				%	1		D422	Total/NA
Coarse Sand	0.2				%	1		D422	Total/NA
Fine Sand	55.0				%	1		D422	Total/NA
Medium Sand	27.9				%	1		D422	Total/NA
Sand	83.1				%	1		D422	Total/NA
Silt	16.7				%	1		D422	Total/NA

Client Sample ID: 2024-IRI-CORE-22_GS — Lab Sample ID: 410-191197-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
50 mm (Sieve Size 2 inch)	100.0				% Finer	1		D422	Total/NA
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer	1		D422	Total/NA
25 mm (Sieve Size 1 inch)	100.0				% Finer	1		D422	Total/NA
19 mm (Sieve Size 0.75 inch)	100.0				% Finer	1		D422	Total/NA
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer	1		D422	Total/NA
4.75 mm (Sieve Size #4)	100.0				% Finer	1		D422	Total/NA
2 mm (Sieve Size #10)	99.3				% Finer	1		D422	Total/NA
0.85 mm (Sieve Size #20)	92.2				% Finer	1		D422	Total/NA
0.425 mm (Sieve Size #40)	79.5				% Finer	1		D422	Total/NA
0.25 mm (Sieve Size #60)	34.8				% Finer	1		D422	Total/NA
0.18 mm (Sieve Size #80)	20.8				% Finer	1		D422	Total/NA
0.15 mm (Sieve Size #100)	18.2				% Finer	1		D422	Total/NA
0.075 mm (Sieve Size #200)	14.9				% Finer	1		D422	Total/NA
36.1 um (Hydrometer Reading 1)	2.9				% Finer	1		D422	Total/NA
22.9 um (Hydrometer Reading 2)	0.9				% Finer	1		D422	Total/NA
13.4 um (Hydrometer Reading 3)	0.0				% Finer	1		D422	Total/NA
9.8 um (Hydrometer Reading 4)	0.0				% Finer	1		D422	Total/NA
6.7 um (Hydrometer Reading 5)	0.0				% Finer	1		D422	Total/NA
3.3 um (Hydrometer Reading 6)	0.0				% Finer	1		D422	Total/NA
1.4 um (Hydrometer Reading 7)	0.0				% Finer	1		D422	Total/NA
Clay	0.0				%	1		D422	Total/NA
Gravel	0.0				%	1		D422	Total/NA
Coarse Sand	0.7				%	1		D422	Total/NA
Fine Sand	64.6				%	1		D422	Total/NA
Medium Sand	19.8				%	1		D422	Total/NA
Sand	85.1				%	1		D422	Total/NA
Silt	14.9				%	1		D422	Total/NA

Client Sample ID: 241004-IRI-1-TOP — Lab Sample ID: 410-191197-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perylene	18	F1	2.0	0.78	ug/Kg	1	☼	8270E SIM	Total/NA
1,2,3,4,6,7,8-HpCDD	6.8		5.8	2.3	ng/Kg	1	☼	1613B	Total/NA
OCDD	66		12	2.3	ng/Kg	1	☼	1613B	Total/NA
Aluminum	4200		33	9.9	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 241004-IRI-1-TOP (Continued)
Lab Sample ID: 410-191197-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.6	J	5.5	1.5	mg/Kg	1	☼	6010D	Total/NA
Barium	11		0.55	0.17	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.14	J	0.55	0.11	mg/Kg	1	☼	6010D	Total/NA
Calcium	2300		55	23	mg/Kg	1	☼	6010D	Total/NA
Chromium	7.8		1.7	0.66	mg/Kg	1	☼	6010D	Total/NA
Cobalt	1.6		0.55	0.16	mg/Kg	1	☼	6010D	Total/NA
Copper	2.0	J	2.2	0.85	mg/Kg	1	☼	6010D	Total/NA
Iron	4800		22	8.8	mg/Kg	1	☼	6010D	Total/NA
Lead	1.9		1.7	0.66	mg/Kg	1	☼	6010D	Total/NA
Magnesium	1500		22	4.4	mg/Kg	1	☼	6010D	Total/NA
Manganese	56		1.1	0.44	mg/Kg	1	☼	6010D	Total/NA
Nickel	4.0		1.1	0.44	mg/Kg	1	☼	6010D	Total/NA
Potassium	940		110	39	mg/Kg	1	☼	6010D	Total/NA
Sodium	2600		110	44	mg/Kg	1	☼	6010D	Total/NA
Vanadium	8.9		1.1	0.47	mg/Kg	1	☼	6010D	Total/NA
Zinc	10		2.2	0.88	mg/Kg	1	☼	6010D	Total/NA
Total Solids	83		0.10	0.10	%	1		2540G-2015	Total/NA
Total Phosphorus as P	160		19	9.6	mg/Kg	1	☼	365.1	Total/NA
Total Phosphorus as PO4	490		59	30	mg/Kg	1	☼	365.1	Total/NA
Total Organic Carbon	1300		350	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA
50 mm (Sieve Size 2 inch)	100.0				% Finer	1		D422	Total/NA
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer	1		D422	Total/NA
25 mm (Sieve Size 1 inch)	100.0				% Finer	1		D422	Total/NA
19 mm (Sieve Size 0.75 inch)	100.0				% Finer	1		D422	Total/NA
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer	1		D422	Total/NA
4.75 mm (Sieve Size #4)	99.3				% Finer	1		D422	Total/NA
2 mm (Sieve Size #10)	98.3				% Finer	1		D422	Total/NA
0.85 mm (Sieve Size #20)	94.1				% Finer	1		D422	Total/NA
0.425 mm (Sieve Size #40)	73.2				% Finer	1		D422	Total/NA
0.25 mm (Sieve Size #60)	20.1				% Finer	1		D422	Total/NA
0.18 mm (Sieve Size #80)	7.3				% Finer	1		D422	Total/NA
0.15 mm (Sieve Size #100)	4.2				% Finer	1		D422	Total/NA
0.075 mm (Sieve Size #200)	0.0				% Finer	1		D422	Total/NA
36.1 um (Hydrometer Reading 1)	0.0				% Finer	1		D422	Total/NA
22.9 um (Hydrometer Reading 2)	0.0				% Finer	1		D422	Total/NA
13.4 um (Hydrometer Reading 3)	0.0				% Finer	1		D422	Total/NA
9.8 um (Hydrometer Reading 4)	0.0				% Finer	1		D422	Total/NA
6.7 um (Hydrometer Reading 5)	0.0				% Finer	1		D422	Total/NA
3.3 um (Hydrometer Reading 6)	0.0				% Finer	1		D422	Total/NA
1.4 um (Hydrometer Reading 7)	0.0				% Finer	1		D422	Total/NA
Clay	0.0				%	1		D422	Total/NA
Gravel	0.7				%	1		D422	Total/NA
Coarse Sand	1.0				%	1		D422	Total/NA
Fine Sand	73.2				%	1		D422	Total/NA
Medium Sand	25.1				%	1		D422	Total/NA
Sand	99.3				%	1		D422	Total/NA
Silt	0.0				%	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Client Sample ID: 241004-IRI-2-BOTTOM
Lab Sample ID: 410-191197-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	1.4	J	2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[e]pyrene	0.84	J	2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
Perylene	8.5		2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[b]fluoranthene	1.2	J	2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
Fluoranthene	1.5	J	2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[k]fluoranthene	1.2	J	2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
Chrysene	1.6	J	2.0	0.39	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[a]pyrene	1.1	J	2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
Benzo[a]anthracene	1.6	J	2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
Phenanthrene	0.82	J	2.0	0.79	ug/Kg	1	☼	8270E SIM	Total/NA
1,2,3,4,6,7,8-HpCDD	8.0		5.9	2.4	ng/Kg	1	☼	1613B	Total/NA
OCDD	92		12	2.4	ng/Kg	1	☼	1613B	Total/NA
OCDF	2.4	J	12	2.4	ng/Kg	1	☼	1613B	Total/NA
Aluminum	5000		33	9.8	mg/Kg	1	☼	6010D	Total/NA
Barium	9.6		0.54	0.16	mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.12	J	0.54	0.11	mg/Kg	1	☼	6010D	Total/NA
Calcium	5300		54	23	mg/Kg	1	☼	6010D	Total/NA
Chromium	6.5		1.6	0.65	mg/Kg	1	☼	6010D	Total/NA
Cobalt	1.4		0.54	0.16	mg/Kg	1	☼	6010D	Total/NA
Copper	1.7	J	2.2	0.84	mg/Kg	1	☼	6010D	Total/NA
Iron	4000		22	8.7	mg/Kg	1	☼	6010D	Total/NA
Lead	1.7		1.6	0.65	mg/Kg	1	☼	6010D	Total/NA
Magnesium	1300		22	4.3	mg/Kg	1	☼	6010D	Total/NA
Manganese	54		1.1	0.43	mg/Kg	1	☼	6010D	Total/NA
Nickel	3.4		1.1	0.43	mg/Kg	1	☼	6010D	Total/NA
Potassium	730		110	38	mg/Kg	1	☼	6010D	Total/NA
Sodium	2500		110	43	mg/Kg	1	☼	6010D	Total/NA
Vanadium	7.4		1.1	0.47	mg/Kg	1	☼	6010D	Total/NA
Zinc	8.1		2.2	0.87	mg/Kg	1	☼	6010D	Total/NA
Total Solids	82		0.10	0.10	%	1		2540G-2015	Total/NA
Total Phosphorus as P	36		23	12	mg/Kg	1	☼	365.1	Total/NA
Total Phosphorus as PO4	110		71	36	mg/Kg	1	☼	365.1	Total/NA
Total Organic Carbon	750		350	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Anchor QEA LLC
Project/Site: DNREC Sediments Indian River Inlet

Job ID: 410-191197-1

Client Sample ID: 241003-IRI-3-TOP
Date Collected: 10/03/24 19:10
Date Received: 10/05/24 10:00

Lab Sample ID: 410-191197-1
Matrix: Solid
Percent Solids: 84.3

Method: EPA 680 - Polychlorinated Biphenyls by GCMS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	ND	*1	20	0.59	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Dichlorobiphenyls	ND		3.9	0.35	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Heptachlorobiphenyls	ND	*1	12	0.59	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Hexachlorobiphenyls	ND		7.9	0.47	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Monochlorobiphenyls	ND		3.9	0.35	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Nonachlorobiphenyls	ND		20	0.59	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Octachlorobiphenyls	ND	*1	12	0.59	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Pentachlorobiphenyls	ND		7.9	0.95	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Tetrachlorobiphenyls	ND		7.9	0.47	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1
Total Trichlorobiphenyls	ND		3.9	0.24	ug/Kg	☼	10/22/24 09:46	10/23/24 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-52L	*42*		*29 - 120*	*10/22/24 09:46*	*10/23/24 13:00*	*1*
PCB-138L	*44*		*20 - 123*	*10/22/24 09:46*	*10/23/24 13:00*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	**1.1**	**J**	2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Pyrene	**1.0**	**J**	2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Dibenzofuran	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Benzo[g,h,i]perylene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Benzo[e]pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Perylene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Benzo[b]fluoranthene	ND	cn	2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Fluoranthene	**1.2**	**J**	2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Benzo[k]fluoranthene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Acenaphthylene	**0.49**	**J**	2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Chrysene	**0.71**	**J**	2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Benzo[a]pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Dibenz(a,h)anthracene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Benzo[a]anthracene	**0.84**	**J**	2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Acenaphthene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Phenanthrene	**1.3**	**J**	2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Fluorene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
Naphthalene	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
2-Methylnaphthalene	ND	*- cn	2.0	1.2	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C1-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C2-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C3-Benzo(a)Anthracenes/Chrysenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C4-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C1-Fluoranthene/Pyrenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C2-Fluoranthenes/Pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C3-Fluoranthenes/Pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C1-Fluorenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C2-Fluorenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C3-Fluorenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C1-Naphthalenes	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C2-Naphthalenes	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C3-Naphthalenes	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1

Client Sample ID: 241003-IRI-3-TOP — **Lab Sample ID: 410-191197-1**
Date Collected: 10/03/24 19:10 — **Matrix: Solid**
Date Received: 10/05/24 10:00 — **Percent Solids: 84.3**

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-Naphthalenes	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C1-Phenanthrenes/Anthracenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C2-Phenanthrenes/Anthracenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C3-Phenanthrenes/Anthracenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1
C4-Phenanthrenes/Anthracenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*106*		*59 - 120*	*10/09/24 15:07*	*10/10/24 13:24*	*1*
Fluoranthene-d10 (Surr)	*103*		*61 - 120*	*10/09/24 15:07*	*10/10/24 13:24*	*1*
1-Methylnaphthalene-d10	*79*		*40 - 120*	*10/09/24 15:07*	*10/10/24 13:24*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	cn	4.9	2.1	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
alpha-BHC (1C)	ND	F1 cn	4.9	2.2	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
alpha-Chlordane (2C)	ND		4.9	1.0	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
beta-BHC (2C)	ND		5.9	2.6	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
delta-BHC (1C)	ND	F1 cn	5.9	2.7	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Dieldrin (1C)	ND	cn	10	1.9	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Endosulfan I (2C)	ND	F2 F1	4.9	1.3	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Endosulfan II (1C)	ND	F1 cn	14	6.5	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Endosulfan sulfate (1C)	ND	cn	10	2.3	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Endrin (1C)	ND	cn	10	4.0	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Endrin aldehyde (1C)	ND	cn	10	2.3	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Endrin ketone (1C)	ND	cn	12	3.5	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
gamma-BHC (Lindane) (1C)	ND	F2 F1 cn	4.9	1.2	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
gamma-Chlordane (1C)	ND	cn	4.9	1.5	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Heptachlor (1C)	ND	F1 cn	4.9	1.8	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Heptachlor epoxide (1C)	ND	F1 cn	4.9	2.1	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Methoxychlor (1C)	ND	F2 cn	40	15	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
Toxaphene (1C)	ND	cn	190	83	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
p,p'-DDD (1C)	ND	cn	10	4.7	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
p,p'-DDE (1C)	ND	cn	10	4.1	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5
p,p'-DDT (1C)	ND	F1 cn	10	4.7	ug/Kg	☼	10/07/24 17:40	10/21/24 05:55	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*83*	*cn*	*54 - 143*	*10/07/24 17:40*	*10/21/24 05:55*	*5*
DCB Decachlorobiphenyl (Surr) (2C)	*83*		*54 - 143*	*10/07/24 17:40*	*10/21/24 05:55*	*5*
Tetrachloro-m-xylene (Surr) (1C)	*84*	*cn*	*20 - 131*	*10/07/24 17:40*	*10/21/24 05:55*	*5*
Tetrachloro-m-xylene (Surr) (2C)	*80*		*20 - 131*	*10/07/24 17:40*	*10/21/24 05:55*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1.6**	**J H cn**	1.8	1.2	mg/Kg	☼		10/16/24 04:59	1
Nitrite as N	ND	H cn	1.2	0.60	mg/Kg	☼		10/16/24 04:59	1
Nitrate Nitrite as N	**1.6**	**J H cn**	1.8	0.60	mg/Kg	☼		10/16/24 04:59	1

Method: EPA 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,4,6,7,8-HpCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1

Client Sample ID: 241003-IRI-3-TOP
Lab Sample ID: 410-191197-1
Date Collected: 10/03/24 19:10
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.3

Method: EPA 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,7,8-HxCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,4,7,8-HxCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,4,7,8,9-HpCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,6,7,8-HxCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,6,7,8-HxCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,7,8-PeCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,7,8-PeCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,7,8,9-HxCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
1,2,3,7,8,9-HxCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
2,3,4,6,7,8-HxCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
2,3,4,7,8-PeCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
2,3,7,8-TCDD	ND		1.2	0.24	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
2,3,7,8-TCDF	ND		1.2	0.24	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
OCDD	**12**		12	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1
OCDF	ND		12	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 10:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-1,2,3,4,6,7,8-HpCDD	*59*		*23 - 140*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*54*		*28 - 143*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,4,7,8-HxCDD	*62*		*32 - 141*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,4,7,8-HxCDF	*62*		*26 - 152*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*54*		*26 - 138*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,6,7,8-HxCDD	*64*		*28 - 130*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,6,7,8-HxCDF	*60*		*26 - 123*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,7,8-PeCDD	*67*		*25 - 181*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,7,8-PeCDF	*65*		*24 - 185*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,7,8,9-HxCDD	*63*		*28 - 130*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-1,2,3,7,8,9-HxCDF	*58*		*29 - 147*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-2,3,4,6,7,8-HxCDF	*58*		*28 - 136*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-2,3,4,7,8-PeCDF	*65*		*21 - 178*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-2,3,7,8-TCDD	*69*		*25 - 164*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-2,3,7,8-TCDF	*61*		*24 - 169*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-OCDD	*63*		*17 - 157*	*10/15/24 18:42*	*10/23/24 10:31*	*1*
13C-OCDF	*60*		*17 - 157*	*10/15/24 18:42*	*10/23/24 10:31*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**920**		25	7.6	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Antimony	ND		4.2	1.4	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Arsenic	ND		4.2	1.2	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Barium	**4.2**		0.42	0.13	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Beryllium	ND		0.42	0.085	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Cadmium	ND		0.42	0.085	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Calcium	**1100**		42	18	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Chromium	**1.5**		1.3	0.51	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Cobalt	**0.24**	**J**	0.42	0.12	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Copper	ND		1.7	0.65	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Iron	**600**		17	6.8	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Lead	**0.58**	**J**	1.3	0.51	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Magnesium	**280**		17	3.4	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1

Client Sample ID: 241003-IRI-3-TOP
Lab Sample ID: 410-191197-1
Date Collected: 10/03/24 19:10
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.3

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	6.4		0.85	0.34	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Nickel	0.75	J	0.85	0.34	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Potassium	200		85	30	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Selenium	ND		4.2	1.3	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Silver	ND		0.85	0.34	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Sodium	1800		85	34	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Thallium	ND		2.5	1.1	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Vanadium	1.8		0.85	0.36	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1
Zinc	1.7		1.7	0.68	mg/Kg	☼	10/17/24 22:00	10/21/24 09:01	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.068	0.023	mg/Kg	☼	10/20/24 23:35	10/23/24 07:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G-2015)	84		0.10	0.10	%			10/07/24 11:13	1
Percent Moisture (SM 2540G-2015)	16		0.10	0.10	%			10/07/24 11:13	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND	F1	160	76	mg/Kg	☼	10/08/24 16:00	10/09/24 12:52	1
Total Phosphorus as P (EPA 365.1)	19	J	22	11	mg/Kg	☼	10/21/24 04:00	10/21/24 12:12	1
Total Phosphorus as PO4 (EPA 365.1)	58	J	68	34	mg/Kg	☼	10/21/24 04:00	10/21/24 12:12	1
Ammonia-N (SM 4500 NH3 C-2011)	ND	cn	810	270	mg/Kg	☼	10/08/24 09:57	10/08/24 10:17	1
Total Organic Carbon (EPA Lloyd Kahn)	830		360	120	mg/Kg	☼		10/12/24 17:01	1
Percent Moisture (EPA Moisture)	15.7		1.0	1.0	%			10/07/24 08:11	1
Nitrogen, Total (EPA Total Nitrogen)	1.6		1.6	0.50	mg/Kg	☼		10/09/24 15:49	1

Method: ASTM D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
50 mm (Sieve Size 2 inch)	100.0				% Finer			10/08/24 15:20	1
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer			10/08/24 15:20	1
25 mm (Sieve Size 1 inch)	100.0				% Finer			10/08/24 15:20	1
19 mm (Sieve Size 0.75 inch)	100.0				% Finer			10/08/24 15:20	1
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer			10/08/24 15:20	1
4.75 mm (Sieve Size #4)	99.4				% Finer			10/08/24 15:20	1
2 mm (Sieve Size #10)	98.4				% Finer			10/08/24 15:20	1
0.85 mm (Sieve Size #20)	92.3				% Finer			10/08/24 15:20	1
0.425 mm (Sieve Size #40)	65.3				% Finer			10/08/24 15:20	1
0.25 mm (Sieve Size #60)	11.5				% Finer			10/08/24 15:20	1
0.18 mm (Sieve Size #80)	0.6				% Finer			10/08/24 15:20	1
0.15 mm (Sieve Size #100)	0.0				% Finer			10/08/24 15:20	1
0.075 mm (Sieve Size #200)	0.0				% Finer			10/08/24 15:20	1
36.1 um (Hydrometer Reading 1)	0.0				% Finer			10/08/24 15:20	1
22.9 um (Hydrometer Reading 2)	0.0				% Finer			10/08/24 15:20	1
13.4 um (Hydrometer Reading 3)	0.0				% Finer			10/08/24 15:20	1
9.8 um (Hydrometer Reading 4)	0.0				% Finer			10/08/24 15:20	1
6.7 um (Hydrometer Reading 5)	0.0				% Finer			10/08/24 15:20	1
3.3 um (Hydrometer Reading 6)	0.0				% Finer			10/08/24 15:20	1

Client Sample ID: 241003-IRI-3-TOP
Lab Sample ID: 410-191197-1

Date Collected: 10/03/24 19:10
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.3

Method: ASTM D422 - Grain Size (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1.4 um (Hydrometer Reading 7)	0.0				% Finer			10/08/24 15:20	1
Clay	0.0				%			10/08/24 15:20	1
Gravel	0.6				%			10/08/24 15:20	1
Coarse Sand	1				%			10/08/24 15:20	1
Fine Sand	65.3				%			10/08/24 15:20	1
Medium Sand	33.1				%			10/08/24 15:20	1
Sand	99.4				%			10/08/24 15:20	1
Silt	0.0				%			10/08/24 15:20	1

Client Sample ID: 241004-IRI-3-TOP
Lab Sample ID: 410-191197-2

Date Collected: 10/04/24 09:50
Matrix: Solid
Date Received: 10/05/24 10:00

Method: ASTM D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
50 mm (Sieve Size 2 inch)	100.0				% Finer			10/08/24 15:20	1
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer			10/08/24 15:20	1
25 mm (Sieve Size 1 inch)	100.0				% Finer			10/08/24 15:20	1
19 mm (Sieve Size 0.75 inch)	100.0				% Finer			10/08/24 15:20	1
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer			10/08/24 15:20	1
4.75 mm (Sieve Size #4)	99.3				% Finer			10/08/24 15:20	1
2 mm (Sieve Size #10)	98.6				% Finer			10/08/24 15:20	1
0.85 mm (Sieve Size #20)	92.8				% Finer			10/08/24 15:20	1
0.425 mm (Sieve Size #40)	69.7				% Finer			10/08/24 15:20	1
0.25 mm (Sieve Size #60)	12.6				% Finer			10/08/24 15:20	1
0.18 mm (Sieve Size #80)	1.6				% Finer			10/08/24 15:20	1
0.15 mm (Sieve Size #100)	0.0				% Finer			10/08/24 15:20	1
0.075 mm (Sieve Size #200)	0.0				% Finer			10/08/24 15:20	1
36.1 um (Hydrometer Reading 1)	0.0				% Finer			10/08/24 15:20	1
22.9 um (Hydrometer Reading 2)	0.0				% Finer			10/08/24 15:20	1
13.4 um (Hydrometer Reading 3)	0.0				% Finer			10/08/24 15:20	1
9.8 um (Hydrometer Reading 4)	0.0				% Finer			10/08/24 15:20	1
6.7 um (Hydrometer Reading 5)	0.0				% Finer			10/08/24 15:20	1
3.3 um (Hydrometer Reading 6)	0.0				% Finer			10/08/24 15:20	1
1.4 um (Hydrometer Reading 7)	0.0				% Finer			10/08/24 15:20	1
Clay	0.0				%			10/08/24 15:20	1
Gravel	0.7				%			10/08/24 15:20	1
Coarse Sand	0.7				%			10/08/24 15:20	1
Fine Sand	69.7				%			10/08/24 15:20	1
Medium Sand	28.9				%			10/08/24 15:20	1
Sand	99.3				%			10/08/24 15:20	1
Silt	0.0				%			10/08/24 15:20	1

Client Sample ID: 241003-IRI-4-BOTTOM
Lab Sample ID: 410-191197-3

Date Collected: 10/03/24 19:15
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 82.6

Method: EPA 680 - Polychlorinated Biphenyls by GCMS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	ND	*1	20	0.60	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1

Client: Anchor QEA LLC
Project/Site: DNREC Sediments Indian River Inlet

Job ID: 410-191197-1

Client Sample ID: 241003-IRI-4-BOTTOM
Date Collected: 10/03/24 19:15
Date Received: 10/05/24 10:00

Lab Sample ID: 410-191197-3
Matrix: Solid
Percent Solids: 82.6

Method: EPA 680 - Polychlorinated Biphenyls by GCMS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dichlorobiphenyls	ND		4.0	0.36	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1
Total Heptachlorobiphenyls	ND	*1	12	0.60	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1
Total Hexachlorobiphenyls	ND		8.0	0.48	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1
Total Monochlorobiphenyls	ND		4.0	0.36	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1
Total Nonachlorobiphenyls	ND		20	0.60	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1
Total Octachlorobiphenyls	ND	*1	12	0.60	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1
Total Pentachlorobiphenyls	ND		8.0	0.96	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1
Total Tetrachlorobiphenyls	ND		8.0	0.48	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1
Total Trichlorobiphenyls	ND		4.0	0.24	ug/Kg	☼	10/22/24 09:46	10/23/24 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-52L	*72*		*29 - 120*	*10/22/24 09:46*	*10/23/24 13:25*	*1*
PCB-138L	*78*		*20 - 123*	*10/22/24 09:46*	*10/23/24 13:25*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	**1.0**	**J**	2.0	0.40	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Pyrene	**17**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Dibenzofuran	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Benzo[g,h,i]perylene	**10**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Benzo[e]pyrene	**12**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Indeno[1,2,3-cd]pyrene	**12**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Perylene	**4.6**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Benzo[b]fluoranthene	**17**	**cn**	2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Fluoranthene	**21**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Benzo[k]fluoranthene	**17**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Acenaphthylene	**0.56**	**J**	2.0	0.40	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Chrysene	**14**		2.0	0.40	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Benzo[a]pyrene	**16**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Dibenz(a,h)anthracene	**2.7**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Benzo[a]anthracene	**15**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Acenaphthene	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Phenanthrene	**3.2**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Fluorene	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
Naphthalene	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
2-Methylnaphthalene	ND	*- cn	2.0	1.2	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C1-Benzo(a)anthracenes/Chrysenes	**4.1**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C2-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C3-Benzo(a)Anthracenes/Chrysenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C4-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C1-Fluoranthene/Pyrenes	**5.5**		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C2-Fluoranthenes/Pyrene	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C3-Fluoranthenes/Pyrene	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C1-Fluorenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C2-Fluorenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C3-Fluorenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C1-Naphthalenes	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C2-Naphthalenes	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C3-Naphthalenes	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1

Client Sample ID: 241003-IRI-4-BOTTOM
Lab Sample ID: 410-191197-3
Date Collected: 10/03/24 19:15
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 82.6

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-Naphthalenes	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C1-Phenanthrenes/Anthracenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C2-Phenanthrenes/Anthracenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C3-Phenanthrenes/Anthracenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1
C4-Phenanthrenes/Anthracenes	ND		2.0	0.80	ug/Kg	☼	10/09/24 15:07	10/10/24 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*105*		*59 - 120*	*10/09/24 15:07*	*10/10/24 14:08*	*1*
Fluoranthene-d10 (Surr)	*107*		*61 - 120*	*10/09/24 15:07*	*10/10/24 14:08*	*1*
1-Methylnaphthalene-d10	*73*		*40 - 120*	*10/09/24 15:07*	*10/10/24 14:08*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	cn	20	8.6	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
alpha-BHC (1C)	ND	cn	20	9.1	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
alpha-Chlordane (1C)	ND	cn	20	4.1	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
beta-BHC (2C)	ND	cn	24	11	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
delta-BHC (1C)	ND	cn	24	11	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Dieldrin (1C)	ND	cn	41	7.9	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Endosulfan I (1C)	ND	cn	20	5.3	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Endosulfan II (1C)	ND	cn	55	26	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Endosulfan sulfate (1C)	ND	cn	41	9.4	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Endrin (1C)	ND	cn	41	16	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Endrin aldehyde (1C)	ND	cn	41	9.2	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Endrin ketone (1C)	ND	cn	48	14	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
gamma-BHC (Lindane) (1C)	ND	p cn	20	20	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
gamma-Chlordane (1C)	ND	cn	20	6.0	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Heptachlor (1C)	ND	cn	20	7.4	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Heptachlor epoxide (2C)	ND	cn	20	8.4	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Methoxychlor (1C)	ND	cn	160	61	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
Toxaphene (1C)	ND	cn	790	340	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
p,p'-DDD (1C)	ND	cn	41	19	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
p,p'-DDE (1C)	ND	cn	41	17	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20
p,p'-DDT (1C)	ND	cn	41	19	ug/Kg	☼	10/07/24 17:40	10/21/24 06:05	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*111*	*cn*	*54 - 143*	*10/07/24 17:40*	*10/21/24 06:05*	*20*
DCB Decachlorobiphenyl (Surr) (2C)	*113*	*cn*	*54 - 143*	*10/07/24 17:40*	*10/21/24 06:05*	*20*
Tetrachloro-m-xylene (Surr) (1C)	*154*	*S1+ cn*	*20 - 131*	*10/07/24 17:40*	*10/21/24 06:05*	*20*
Tetrachloro-m-xylene (Surr) (2C)	*105*	*cn*	*20 - 131*	*10/07/24 17:40*	*10/21/24 06:05*	*20*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND	H cn	1.9	1.2	mg/Kg	☼		10/16/24 05:10	1
Nitrite as N	ND	H cn	1.2	0.62	mg/Kg	☼		10/16/24 05:10	1
Nitrate Nitrite as N	ND	H cn	1.9	0.62	mg/Kg	☼		10/16/24 05:10	1

Method: EPA 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDD	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,4,6,7,8-HpCDF	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1

Client Sample ID: 241003-IRI-4-BOTTOM
Lab Sample ID: 410-191197-3
Date Collected: 10/03/24 19:15
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 82.6

Method: EPA 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,7,8-HxCDD	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,4,7,8-HxCDF	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,4,7,8,9-HpCDF	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,6,7,8-HxCDD	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,6,7,8-HxCDF	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,7,8-PeCDD	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,7,8-PeCDF	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,7,8,9-HxCDD	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
1,2,3,7,8,9-HxCDF	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
2,3,4,6,7,8-HxCDF	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
2,3,4,7,8-PeCDF	ND		6.0	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
2,3,7,8-TCDD	ND		1.2	0.24	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
2,3,7,8-TCDF	ND		1.2	0.24	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
OCDD	**16**		12	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1
OCDF	ND		12	2.4	ng/Kg	☼	10/15/24 18:42	10/24/24 23:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-1,2,3,4,6,7,8-HpCDD	*89*		*23 - 140*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*105*		*28 - 143*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,4,7,8-HxCDD	*94*		*32 - 141*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,4,7,8-HxCDF	*100*		*26 - 152*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*106*		*26 - 138*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,6,7,8-HxCDD	*91*		*28 - 130*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,6,7,8-HxCDF	*106*		*26 - 123*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,7,8-PeCDD	*84*		*25 - 181*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,7,8-PeCDF	*91*		*24 - 185*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,7,8,9-HxCDD	*89*		*28 - 130*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-1,2,3,7,8,9-HxCDF	*110*		*29 - 147*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-2,3,4,6,7,8-HxCDF	*106*		*28 - 136*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-2,3,4,7,8-PeCDF	*93*		*21 - 178*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-2,3,7,8-TCDD	*84*		*25 - 164*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-2,3,7,8-TCDF	*99*		*24 - 169*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-OCDD	*82*		*17 - 157*	*10/15/24 18:42*	*10/24/24 23:43*	*1*
13C-OCDF	*91*		*17 - 157*	*10/15/24 18:42*	*10/24/24 23:43*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**970**	**F1**	32	9.6	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Antimony	ND		5.4	1.8	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Arsenic	ND		5.4	1.5	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Barium	**4.2**		0.54	0.16	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Beryllium	ND		0.54	0.11	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Cadmium	ND		0.54	0.11	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Calcium	**3900**		54	22	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Chromium	**1.8**		1.6	0.64	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Cobalt	**0.28**	**J**	0.54	0.16	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Copper	ND		2.1	0.82	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Iron	**690**	**F1**	21	8.6	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Lead	**0.70**	**J F1 F2**	1.6	0.64	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Magnesium	**290**		21	4.3	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1

Client Sample ID: 241003-IRI-4-BOTTOM

Lab Sample ID: 410-191197-3

Date Collected: 10/03/24 19:15
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 82.6

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	6.2		1.1	0.43	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Nickel	0.89	J	1.1	0.43	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Potassium	220	F1	110	37	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Selenium	ND		5.4	1.6	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Silver	ND		1.1	0.43	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Sodium	1700	F1 F2	110	43	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Thallium	ND		3.2	1.4	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Vanadium	2.0		1.1	0.46	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1
Zinc	2.4	F1 F2	2.1	0.86	mg/Kg	☼	10/17/24 22:00	10/21/24 08:34	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.069	0.023	mg/Kg	☼	10/20/24 23:35	10/23/24 07:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G-2015)	81		0.10	0.10	%			10/07/24 11:14	1
Percent Moisture (SM 2540G-2015)	19		0.10	0.10	%			10/07/24 11:14	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND	F1	190	90	mg/Kg	☼	10/08/24 16:00	10/09/24 13:15	1
Total Phosphorus as P (EPA 365.1)	15	J	23	11	mg/Kg	☼	10/21/24 04:00	10/21/24 12:13	1
Total Phosphorus as PO4 (EPA 365.1)	47	J	70	35	mg/Kg	☼	10/21/24 04:00	10/21/24 12:13	1
Ammonia-N (SM 4500 NH3 C-2011)	ND	cn	730	240	mg/Kg	☼	10/08/24 09:57	10/08/24 10:17	1
Total Organic Carbon (EPA Lloyd Kahn)	ND		360	120	mg/Kg	☼		10/12/24 17:42	1
Percent Moisture (EPA Moisture)	17.4		1.0	1.0	%			10/07/24 08:11	1
Nitrogen, Total (EPA Total Nitrogen)	ND		1.6	0.50	mg/Kg	☼		10/09/24 15:49	1

Client Sample ID: 2024-IRI-CORE-01_GS

Lab Sample ID: 410-191197-4

Date Collected: 10/04/24 11:35
Matrix: Solid
Date Received: 10/05/24 10:00

Method: ASTM D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
50 mm (Sieve Size 2 inch)	100.0				% Finer			10/08/24 15:20	1
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer			10/08/24 15:20	1
25 mm (Sieve Size 1 inch)	100.0				% Finer			10/08/24 15:20	1
19 mm (Sieve Size 0.75 inch)	100.0				% Finer			10/08/24 15:20	1
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer			10/08/24 15:20	1
4.75 mm (Sieve Size #4)	96.8				% Finer			10/08/24 15:20	1
2 mm (Sieve Size #10)	96.0				% Finer			10/08/24 15:20	1
0.85 mm (Sieve Size #20)	92.3				% Finer			10/08/24 15:20	1
0.425 mm (Sieve Size #40)	71.3				% Finer			10/08/24 15:20	1
0.25 mm (Sieve Size #60)	8.3				% Finer			10/08/24 15:20	1
0.18 mm (Sieve Size #80)	0.0				% Finer			10/08/24 15:20	1
0.15 mm (Sieve Size #100)	0.0				% Finer			10/08/24 15:20	1
0.075 mm (Sieve Size #200)	0.0				% Finer			10/08/24 15:20	1
36.1 um (Hydrometer Reading 1)	0.0				% Finer			10/08/24 15:20	1
22.9 um (Hydrometer Reading 2)	0.0				% Finer			10/08/24 15:20	1
13.4 um (Hydrometer Reading 3)	0.0				% Finer			10/08/24 15:20	1

Client Sample ID: 2024-IRI-CORE-01_GS

Lab Sample ID: 410-191197-4

Date Collected: 10/04/24 11:35

Matrix: Solid

Date Received: 10/05/24 10:00

Method: ASTM D422 - Grain Size (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9.8 um (Hydrometer Reading 4)	0.0				% Finer			10/08/24 15:20	1
6.7 um (Hydrometer Reading 5)	0.0				% Finer			10/08/24 15:20	1
3.3 um (Hydrometer Reading 6)	0.0				% Finer			10/08/24 15:20	1
1.4 um (Hydrometer Reading 7)	0.0				% Finer			10/08/24 15:20	1
Clay	0.0				%			10/08/24 15:20	1
Gravel	3.2				%			10/08/24 15:20	1
Coarse Sand	0.8				%			10/08/24 15:20	1
Fine Sand	71.3				%			10/08/24 15:20	1
Medium Sand	24.7				%			10/08/24 15:20	1
Sand	96.8				%			10/08/24 15:20	1
Silt	0.0				%			10/08/24 15:20	1

Client Sample ID: 2024-IRI-CORE-02_GS

Lab Sample ID: 410-191197-5

Date Collected: 10/04/24 11:30

Matrix: Solid

Date Received: 10/05/24 10:00

Method: ASTM D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
50 mm (Sieve Size 2 inch)	100.0				% Finer			10/08/24 15:20	1
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer			10/08/24 15:20	1
25 mm (Sieve Size 1 inch)	100.0				% Finer			10/08/24 15:20	1
19 mm (Sieve Size 0.75 inch)	100.0				% Finer			10/08/24 15:20	1
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer			10/08/24 15:20	1
4.75 mm (Sieve Size #4)	99.6				% Finer			10/08/24 15:20	1
2 mm (Sieve Size #10)	99.0				% Finer			10/08/24 15:20	1
0.85 mm (Sieve Size #20)	94.2				% Finer			10/08/24 15:20	1
0.425 mm (Sieve Size #40)	48.2				% Finer			10/08/24 15:20	1
0.25 mm (Sieve Size #60)	0.0				% Finer			10/08/24 15:20	1
0.18 mm (Sieve Size #80)	0.0				% Finer			10/08/24 15:20	1
0.15 mm (Sieve Size #100)	0.0				% Finer			10/08/24 15:20	1
0.075 mm (Sieve Size #200)	0.0				% Finer			10/08/24 15:20	1
36.1 um (Hydrometer Reading 1)	0.0				% Finer			10/08/24 15:20	1
22.9 um (Hydrometer Reading 2)	0.0				% Finer			10/08/24 15:20	1
13.4 um (Hydrometer Reading 3)	0.0				% Finer			10/08/24 15:20	1
9.8 um (Hydrometer Reading 4)	0.0				% Finer			10/08/24 15:20	1
6.7 um (Hydrometer Reading 5)	0.0				% Finer			10/08/24 15:20	1
3.3 um (Hydrometer Reading 6)	0.0				% Finer			10/08/24 15:20	1
1.4 um (Hydrometer Reading 7)	0.0				% Finer			10/08/24 15:20	1
Clay	0.0				%			10/08/24 15:20	1
Gravel	0.4				%			10/08/24 15:20	1
Coarse Sand	0.6				%			10/08/24 15:20	1
Fine Sand	48.2				%			10/08/24 15:20	1
Medium Sand	50.8				%			10/08/24 15:20	1
Sand	99.6				%			10/08/24 15:20	1
Silt	0.0				%			10/08/24 15:20	1

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Client Sample ID: 2024-IRI-CORE-19_GS

Lab Sample ID: 410-191197-6

Date Collected: 10/04/24 11:30
Matrix: Solid
Date Received: 10/05/24 10:00

Method: ASTM D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
50 mm (Sieve Size 2 inch)	100.0				% Finer			10/08/24 15:20	1
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer			10/08/24 15:20	1
25 mm (Sieve Size 1 inch)	100.0				% Finer			10/08/24 15:20	1
19 mm (Sieve Size 0.75 inch)	100.0				% Finer			10/08/24 15:20	1
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer			10/08/24 15:20	1
4.75 mm (Sieve Size #4)	99.8				% Finer			10/08/24 15:20	1
2 mm (Sieve Size #10)	99.6				% Finer			10/08/24 15:20	1
0.85 mm (Sieve Size #20)	96.1				% Finer			10/08/24 15:20	1
0.425 mm (Sieve Size #40)	71.7				% Finer			10/08/24 15:20	1
0.25 mm (Sieve Size #60)	45.0				% Finer			10/08/24 15:20	1
0.18 mm (Sieve Size #80)	36.6				% Finer			10/08/24 15:20	1
0.15 mm (Sieve Size #100)	33.2				% Finer			10/08/24 15:20	1
0.075 mm (Sieve Size #200)	16.7				% Finer			10/08/24 15:20	1
36.1 um (Hydrometer Reading 1)	1.0				% Finer			10/08/24 15:20	1
22.9 um (Hydrometer Reading 2)	0.0				% Finer			10/08/24 15:20	1
13.4 um (Hydrometer Reading 3)	0.0				% Finer			10/08/24 15:20	1
9.8 um (Hydrometer Reading 4)	0.0				% Finer			10/08/24 15:20	1
6.7 um (Hydrometer Reading 5)	0.0				% Finer			10/08/24 15:20	1
3.3 um (Hydrometer Reading 6)	0.0				% Finer			10/08/24 15:20	1
1.4 um (Hydrometer Reading 7)	0.0				% Finer			10/08/24 15:20	1
Clay	0.0				%			10/08/24 15:20	1
Gravel	0.2				%			10/08/24 15:20	1
Coarse Sand	0.2				%			10/08/24 15:20	1
Fine Sand	55.0				%			10/08/24 15:20	1
Medium Sand	27.9				%			10/08/24 15:20	1
Sand	83.1				%			10/08/24 15:20	1
Silt	16.7				%			10/08/24 15:20	1

Client Sample ID: 2024-IRI-CORE-22_GS

Lab Sample ID: 410-191197-7

Date Collected: 10/04/24 11:55
Matrix: Solid
Date Received: 10/05/24 10:00

Method: ASTM D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
50 mm (Sieve Size 2 inch)	100.0				% Finer			10/08/24 15:20	1
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer			10/08/24 15:20	1
25 mm (Sieve Size 1 inch)	100.0				% Finer			10/08/24 15:20	1
19 mm (Sieve Size 0.75 inch)	100.0				% Finer			10/08/24 15:20	1
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer			10/08/24 15:20	1
4.75 mm (Sieve Size #4)	100.0				% Finer			10/08/24 15:20	1
2 mm (Sieve Size #10)	99.3				% Finer			10/08/24 15:20	1
0.85 mm (Sieve Size #20)	92.2				% Finer			10/08/24 15:20	1
0.425 mm (Sieve Size #40)	79.5				% Finer			10/08/24 15:20	1
0.25 mm (Sieve Size #60)	34.8				% Finer			10/08/24 15:20	1
0.18 mm (Sieve Size #80)	20.8				% Finer			10/08/24 15:20	1
0.15 mm (Sieve Size #100)	18.2				% Finer			10/08/24 15:20	1
0.075 mm (Sieve Size #200)	14.9				% Finer			10/08/24 15:20	1
36.1 um (Hydrometer Reading 1)	2.9				% Finer			10/08/24 15:20	1
22.9 um (Hydrometer Reading 2)	0.9				% Finer			10/08/24 15:20	1
13.4 um (Hydrometer Reading 3)	0.0				% Finer			10/08/24 15:20	1

Client Sample ID: 2024-IRI-CORE-22_GS — **Lab Sample ID: 410-191197-7**
Date Collected: 10/04/24 11:55 — **Matrix: Solid**
Date Received: 10/05/24 10:00

Method: ASTM D422 - Grain Size (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9.8 um (Hydrometer Reading 4)	0.0				% Finer			10/08/24 15:20	1
6.7 um (Hydrometer Reading 5)	0.0				% Finer			10/08/24 15:20	1
3.3 um (Hydrometer Reading 6)	0.0				% Finer			10/08/24 15:20	1
1.4 um (Hydrometer Reading 7)	0.0				% Finer			10/08/24 15:20	1
Clay	0.0				%			10/08/24 15:20	1
Gravel	0.0				%			10/08/24 15:20	1
Coarse Sand	0.7				%			10/08/24 15:20	1
Fine Sand	64.6				%			10/08/24 15:20	1
Medium Sand	19.8				%			10/08/24 15:20	1
Sand	85.1				%			10/08/24 15:20	1
Silt	14.9				%			10/08/24 15:20	1

Client Sample ID: 241004-IRI-1-TOP — **Lab Sample ID: 410-191197-8**
Date Collected: 10/04/24 12:05 — **Matrix: Solid**
Date Received: 10/05/24 10:00 — **Percent Solids: 84.7**

Method: EPA 680 - Polychlorinated Biphenyls by GCMS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	ND	*1	20	0.59	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Dichlorobiphenyls	ND		3.9	0.35	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Heptachlorobiphenyls	ND	*1	12	0.59	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Hexachlorobiphenyls	ND		7.9	0.47	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Monochlorobiphenyls	ND		3.9	0.35	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Nonachlorobiphenyls	ND		20	0.59	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Octachlorobiphenyls	ND	*1	12	0.59	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Pentachlorobiphenyls	ND		7.9	0.94	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Tetrachlorobiphenyls	ND		7.9	0.47	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1
Total Trichlorobiphenyls	ND		3.9	0.24	ug/Kg	☼	10/22/24 09:46	10/24/24 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-52L	*63*		*29 - 120*	*10/22/24 09:46*	*10/24/24 11:43*	*1*
PCB-138L	*73*		*20 - 123*	*10/22/24 09:46*	*10/24/24 11:43*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Dibenzofuran	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Benzo[g,h,i]perylene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Benzo[e]pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Perylene	18	F1	2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Benzo[b]fluoranthene	ND	cn	2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Fluoranthene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Benzo[k]fluoranthene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Acenaphthylene	ND		2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Chrysene	ND		2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Benzo[a]pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Dibenz(a,h)anthracene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Benzo[a]anthracene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1

Client Sample ID: 241004-IRI-1-TOP
Lab Sample ID: 410-191197-8
Date Collected: 10/04/24 12:05
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.7

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Phenanthrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Fluorene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
Naphthalene	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
2-Methylnaphthalene	ND	F1 *- cn	2.0	1.2	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C1-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C2-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C3-Benzo(a)Anthracenes/Chrysenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C4-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C1-Fluoranthene/Pyrenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C2-Fluoranthenes/Pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C3-Fluoranthenes/Pyrene	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C1-Fluorenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C2-Fluorenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C3-Fluorenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C1-Naphthalenes	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C2-Naphthalenes	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C3-Naphthalenes	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C4-Naphthalenes	ND		2.7	1.6	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C1-Phenanthrenes/Anthracenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C2-Phenanthrenes/Anthracenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C3-Phenanthrenes/Anthracenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1
C4-Phenanthrenes/Anthracenes	ND		2.0	0.78	ug/Kg	☼	10/09/24 15:07	10/10/24 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*98*		*59 - 120*	*10/09/24 15:07*	*10/10/24 14:52*	*1*
Fluoranthene-d10 (Surr)	*105*		*61 - 120*	*10/09/24 15:07*	*10/10/24 14:52*	*1*
1-Methylnaphthalene-d10	*75*		*40 - 120*	*10/09/24 15:07*	*10/10/24 14:52*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		9.8	4.3	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
alpha-BHC (1C)	ND		9.8	4.5	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
alpha-Chlordane (1C)	ND		9.8	2.0	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
beta-BHC (2C)	ND	cn	12	5.2	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
delta-BHC (1C)	ND		12	5.3	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Dieldrin (1C)	ND		20	3.9	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Endosulfan I (2C)	ND	cn	9.8	2.6	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Endosulfan II (1C)	ND		27	13	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Endosulfan sulfate (1C)	ND		20	4.7	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Endrin (1C)	ND		20	8.0	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Endrin aldehyde (1C)	ND		20	4.5	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Endrin ketone (1C)	ND		24	7.1	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
gamma-BHC (Lindane) (1C)	ND		9.8	2.5	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
gamma-Chlordane (1C)	ND		9.8	3.0	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Heptachlor (1C)	ND		9.8	3.7	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Heptachlor epoxide (1C)	ND		9.8	4.1	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Methoxychlor (1C)	ND		79	30	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
Toxaphene (1C)	ND		390	170	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
p,p'-DDD (1C)	ND		20	9.4	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10

Client Sample ID: 241004-IRI-1-TOP
Lab Sample ID: 410-191197-8
Date Collected: 10/04/24 12:05
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.7

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p,p'-DDE (1C)	ND		20	8.3	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10
p,p'-DDT (1C)	ND		20	9.3	ug/Kg	☼	10/07/24 17:40	10/21/24 06:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*87*		*54 - 143*	*10/07/24 17:40*	*10/21/24 06:16*	*10*
DCB Decachlorobiphenyl (Surr) (2C)	*90*	*cn*	*54 - 143*	*10/07/24 17:40*	*10/21/24 06:16*	*10*
Tetrachloro-m-xylene (Surr) (1C)	*99*		*20 - 131*	*10/07/24 17:40*	*10/21/24 06:16*	*10*
Tetrachloro-m-xylene (Surr) (2C)	*102*	*cn*	*20 - 131*	*10/07/24 17:40*	*10/21/24 06:16*	*10*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND	H cn	1.8	1.2	mg/Kg	☼		10/16/24 05:21	1
Nitrite as N	ND	H cn	1.2	0.60	mg/Kg	☼		10/16/24 05:21	1
Nitrate Nitrite as N	ND	H cn	1.8	0.60	mg/Kg	☼		10/16/24 05:21	1

Method: EPA 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDD	**6.8**		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,4,6,7,8-HpCDF	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,4,7,8-HxCDD	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,4,7,8-HxCDF	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,4,7,8,9-HpCDF	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,6,7,8-HxCDD	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,6,7,8-HxCDF	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,7,8-PeCDD	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,7,8-PeCDF	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,7,8,9-HxCDD	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
1,2,3,7,8,9-HxCDF	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
2,3,4,6,7,8-HxCDF	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
2,3,4,7,8-PeCDF	ND		5.8	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
2,3,7,8-TCDD	ND		1.2	0.23	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
2,3,7,8-TCDF	ND		1.2	0.23	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
OCDD	**66**		12	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1
OCDF	ND		12	2.3	ng/Kg	☼	10/15/24 18:42	10/23/24 12:11	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-1,2,3,4,6,7,8-HpCDD	*80*		*23 - 140*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*71*		*28 - 143*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,4,7,8-HxCDD	*83*		*32 - 141*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,4,7,8-HxCDF	*80*		*26 - 152*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*73*		*26 - 138*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,6,7,8-HxCDD	*82*		*28 - 130*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,6,7,8-HxCDF	*76*		*26 - 123*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,7,8-PeCDD	*98*		*25 - 181*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,7,8-PeCDF	*95*		*24 - 185*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,7,8,9-HxCDD	*82*		*28 - 130*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-1,2,3,7,8,9-HxCDF	*74*		*29 - 147*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-2,3,4,6,7,8-HxCDF	*74*		*28 - 136*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-2,3,4,7,8-PeCDF	*93*		*21 - 178*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-2,3,7,8-TCDD	*98*		*25 - 164*	*10/15/24 18:42*	*10/23/24 12:11*	*1*
13C-2,3,7,8-TCDF	*85*		*24 - 169*	*10/15/24 18:42*	*10/23/24 12:11*	*1*

Client Sample ID: 241004-IRI-1-TOP
Date Collected: 10/04/24 12:05
Date Received: 10/05/24 10:00

Lab Sample ID: 410-191197-8
Matrix: Solid
Percent Solids: 84.7

Method: EPA 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-OCDD	86		17 - 157	10/15/24 18:42	10/23/24 12:11	1
13C-OCDF	81		17 - 157	10/15/24 18:42	10/23/24 12:11	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4200		33	9.9	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Antimony	ND		5.5	1.9	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Arsenic	1.6	J	5.5	1.5	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Barium	11		0.55	0.17	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Beryllium	0.14	J	0.55	0.11	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Cadmium	ND		0.55	0.11	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Calcium	2300		55	23	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Chromium	7.8		1.7	0.66	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Cobalt	1.6		0.55	0.16	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Copper	2.0	J	2.2	0.85	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Iron	4800		22	8.8	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Lead	1.9		1.7	0.66	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Magnesium	1500		22	4.4	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Manganese	56		1.1	0.44	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Nickel	4.0		1.1	0.44	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Potassium	940		110	39	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Selenium	ND		5.5	1.7	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Silver	ND		1.1	0.44	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Sodium	2600		110	44	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Thallium	ND		3.3	1.4	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Vanadium	8.9		1.1	0.47	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1
Zinc	10		2.2	0.88	mg/Kg	☼	10/17/24 22:00	10/21/24 09:04	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.066	0.022	mg/Kg	☼	10/20/24 23:35	10/23/24 07:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G-2015)	83		0.10	0.10	%			10/07/24 11:14	1
Percent Moisture (SM 2540G-2015)	17		0.10	0.10	%			10/07/24 11:14	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		190	87	mg/Kg	☼	10/08/24 16:00	10/09/24 13:12	1
Total Phosphorus as P (EPA 365.1)	160		19	9.6	mg/Kg	☼	10/21/24 04:00	10/21/24 12:13	1
Total Phosphorus as PO4 (EPA 365.1)	490		59	30	mg/Kg	☼	10/21/24 04:00	10/21/24 12:13	1
Ammonia-N (SM 4500 NH3 C-2011)	ND	cn	870	290	mg/Kg	☼	10/08/24 09:57	10/08/24 10:17	1
Total Organic Carbon (EPA Lloyd Kahn)	1300		350	120	mg/Kg	☼		10/12/24 17:52	1
Percent Moisture (EPA Moisture)	15.3		1.0	1.0	%			10/07/24 08:11	1
Nitrogen, Total (EPA Total Nitrogen)	ND		1.6	0.50	mg/Kg	☼		10/09/24 15:49	1

Method: ASTM D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
50 mm (Sieve Size 2 inch)	100.0				% Finer			10/08/24 15:20	1
37.5 mm (Sieve Size 1.5 inch)	100.0				% Finer			10/08/24 15:20	1

Client Sample ID: 241004-IRI-1-TOP
Lab Sample ID: 410-191197-8

Date Collected: 10/04/24 12:05
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.7

Method: ASTM D422 - Grain Size (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
25 mm (Sieve Size 1 inch)	100.0				% Finer			10/08/24 15:20	1
19 mm (Sieve Size 0.75 inch)	100.0				% Finer			10/08/24 15:20	1
9.5 mm (Sieve Size 0.375 inch)	100.0				% Finer			10/08/24 15:20	1
4.75 mm (Sieve Size #4)	99.3				% Finer			10/08/24 15:20	1
2 mm (Sieve Size #10)	98.3				% Finer			10/08/24 15:20	1
0.85 mm (Sieve Size #20)	94.1				% Finer			10/08/24 15:20	1
0.425 mm (Sieve Size #40)	73.2				% Finer			10/08/24 15:20	1
0.25 mm (Sieve Size #60)	20.1				% Finer			10/08/24 15:20	1
0.18 mm (Sieve Size #80)	7.3				% Finer			10/08/24 15:20	1
0.15 mm (Sieve Size #100)	4.2				% Finer			10/08/24 15:20	1
0.075 mm (Sieve Size #200)	0.0				% Finer			10/08/24 15:20	1
36.1 um (Hydrometer Reading 1)	0.0				% Finer			10/08/24 15:20	1
22.9 um (Hydrometer Reading 2)	0.0				% Finer			10/08/24 15:20	1
13.4 um (Hydrometer Reading 3)	0.0				% Finer			10/08/24 15:20	1
9.8 um (Hydrometer Reading 4)	0.0				% Finer			10/08/24 15:20	1
6.7 um (Hydrometer Reading 5)	0.0				% Finer			10/08/24 15:20	1
3.3 um (Hydrometer Reading 6)	0.0				% Finer			10/08/24 15:20	1
1.4 um (Hydrometer Reading 7)	0.0				% Finer			10/08/24 15:20	1
Clay	0.0				%			10/08/24 15:20	1
Gravel	0.7				%			10/08/24 15:20	1
Coarse Sand	1.0				%			10/08/24 15:20	1
Fine Sand	73.2				%			10/08/24 15:20	1
Medium Sand	25.1				%			10/08/24 15:20	1
Sand	99.3				%			10/08/24 15:20	1
Silt	0.0				%			10/08/24 15:20	1

Client Sample ID: 241004-IRI-2-BOTTOM
Lab Sample ID: 410-191197-9

Date Collected: 10/04/24 12:00
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.5

Method: EPA 680 - Polychlorinated Biphenyls by GCMS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	ND	*1	20	0.59	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Dichlorobiphenyls	ND		3.9	0.35	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Heptachlorobiphenyls	ND	*1	12	0.59	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Hexachlorobiphenyls	ND		7.8	0.47	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Monochlorobiphenyls	ND		3.9	0.35	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Nonachlorobiphenyls	ND		20	0.59	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Octachlorobiphenyls	ND	*1	12	0.59	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Pentachlorobiphenyls	ND		7.8	0.94	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Tetrachlorobiphenyls	ND		7.8	0.47	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1
Total Trichlorobiphenyls	ND		3.9	0.23	ug/Kg	☼	10/22/24 09:46	10/23/24 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-52L	*50*		*29 - 120*	*10/22/24 09:46*	*10/23/24 14:16*	*1*
PCB-138L	*51*		*20 - 123*	*10/22/24 09:46*	*10/23/24 14:16*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1

Client: Anchor QEA LLC
Project/Site: DNREC Sediments Indian River Inlet

Job ID: 410-191197-1

Client Sample ID: 241004-IRI-2-BOTTOM
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 10:00

Lab Sample ID: 410-191197-9
Matrix: Solid
Percent Solids: 84.5

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**1.4**	**J**	2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Dibenzofuran	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Benzo[g,h,i]perylene	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Benzo[e]pyrene	**0.84**	**J**	2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Perylene	**8.5**		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Benzo[b]fluoranthene	**1.2**	**J**	2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Fluoranthene	**1.5**	**J**	2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Benzo[k]fluoranthene	**1.2**	**J**	2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Acenaphthylene	ND		2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Chrysene	**1.6**	**J**	2.0	0.39	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Benzo[a]pyrene	**1.1**	**J**	2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Dibenz(a,h)anthracene	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Benzo[a]anthracene	**1.6**	**J**	2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Acenaphthene	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Phenanthrene	**0.82**	**J**	2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Fluorene	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
Naphthalene	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
2-Methylnaphthalene	ND	*- cn	2.0	1.2	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C1-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C2-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C3-Benzo(a)Anthracenes/Chrysenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C4-Benzo(a)anthracenes/Chrysenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C1-Fluoranthene/Pyrenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C2-Fluoranthenes/Pyrene	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C3-Fluoranthenes/Pyrene	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C1-Fluorenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C2-Fluorenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C3-Fluorenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C1-Naphthalenes	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C2-Naphthalenes	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C3-Naphthalenes	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C4-Naphthalenes	ND		2.8	1.6	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C1-Phenanthrenes/Anthracenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C2-Phenanthrenes/Anthracenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C3-Phenanthrenes/Anthracenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1
C4-Phenanthrenes/Anthracenes	ND		2.0	0.79	ug/Kg	☼	10/09/24 15:07	10/11/24 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*99*		*59 - 120*	*10/09/24 15:07*	*10/11/24 11:33*	*1*
Fluoranthene-d10 (Surr)	*106*		*61 - 120*	*10/09/24 15:07*	*10/11/24 11:33*	*1*
1-Methylnaphthalene-d10	*66*		*40 - 120*	*10/09/24 15:07*	*10/11/24 11:33*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	cn	9.7	4.2	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
alpha-BHC (1C)	ND	cn	9.7	4.4	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
alpha-Chlordane (1C)	ND	cn	9.7	2.0	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
beta-BHC (2C)	ND	p cn	13	13	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
delta-BHC (1C)	ND	cn	12	5.3	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10

Client Sample ID: 241004-IRI-2-BOTTOM
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 10:00

Lab Sample ID: 410-191197-9
Matrix: Solid
Percent Solids: 84.5

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin (1C)	ND	cn	20	3.9	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Endosulfan I (2C)	ND	cn	9.7	2.6	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Endosulfan II (1C)	ND	cn	27	13	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Endosulfan sulfate (1C)	ND	cn	20	4.6	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Endrin (1C)	ND	cn	20	8.0	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Endrin aldehyde (1C)	ND	cn	20	4.5	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Endrin ketone (1C)	ND	cn	23	7.0	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
gamma-BHC (Lindane) (1C)	ND	p cn	9.7	9.7	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
gamma-Chlordane (1C)	ND	cn	9.7	2.9	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Heptachlor (1C)	ND	cn	9.7	3.6	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Heptachlor epoxide (1C)	ND	cn	9.7	4.1	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Methoxychlor (1C)	ND	cn	78	30	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
Toxaphene (1C)	ND	cn	390	160	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
p,p'-DDD (1C)	ND	cn	20	9.4	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
p,p'-DDE (1C)	ND	cn	20	8.2	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10
p,p'-DDT (1C)	ND	cn	20	9.2	ug/Kg	☼	10/07/24 17:40	10/21/24 06:26	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*107*	*cn*	*54 - 143*	*10/07/24 17:40*	*10/21/24 06:26*	*10*
DCB Decachlorobiphenyl (Surr) (2C)	*109*	*cn*	*54 - 143*	*10/07/24 17:40*	*10/21/24 06:26*	*10*
Tetrachloro-m-xylene (Surr) (1C)	*114*	*cn*	*20 - 131*	*10/07/24 17:40*	*10/21/24 06:26*	*10*
Tetrachloro-m-xylene (Surr) (2C)	*92*	*cn*	*20 - 131*	*10/07/24 17:40*	*10/21/24 06:26*	*10*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND	H cn	1.8	1.2	mg/Kg	☼		10/16/24 06:17	1
Nitrite as N	ND	H cn	1.2	0.60	mg/Kg	☼		10/16/24 06:17	1
Nitrate Nitrite as N	ND	H cn	1.8	0.60	mg/Kg	☼		10/16/24 06:17	1

Method: EPA 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDD	**8.0**		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,4,6,7,8-HpCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,4,7,8-HxCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,4,7,8-HxCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,4,7,8,9-HpCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,6,7,8-HxCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,6,7,8-HxCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,7,8-PeCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,7,8-PeCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,7,8,9-HxCDD	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
1,2,3,7,8,9-HxCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
2,3,4,6,7,8-HxCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
2,3,4,7,8-PeCDF	ND		5.9	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
2,3,7,8-TCDD	ND		1.2	0.24	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
2,3,7,8-TCDF	ND		1.2	0.24	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
OCDD	**92**		12	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1
OCDF	**2.4**	**J**	12	2.4	ng/Kg	☼	10/15/24 18:42	10/23/24 13:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-1,2,3,4,6,7,8-HpCDD	*77*		*23 - 140*	*10/15/24 18:42*	*10/23/24 13:01*	*1*

Client Sample ID: 241004-IRI-2-BOTTOM
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 10:00

Lab Sample ID: 410-191197-9
Matrix: Solid
Percent Solids: 84.5

Method: EPA 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDF	69		28 - 143	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,4,7,8-HxCDD	83		32 - 141	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,4,7,8-HxCDF	79		26 - 152	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,4,7,8,9-HpCDF	70		26 - 138	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,6,7,8-HxCDD	83		28 - 130	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,6,7,8-HxCDF	77		26 - 123	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,7,8-PeCDD	90		25 - 181	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,7,8-PeCDF	85		24 - 185	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,7,8,9-HxCDD	82		28 - 130	10/15/24 18:42	10/23/24 13:01	1
13C-1,2,3,7,8,9-HxCDF	71		29 - 147	10/15/24 18:42	10/23/24 13:01	1
13C-2,3,4,6,7,8-HxCDF	75		28 - 136	10/15/24 18:42	10/23/24 13:01	1
13C-2,3,4,7,8-PeCDF	84		21 - 178	10/15/24 18:42	10/23/24 13:01	1
13C-2,3,7,8-TCDD	92		25 - 164	10/15/24 18:42	10/23/24 13:01	1
13C-2,3,7,8-TCDF	81		24 - 169	10/15/24 18:42	10/23/24 13:01	1
13C-OCDD	81		17 - 157	10/15/24 18:42	10/23/24 13:01	1
13C-OCDF	74		17 - 157	10/15/24 18:42	10/23/24 13:01	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5000**		33	9.8	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Antimony	ND		5.4	1.8	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Arsenic	ND		5.4	1.5	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Barium	**9.6**		0.54	0.16	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Beryllium	**0.12**	**J**	0.54	0.11	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Cadmium	ND		0.54	0.11	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Calcium	**5300**		54	23	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Chromium	**6.5**		1.6	0.65	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Cobalt	**1.4**		0.54	0.16	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Copper	**1.7**	**J**	2.2	0.84	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Iron	**4000**		22	8.7	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Lead	**1.7**		1.6	0.65	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Magnesium	**1300**		22	4.3	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Manganese	**54**		1.1	0.43	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Nickel	**3.4**		1.1	0.43	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Potassium	**730**		110	38	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Selenium	ND		5.4	1.6	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Silver	ND		1.1	0.43	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Sodium	**2500**		110	43	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Thallium	ND		3.3	1.4	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Vanadium	**7.4**		1.1	0.47	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1
Zinc	**8.1**		2.2	0.87	mg/Kg	☼	10/17/24 22:00	10/21/24 09:07	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.068	0.023	mg/Kg	☼	10/20/24 23:35	10/23/24 07:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G-2015)	**82**		0.10	0.10	%			10/07/24 11:14	1

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Client Sample ID: 241004-IRI-2-BOTTOM
Lab Sample ID: 410-191197-9
Date Collected: 10/04/24 12:00
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.5

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM 2540G-2015)	**18**		0.10	0.10	%			10/07/24 11:14	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		190	88	mg/Kg	☼	10/08/24 16:00	10/09/24 13:13	1
Total Phosphorus as P (EPA 365.1)	**36**		23	12	mg/Kg	☼	10/21/24 04:00	10/21/24 12:13	1
Total Phosphorus as PO4 (EPA 365.1)	**110**		71	36	mg/Kg	☼	10/21/24 04:00	10/21/24 12:13	1
Ammonia-N (SM 4500 NH3 C-2011)	ND	cn	650	220	mg/Kg	☼	10/08/24 09:57	10/08/24 10:17	1
Total Organic Carbon (EPA Lloyd Kahn)	**750**		350	120	mg/Kg	☼		10/12/24 18:03	1
Percent Moisture (EPA Moisture)	**15.5**		1.0	1.0	%			10/07/24 08:11	1
Nitrogen, Total (EPA Total Nitrogen)	ND		1.6	0.50	mg/Kg	☼		10/09/24 15:49	1

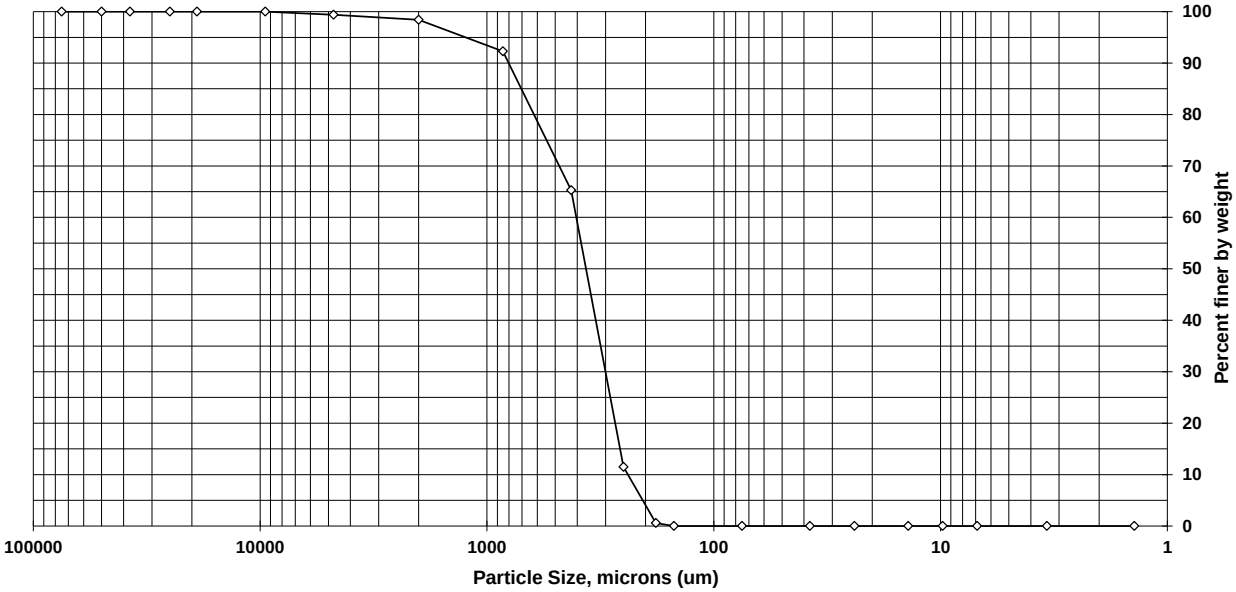
Particle Size of Soils by ASTM D422

Sample ID: 0
Lab ID: 410-191197-D-1

Percent Solids: 84.3%
Specific Gravity: 2.650

Date Received: 1/0/1900
Start Date: 10/8/2024
End Date: 10/15/2024

Shape (> #10):
Non-soil material:
Hardness (> #10):



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.4	0.6
#10	2000	98.4	1.0
#20	850	92.3	6.1
#40	425	65.3	27.0
#60	250	11.5	53.8
#80	180	0.6	10.9
#100	150	0.0	0.6
#200	75	0.0	0.0
Hyd1	37.7	0.0	0.0
Hyd2	24	0.0	0.0
Hyd3	13.9	0.0	0.0
Hyd4	9.8	0.0	0.0
Hyd5	6.9	0.0	0.0
Hyd6	3.4	0.0	0.0
Hyd7	1.4	0.0	0.0

Soil Classification	Percent of sample
Gravel	0.6
Sand	99.4
Coarse Sand	1.0
Medium Sand	33.1
Fine Sand	65.3
Silt	0.0
Clay	0.0

Particle Size of Soils by ASTM D422

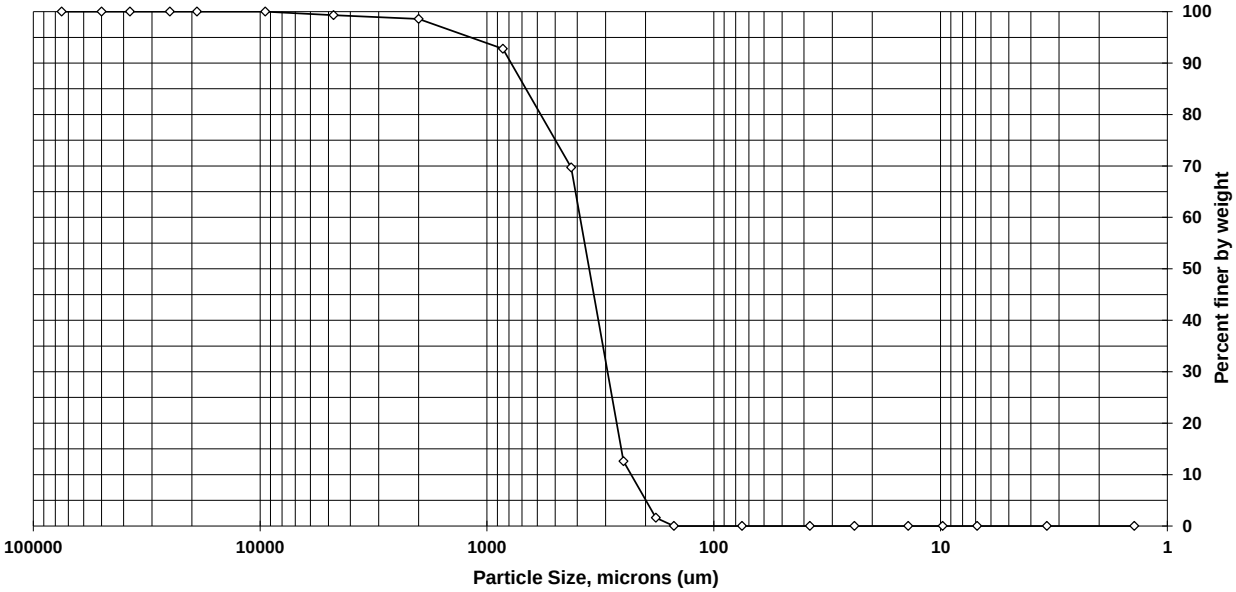
Sample ID: 0
Lab ID: 410-191197-A-2

Percent Solids: 85.2%
Specific Gravity: 2.650

Date Received: 1/0/1900
Start Date: 10/8/2024
End Date: 10/15/2024

Shape (> #10):

Non-soil material: shells
Hardness (> #10):



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.3	0.7
#10	2000	98.6	0.7
#20	850	92.8	5.8
#40	425	69.7	23.1
#60	250	12.6	57.1
#80	180	1.6	11.0
#100	150	0.0	1.6
#200	75	0.0	0.0
Hyd1	37.7	0.0	0.0
Hyd2	24	0.0	0.0
Hyd3	13.9	0.0	0.0
Hyd4	9.8	0.0	0.0
Hyd5	6.9	0.0	0.0
Hyd6	3.4	0.0	0.0
Hyd7	1.4	0.0	0.0

Soil Classification	Percent of sample
Gravel	0.7
Sand	99.3
Coarse Sand	0.7
Medium Sand	28.9
Fine Sand	69.7
Silt	0.0
Clay	0.0

Particle Size of Soils by ASTM D422

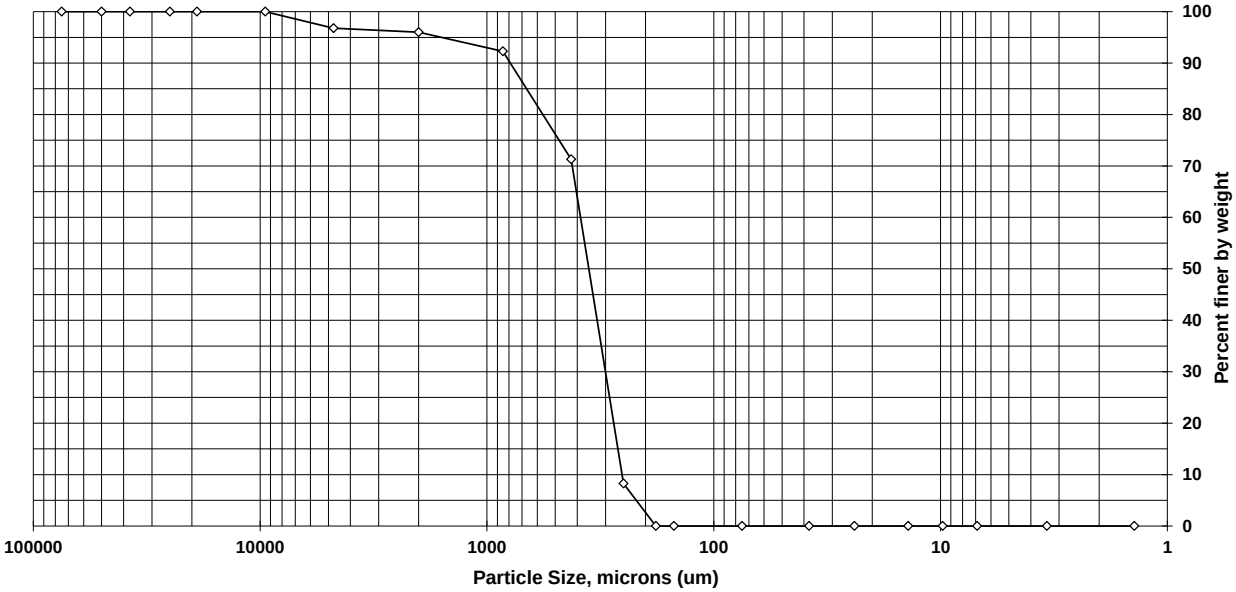
Sample ID: 0
Lab ID: 410-191197-A-4

Percent Solids: 81.1%
Specific Gravity: 2.650

Date Received: 1/0/1900
Start Date: 10/8/2024
End Date: 10/15/2024

Shape (> #10):

Non-soil material: rocks
Hardness (> #10):



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	96.8	3.2
#10	2000	96.0	0.8
#20	850	92.3	3.7
#40	425	71.3	21.0
#60	250	8.3	63.0
#80	180	0.0	8.3
#100	150	0.0	0.0
#200	75	0.0	0.0
Hyd1	38	0.0	0.0
Hyd2	24	0.0	0.0
Hyd3	13.9	0.0	0.0
Hyd4	9.8	0.0	0.0
Hyd5	6.9	0.0	0.0
Hyd6	3.4	0.0	0.0
Hyd7	1.4	0.0	0.0

Soil Classification	Percent of sample
Gravel	3.2
Sand	96.8
Coarse Sand	0.8
Medium Sand	24.7
Fine Sand	71.3
Silt	0.0
Clay	0.0

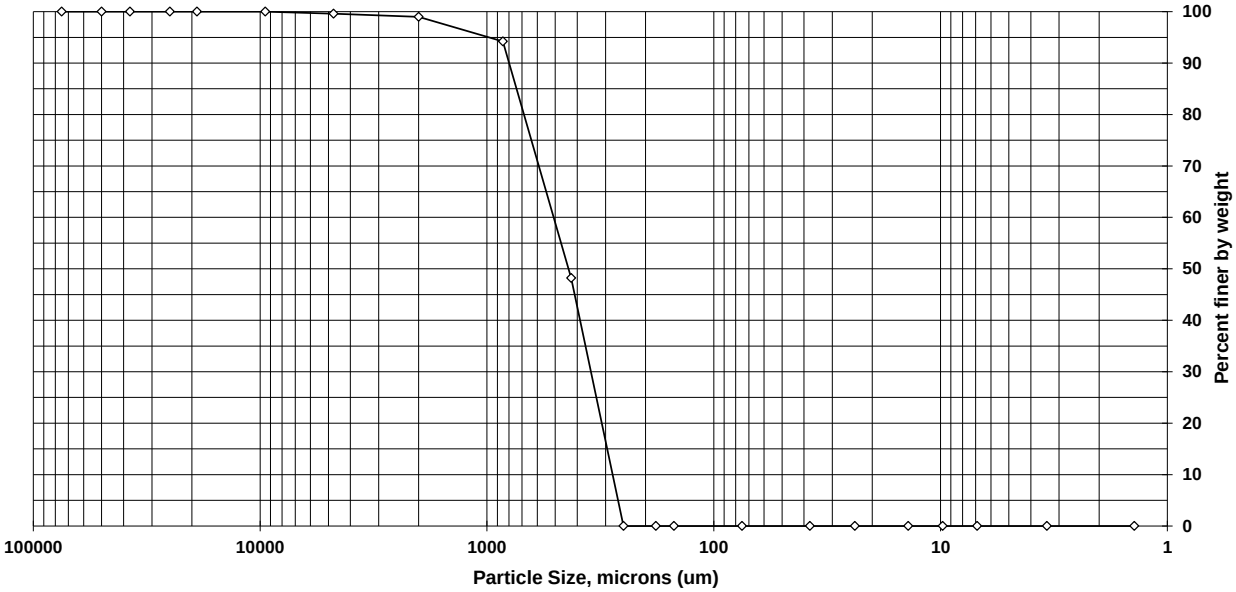
Particle Size of Soils by ASTM D422

Sample ID: 0
Lab ID: 410-191197-A-5

Percent Solids: 81.9%
Specific Gravity: 2.650

Date Received: 1/0/1900
Start Date: 10/8/2024
End Date: 10/15/2024

Shape (> #10):
Non-soil material:
Hardness (> #10):



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.6	0.4
#10	2000	99.0	0.6
#20	850	94.2	4.8
#40	425	48.2	46.0
#60	250	0.0	48.2
#80	180	0.0	0.0
#100	150	0.0	0.0
#200	75	0.0	0.0
Hyd1	37.7	0.0	0.0
Hyd2	23.9	0.0	0.0
Hyd3	13.9	0.0	0.0
Hyd4	9.8	0.0	0.0
Hyd5	6.9	0.0	0.0
Hyd6	3.4	0.0	0.0
Hyd7	1.4	0.0	0.0

Soil Classification	Percent of sample
Gravel	0.4
Sand	99.6
Coarse Sand	0.6
Medium Sand	50.8
Fine Sand	48.2
Silt	0.0
Clay	0.0

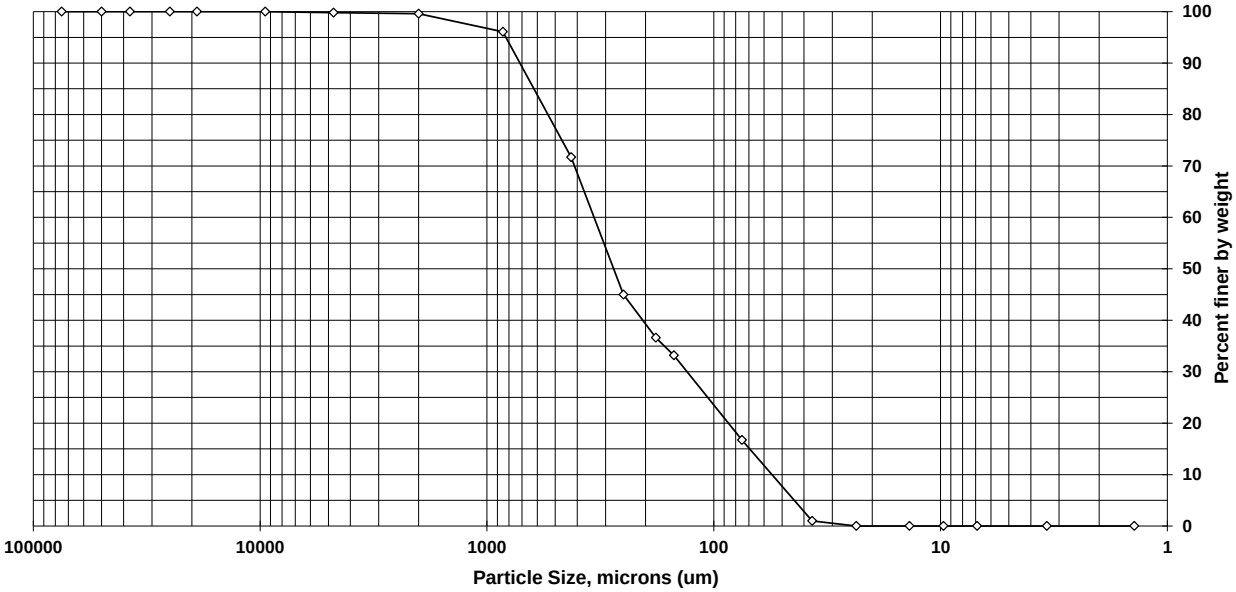
Particle Size of Soils by ASTM D422

Sample ID: 0
Lab ID: 410-191197-A-6

Percent Solids: 83.4%
Specific Gravity: 2.650

Date Received: 1/0/1900
Start Date: 10/8/2024
End Date: 10/15/2024

Shape (> #10):
Non-soil material:
Hardness (> #10):



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.8	0.2
#10	2000	99.6	0.2
#20	850	96.1	3.5
#40	425	71.7	24.4
#60	250	45.0	26.7
#80	180	36.6	8.4
#100	150	33.2	3.4
#200	75	16.7	16.5
Hyd1	36.8	1.0	15.7
Hyd2	23.5	0.0	1.0
Hyd3	13.7	0.0	0.0
Hyd4	9.7	0.0	0.0
Hyd5	6.9	0.0	0.0
Hyd6	3.4	0.0	0.0
Hyd7	1.4	0.0	0.0

Soil Classification	Percent of sample
Gravel	0.2
Sand	83.1
Coarse Sand	0.2
Medium Sand	27.9
Fine Sand	55.0
Silt	16.7
Clay	0.0

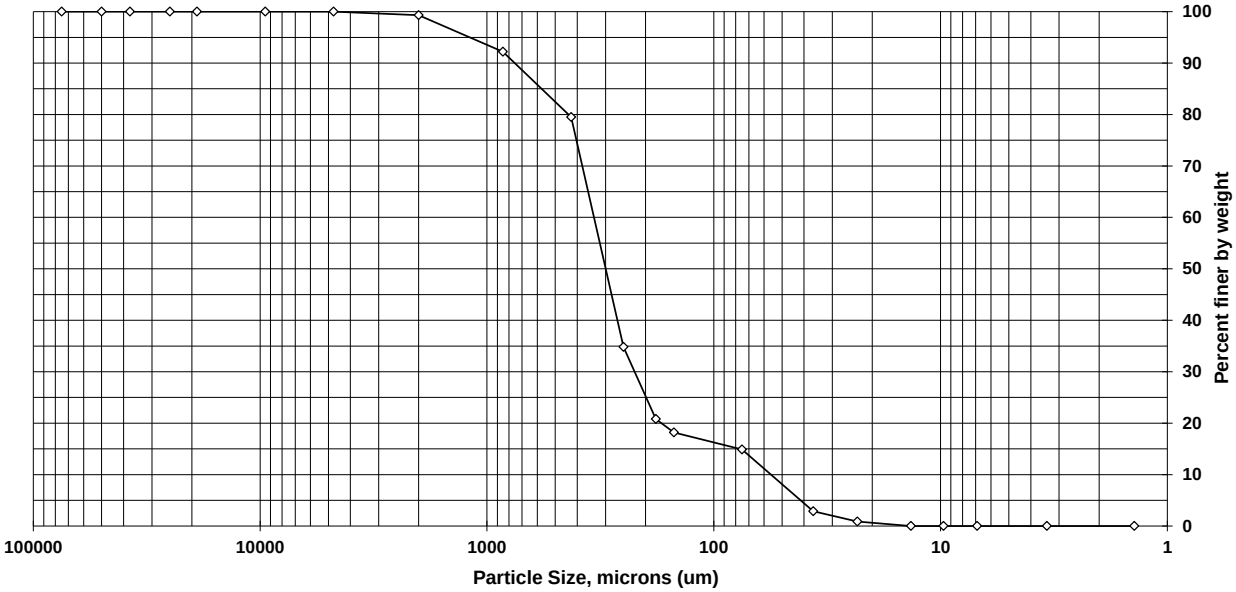
Particle Size of Soils by ASTM D422

Sample ID: 0
Lab ID: 410-191197-A-7

Percent Solids: 85.5%
Specific Gravity: 2.650

Date Received: 1/0/1900
Start Date: 10/8/2024
End Date: 10/15/2024

Shape (> #10):
Non-soil material:
Hardness (> #10):



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.3	0.7
#20	850	92.2	7.1
#40	425	79.5	12.7
#60	250	34.8	44.7
#80	180	20.8	14.0
#100	150	18.2	2.6
#200	75	14.9	3.3
Hyd1	36.4	2.9	12.0
Hyd2	23.3	0.9	2.0
Hyd3	13.5	0.0	0.9
Hyd4	9.7	0.0	0.0
Hyd5	6.9	0.0	0.0
Hyd6	3.4	0.0	0.0
Hyd7	1.4	0.0	0.0

Soil Classification	Percent of sample
Gravel	0.0
Sand	85.1
Coarse Sand	0.7
Medium Sand	19.8
Fine Sand	64.6
Silt	14.9
Clay	0.0

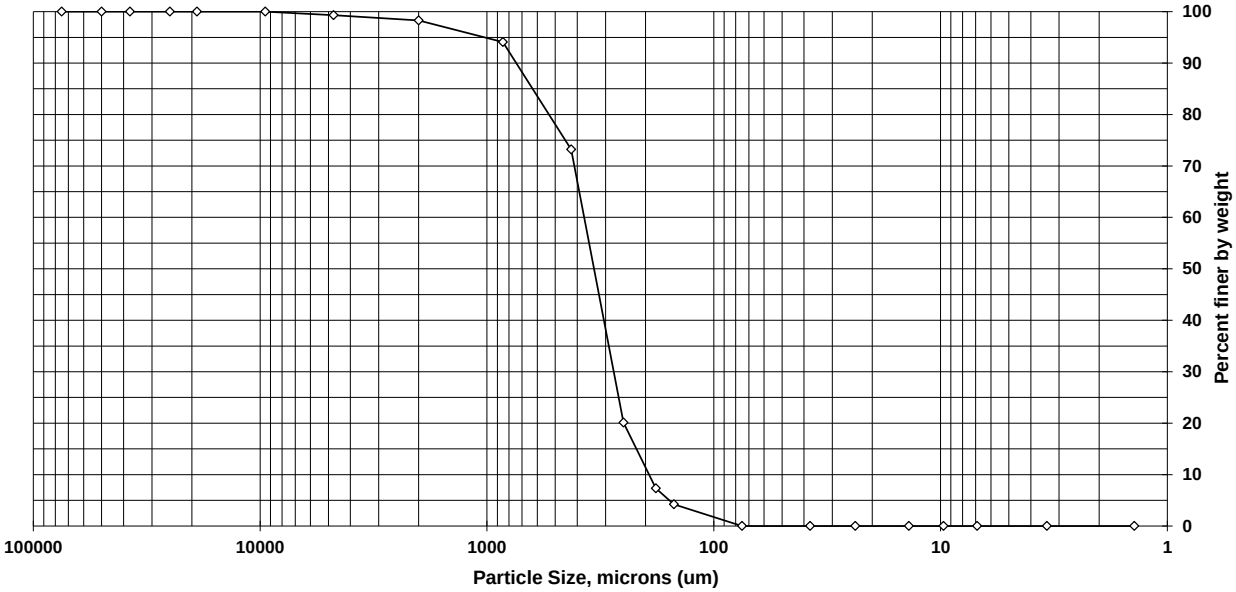
Particle Size of Soils by ASTM D422

Sample ID: 0
Lab ID: 410-191197-D-8

Percent Solids: 84.8%
Specific Gravity: 2.650

Date Received: 1/0/1900
Start Date: 10/8/2024
End Date: 10/15/2024

Shape (> #10):
Non-soil material:
Hardness (> #10):



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.3	0.7
#10	2000	98.3	1.0
#20	850	94.1	4.2
#40	425	73.2	20.9
#60	250	20.1	53.1
#80	180	7.3	12.8
#100	150	4.2	3.1
#200	75	0.0	4.2
Hyd1	37.6	0.0	0.0
Hyd2	23.8	0.0	0.0
Hyd3	13.8	0.0	0.0
Hyd4	9.7	0.0	0.0
Hyd5	6.9	0.0	0.0
Hyd6	3.4	0.0	0.0
Hyd7	1.4	0.0	0.0

Soil Classification	Percent of sample
Gravel	0.7
Sand	99.3
Coarse Sand	1.0
Medium Sand	25.1
Fine Sand	73.2
Silt	0.0
Clay	0.0

Sediment Grain Size - D422

Client	
Client Sample ID	
Lab Sample ID	410-191197-D-1

Date Received	
Start Date	10/08/2024 15:20
End Date	10/15/2024 15:40

Dry Weight Determination

Tin Weight	0.76	g
Wet Sample + Tin	6.92	g
Dry Sample + Tin	5.95	g
% Moisture	15.75	%

Non-soil material:	
Shape (> #10):	
Hardness (> #10):	

Date/Time in oven	10/13/2024 8:00
Date/Time out of oven	10/15/2024 15:40

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	82.85	167.97	85.12
Sample Weight (Oven Dried)			71.7

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			1.15
Sample <#10			70.6
% Passing #10			82.9

Hydrometer Data	
Serial Number	444745
Calib. Date (mm/dd/yyyy)	04/26/2024
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	23.0
Reading at High Temp	1.0035
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.005416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample		% Finer	Classification	Sub Class
3 inch	75000			0.00	g	100.0	Gravel	
2 inch	50000			0.00	g	100.0	Gravel	
1.5 inch	37500			0.00	g	100.0	Gravel	
1 inch	25000			0.00	g	100.0	Gravel	
3/4 inch	19000			0.00	g	100.0	Gravel	
3/8 inch	9500			0.00	g	100.0	Gravel	
#4	4750	502.90	503.31	0.41	g	99.4	Gravel	
#10	2000	450.90	451.64	0.74	g	98.4	Sand	Coarse
#20	850	340.27	344.67	4.40	g	92.3	Sand	Medium
#40	425	350.74	370.10	19.36	g	65.3	Sand	Medium
#60	250	331.34	369.91	38.57	g	11.5	Sand	Fine
#80	180	326.82	334.64	7.82	g	0.6	Sand	Fine
#100	150	317.49	319.21	1.72	g	-1.8	Sand	Fine
#200	75	308.52	311.24	2.72	g	-5.6	Sand	Fine
				0.00	g	-5.6		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	71.7

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0010	22.0	37.7	-5.79	Silt	
5	5	1.0000	22.0	24	-8.03	Silt	
15	15	1.0000	22.0	13.9	-8.03	Silt	
30	30	1.0000	22.0	9.8	-8.03	Silt	
60	60	1.0000	22.0	6.9	-8.03	Silt	
250	250	1.0000	22.0	3.4	-8.03	Clay	
1440	1440	1.0000	22.0	1.4	-8.03	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	
Lab Sample ID	410-191197-A-2

Date Received	
Start Date	10/08/2024 15:20
End Date	10/15/2024 15:43

Dry Weight Determination

Tin Weight	0.77	g
Wet Sample + Tin	6.77	g
Dry Sample + Tin	5.88	g
% Moisture	14.83	%

Non-soil material:	shells
Shape (> #10):	
Hardness (> #10):	

Date/Time in oven	10/13/2024 8:00
Date/Time out of oven	10/15/2024 15:43

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	113.76	198.80	85.04
Sample Weight (Oven Dried)			72.4

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			0.99
Sample <#10			71.4
% Passing #10			84

Hydrometer Data	
Serial Number	444745
Calib. Date (mm/dd/yyyy)	04/26/2024
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	23.0
Reading at High Temp	1.0035
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.005416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample		% Finer	Classification	Sub Class
3 inch	75000			0.00	g	100.0	Gravel	
2 inch	50000			0.00	g	100.0	Gravel	
1.5 inch	37500			0.00	g	100.0	Gravel	
1 inch	25000			0.00	g	100.0	Gravel	
3/4 inch	19000			0.00	g	100.0	Gravel	
3/8 inch	9500			0.00	g	100.0	Gravel	
#4	4750	502.88	503.37	0.49	g	99.3	Gravel	
#10	2000	450.90	451.40	0.50	g	98.6	Sand	Coarse
#20	850	340.27	344.45	4.18	g	92.8	Sand	Medium
#40	425	350.74	367.43	16.69	g	69.7	Sand	Medium
#60	250	331.34	372.65	41.31	g	12.6	Sand	Fine
#80	180	326.82	334.79	7.97	g	1.6	Sand	Fine
#100	150	317.49	319.21	1.72	g	-0.8	Sand	Fine
#200	75	308.52	311.04	2.52	g	-4.3	Sand	Fine
				0.00	g	-4.3		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	72.4

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0010	22.0	37.7	-5.73	Silt	
5	5	1.0000	22.0	24	-7.95	Silt	
15	15	1.0000	22.0	13.9	-7.95	Silt	
30	30	1.0000	22.0	9.8	-7.95	Silt	
60	60	1.0000	22.0	6.9	-7.95	Silt	
250	250	1.0000	22.0	3.4	-7.95	Clay	
1440	1440	1.0000	22.0	1.4	-7.95	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	
Lab Sample ID	410-191197-A-4

Date Received	
Start Date	10/08/2024 15:20
End Date	10/15/2024 15:46

Dry Weight Determination

Tin Weight	0.76	g
Wet Sample + Tin	5.99	g
Dry Sample + Tin	5.00	g
% Moisture	18.93	%

Non-soil material:	rocks
Shape (> #10):	
Hardness (> #10):	

Date/Time in oven	10/13/2024 8:00
Date/Time out of oven	10/15/2024 15:46

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	107.26	182.41	75.15
Sample Weight (Oven Dried)			60.9

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			2.47
Sample <#10			58.4
% Passing #10			77.7

Hydrometer Data

Serial Number	444745
Calib. Date (mm/dd/yyyy)	04/26/2024
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	23.0
Reading at High Temp	1.0035
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.005416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample		% Finer	Classification	Sub Class
3 inch	75000			0.00	g	100.0	Gravel	
2 inch	50000			0.00	g	100.0	Gravel	
1.5 inch	37500			0.00	g	100.0	Gravel	
1 inch	25000			0.00	g	100.0	Gravel	
3/4 inch	19000			0.00	g	100.0	Gravel	
3/8 inch	9500			0.00	g	100.0	Gravel	
#4	4750	502.90	504.86	1.96	g	96.8	Gravel	
#10	2000	450.90	451.41	0.51	g	96.0	Sand	Coarse
#20	850	340.27	342.50	2.23	g	92.3	Sand	Medium
#40	425	350.74	363.54	12.80	g	71.3	Sand	Medium
#60	250	331.34	369.73	38.39	g	8.3	Sand	Fine
#80	180	326.82	334.94	8.12	g	-5.1	Sand	Fine
#100	150	317.49	319.70	2.21	g	-8.7	Sand	Fine
#200	75	308.52	310.75	2.23	g	-12.4	Sand	Fine
				0.00	g	-12.4		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	60.9

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0000	22.0	38	-9.45	Silt	
5	5	1.0000	22.0	24	-9.45	Silt	
15	15	1.0000	22.0	13.9	-9.45	Silt	
30	30	1.0000	22.0	9.8	-9.45	Silt	
60	60	1.0000	22.0	6.9	-9.45	Silt	
250	250	1.0000	22.0	3.4	-9.45	Clay	
1440	1440	1.0000	22.0	1.4	-9.45	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	
Lab Sample ID	410-191197-A-5

Date Received	
Start Date	10/08/2024 15:20
End Date	10/15/2024 15:48

Dry Weight Determination

Tin Weight	0.80	g
Wet Sample + Tin	5.32	g
Dry Sample + Tin	4.50	g
% Moisture	18.14	%

Non-soil material:	
Shape (> #10):	
Hardness (> #10):	

Date/Time in oven	10/13/2024 8:00
Date/Time out of oven	10/15/2024 15:48

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	115.51	187.78	72.27
Sample Weight (Oven Dried)			59.2

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			0.59
Sample <#10			58.6
% Passing #10			81.1

Hydrometer Data

Serial Number	444745
Calib. Date (mm/dd/yyyy)	04/26/2024
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	23.0
Reading at High Temp	1.0035
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.005416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample		% Finer	Classification	Sub Class
3 inch	75000			0.00	g	100.0	Gravel	
2 inch	50000			0.00	g	100.0	Gravel	
1.5 inch	37500			0.00	g	100.0	Gravel	
1 inch	25000			0.00	g	100.0	Gravel	
3/4 inch	19000			0.00	g	100.0	Gravel	
3/8 inch	9500			0.00	g	100.0	Gravel	
#4	4750	502.90	503.13	0.23	g	99.6	Gravel	
#10	2000	450.90	451.26	0.36	g	99.0	Sand	Coarse
#20	850	340.27	343.12	2.85	g	94.2	Sand	Medium
#40	425	350.74	377.95	27.21	g	48.2	Sand	Medium
#60	250	331.34	360.75	29.41	g	-1.5	Sand	Fine
#80	180	326.82	332.76	5.94	g	-11.5	Sand	Fine
#100	150	317.49	319.42	1.93	g	-14.8	Sand	Fine
#200	75	308.52	310.04	1.52	g	-17.4	Sand	Fine
				0.00	g	-17.4		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	59.2

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0010	22.0	37.7	-7.01	Silt	
5	5	1.0010	22.0	23.9	-7.01	Silt	
15	15	1.0000	22.0	13.9	-9.72	Silt	
30	30	1.0000	22.0	9.8	-9.72	Silt	
60	60	1.0000	22.0	6.9	-9.72	Silt	
250	250	1.0000	22.0	3.4	-9.72	Clay	
1440	1440	1.0000	22.0	1.4	-9.72	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	
Lab Sample ID	410-191197-A-6

Date Received	
Start Date	10/08/2024 15:20
End Date	10/15/2024 15:51

Dry Weight Determination

Tin Weight	0.80	g
Wet Sample + Tin	5.67	g
Dry Sample + Tin	4.86	g
% Moisture	16.63	%

Non-soil material:	
Shape (> #10):	
Hardness (> #10):	

Date/Time in oven	10/13/2024 8:00
Date/Time out of oven	10/15/2024 15:51

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	116.22	196.16	79.94
Sample Weight (Oven Dried)			66.6

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			0.26
Sample <#10			66.3
% Passing #10			82.9

Hydrometer Data	
Serial Number	444745
Calib. Date (mm/dd/yyyy)	04/26/2024
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	23.0
Reading at High Temp	1.0035
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.005416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample		% Finer	Classification	Sub Class
3 inch	75000			0.00	g	100.0	Gravel	
2 inch	50000			0.00	g	100.0	Gravel	
1.5 inch	37500			0.00	g	100.0	Gravel	
1 inch	25000			0.00	g	100.0	Gravel	
3/4 inch	19000			0.00	g	100.0	Gravel	
3/8 inch	9500			0.00	g	100.0	Gravel	
#4	4750	502.90	503.06	0.16	g	99.8	Gravel	
#10	2000	450.90	451.00	0.10	g	99.6	Sand	Coarse
#20	850	340.27	342.60	2.33	g	96.1	Sand	Medium
#40	425	350.74	367.00	16.26	g	71.7	Sand	Medium
#60	250	331.34	349.11	17.77	g	45.0	Sand	Fine
#80	180	326.82	332.44	5.62	g	36.6	Sand	Fine
#100	150	317.49	319.75	2.26	g	33.2	Sand	Fine
#200	75	308.52	319.54	11.02	g	16.7	Sand	Fine
				0.00	g	16.7		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	66.6

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0040	22.0	36.8	1	Silt	
5	5	1.0030	22.0	23.5	-1.41	Silt	
15	15	1.0020	22.0	13.7	-3.82	Silt	
30	30	1.0015	22.0	9.7	-5.02	Silt	
60	60	1.0010	22.0	6.9	-6.23	Silt	
250	250	1.0005	22.0	3.4	-7.44	Clay	
1440	1440	1.0000	22.0	1.4	-8.64	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	
Lab Sample ID	410-191197-A-7

Date Received	
Start Date	10/08/2024 15:20
End Date	10/15/2024 15:54

Dry Weight Determination

Tin Weight	0.80	g
Wet Sample + Tin	5.01	g
Dry Sample + Tin	4.40	g
% Moisture	14.49	%

Non-soil material:	
Shape (> #10):	
Hardness (> #10):	

Date/Time in oven	10/13/2024 8:00
Date/Time out of oven	10/15/2024 15:54

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	79.93	171.88	91.95
Sample Weight (Oven Dried)			78.6

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			0.56
Sample <#10			78
% Passing #10			84.8

Hydrometer Data	
Serial Number	444745
Calib. Date (mm/dd/yyyy)	04/26/2024
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	23.0
Reading at High Temp	1.0035
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.005416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000			0.00 g	100.0	Gravel	
2 inch	50000			0.00 g	100.0	Gravel	
1.5 inch	37500			0.00 g	100.0	Gravel	
1 inch	25000			0.00 g	100.0	Gravel	
3/4 inch	19000			0.00 g	100.0	Gravel	
3/8 inch	9500			0.00 g	100.0	Gravel	
#4	4750			0.00 g	100.0	Gravel	
#10	2000	450.90	451.46	0.56 g	99.3	Sand	Coarse
#20	850	340.27	345.87	5.60 g	92.2	Sand	Medium
#40	425	350.74	360.71	9.97 g	79.5	Sand	Medium
#60	250	331.34	366.45	35.11 g	34.8	Sand	Fine
#80	180	326.82	337.83	11.01 g	20.8	Sand	Fine
#100	150	317.49	319.51	2.02 g	18.2	Sand	Fine
#200	75	308.52	311.10	2.58 g	14.9	Sand	Fine
				0.00 g	14.9		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	78.6

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0050	22.0	36.4	2.89	Silt	
5	5	1.0040	22.0	23.3	0.851	Silt	
15	15	1.0035	22.0	13.5	-0.17	Silt	
30	30	1.0020	22.0	9.7	-3.24	Silt	
60	60	1.0010	22.0	6.9	-5.28	Silt	
250	250	1.0000	22.0	3.4	-7.32	Clay	
1440	1440	1.0000	22.0	1.4	-7.32	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	
Lab Sample ID	410-191197-D-8

Date Received	
Start Date	10/08/2024 15:20
End Date	10/15/2024 15:57

Dry Weight Determination

Tin Weight	0.80	g
Wet Sample + Tin	5.22	g
Dry Sample + Tin	4.55	g
% Moisture	15.16	%

Non-soil material:	
Shape (> #10):	
Hardness (> #10):	
Date/Time in oven	10/13/2024 8:00
Date/Time out of oven	10/15/2024 15:57

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	111.50	186.09	74.59
Sample Weight (Oven Dried)			63.3

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			1.03
Sample <#10			62.3
% Passing #10			83.5

Hydrometer Data	
Serial Number	444745
Calib. Date (mm/dd/yyyy)	04/26/2024
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	23.0
Reading at High Temp	1.0035
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.005416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample		% Finer	Classification	Sub Class
3 inch	75000			0.00	g	100.0	Gravel	
2 inch	50000			0.00	g	100.0	Gravel	
1.5 inch	37500			0.00	g	100.0	Gravel	
1 inch	25000			0.00	g	100.0	Gravel	
3/4 inch	19000			0.00	g	100.0	Gravel	
3/8 inch	9500			0.00	g	100.0	Gravel	
#4	4750	502.90	503.32	0.42	g	99.3	Gravel	
#10	2000	450.90	451.51	0.61	g	98.3	Sand	Coarse
#20	850	340.27	342.90	2.63	g	94.1	Sand	Medium
#40	425	350.74	363.97	13.23	g	73.2	Sand	Medium
#60	250	331.34	364.95	33.61	g	20.1	Sand	Fine
#80	180	326.82	334.91	8.09	g	7.3	Sand	Fine
#100	150	317.49	319.46	1.97	g	4.2	Sand	Fine
#200	75	308.52	311.97	3.45	g	-1.2	Sand	Fine
				0.00	g	-1.2		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	63.3

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0015	22.0	37.6	-5.29	Silt	
5	5	1.0015	22.0	23.8	-5.29	Silt	
15	15	1.0010	22.0	13.8	-6.55	Silt	
30	30	1.0010	22.0	9.7	-6.55	Silt	
60	60	1.0010	22.0	6.9	-6.55	Silt	
250	250	1.0000	22.0	3.4	-9.09	Clay	
1440	1440	1.0000	22.0	1.4	-9.09	Clay	

Surrogate Summary

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Method: 680 - Polychlorinated Biphenyls by GCMS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PCB52L (29-120)	PCB138L (20-123)								
410-191197-1	241003-IRI-3-TOP	42	44								
410-191197-3	241003-IRI-4-BOTTOM	72	78								
410-191197-8	241004-IRI-1-TOP	63	73								
410-191197-9	241004-IRI-2-BOTTOM	50	51								
LCS 410-566243/2-A	Lab Control Sample	57	62								
LCSD 410-566243/3-A	Lab Control Sample Dup	71	84								
MB 410-566243/1-A	Method Blank	68	75								

Surrogate Legend

PCB52L = PCB-52L

PCB138L = PCB-138L

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	BAPd12 (59-120)	FLN10 (61-120)	MNPd10 (40-120)							
410-191197-1	241003-IRI-3-TOP	106	103	79							
410-191197-3	241003-IRI-4-BOTTOM	105	107	73							
410-191197-8	241004-IRI-1-TOP	98	105	75							
410-191197-8 MS	241004-IRI-1-TOP	100	105	49							
410-191197-8 MSD	241004-IRI-1-TOP	93	89	89							
410-191197-9	241004-IRI-2-BOTTOM	99	106	66							
LCS 410-561309/2-A	Lab Control Sample	101	97	49							
MB 410-561309/1-A	Method Blank	101	98	66							

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)

FLN10 = Fluoranthene-d10 (Surr)

MNPd10 = 1-Methylnaphthalene-d10

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCB1 (54-143)	DCB2 (54-143)	TCX1 (20-131)	TCX2 (20-131)						
410-191197-1	241003-IRI-3-TOP	83 cn	83	84 cn	80						
410-191197-1 MS	241003-IRI-3-TOP	100 cn	102	101 cn	77						
410-191197-1 MSD	241003-IRI-3-TOP	89 cn	89	92 cn	86						
410-191197-3	241003-IRI-4-BOTTOM	111 cn	113 cn	154 S1+ cn	105 cn						
410-191197-8	241004-IRI-1-TOP	87	90 cn	99	102 cn						
410-191197-9	241004-IRI-2-BOTTOM	107 cn	109 cn	114 cn	92 cn						
LCS 410-560349/2-B	Lab Control Sample	86	87	78	81						
MB 410-560349/1-B	Method Blank	81	82	75	79						

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

Isotope Dilution Summary

Client: Anchor QEA LLC
Project/Site: DNREC Sediments Indian River Inlet

Job ID: 410-191197-1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid | **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		HpCDD	HpCDF	HxCDD	HxCDF	HpCDF2	HxDD	HxDF	PeCDD
Lab Sample ID	Client Sample ID	(23-140)	(28-143)	(32-141)	(26-152)	(26-138)	(28-130)	(26-123)	(25-181)
410-191197-1	241003-IRI-3-TOP	59	54	62	62	54	64	60	67
410-191197-3	241003-IRI-4-BOTTOM	89	105	94	100	106	91	106	84
410-191197-8	241004-IRI-1-TOP	80	71	83	80	73	82	76	98
410-191197-9	241004-IRI-2-BOTTOM	77	69	83	79	70	83	77	90
MB 410-563559/1-A	Method Blank	60	62	56	57	55	59	64	67

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PeCDF	13CHxCD	HxCF	13CHxCF	PeCF	TCDD	TCDF	OCDD
Lab Sample ID	Client Sample ID	(24-185)	(28-130)	(29-147)	(28-136)	(21-178)	(25-164)	(24-169)	(17-157)
410-191197-1	241003-IRI-3-TOP	65	63	58	58	65	69	61	63
410-191197-3	241003-IRI-4-BOTTOM	91	89	110	106	93	84	99	82
410-191197-8	241004-IRI-1-TOP	95	82	74	74	93	98	85	86
410-191197-9	241004-IRI-2-BOTTOM	85	82	71	75	84	92	81	81
MB 410-563559/1-A	Method Blank	61	61	55	58	69	52	51	62

		Percent Isotope Dilution Recovery (Acceptance Limits)
		OCDF
Lab Sample ID	Client Sample ID	(17-157)
410-191197-1	241003-IRI-3-TOP	60
410-191197-3	241003-IRI-4-BOTTOM	91
410-191197-8	241004-IRI-1-TOP	81
410-191197-9	241004-IRI-2-BOTTOM	74
MB 410-563559/1-A	Method Blank	58

Surrogate Legend

HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
HxCDD = 13C-1,2,3,4,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxDF = 13C-1,2,3,6,7,8-HxCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
13CHxCD = 13C-1,2,3,7,8,9-HxCDD
HxCF = 13C-1,2,3,7,8,9-HxCDF
13CHxCF = 13C-2,3,4,6,7,8-HxCDF
PeCF = 13C-2,3,4,7,8-PeCDF
TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
OCDD = 13C-OCDD
OCDF = 13C-OCDF

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid | **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		HpCDD	HpCDF	HxCDD	HxCDF	HpCDF2	HxDD	HxDF	PeCDD
Lab Sample ID	Client Sample ID	(26-166)	(21-158)	(21-193)	(19-202)	(20-186)	(25-163)	(21-159)	(21-227)
LCS 410-563559/2-A	Lab Control Sample	83	87	82	85	75	83	91	98

Isotope Dilution Summary

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PeCDF (21-192)	13CHxCD (25-163)	HxCF (17-205)	13CHxCF (22-176)	PeCF (13-328)	TCDD (20-175)	TCDF (22-152)	OCDD (13-199)
LCS 410-563559/2-A	Lab Control Sample	90	85	80	85	99	81	80	86

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OCDF (13-199)
LCS 410-563559/2-A	Lab Control Sample	78

Surrogate Legend

HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
HxCDD = 13C-1,2,3,4,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxDF = 13C-1,2,3,6,7,8-HxCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
13CHxCD = 13C-1,2,3,7,8,9-HxCDD
HxCF = 13C-1,2,3,7,8,9-HxCDF
13CHxCF = 13C-2,3,4,6,7,8-HxCDF
PeCF = 13C-2,3,4,7,8-PeCDF
TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
OCDD = 13C-OCDD
OCDF = 13C-OCDF

Method: 680 - Polychlorinated Biphenyls by GCMS

Lab Sample ID: MB 410-566243/1-A
Matrix: Solid
Analysis Batch: 566679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 566243

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	ND		17	0.50	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Dichlorobiphenyls	ND		3.3	0.30	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Heptachlorobiphenyls	ND		10	0.50	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Hexachlorobiphenyls	ND		6.7	0.40	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Monochlorobiphenyls	ND		3.3	0.30	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Nonachlorobiphenyls	ND		17	0.50	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Octachlorobiphenyls	ND		10	0.50	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Pentachlorobiphenyls	ND		6.7	0.80	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Tetrachlorobiphenyls	ND		6.7	0.40	ug/Kg		10/22/24 09:46	10/23/24 09:10	1
Total Trichlorobiphenyls	ND		3.3	0.20	ug/Kg		10/22/24 09:46	10/23/24 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-52L	*68*		*29 - 120*	*10/22/24 09:46*	*10/23/24 09:10*	*1*
PCB-138L	*75*		*20 - 123*	*10/22/24 09:46*	*10/23/24 09:10*	*1*

Lab Sample ID: LCS 410-566243/2-A
Matrix: Solid
Analysis Batch: 566679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 566243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
DCB Decachlorobiphenyl	209	167		ug/Kg		80	38 - 166
Total Dichlorobiphenyls	41.8	21.4		ug/Kg		51	35 - 120
Total Heptachlorobiphenyls	125	75.9		ug/Kg		61	33 - 143
Total Hexachlorobiphenyls	83.6	52.2		ug/Kg		62	32 - 145
Total Monochlorobiphenyls	41.8	20.6		ug/Kg		49	36 - 120
Total Octachlorobiphenyls	125	75.4		ug/Kg		60	28 - 153
Total Pentachlorobiphenyls	83.5	49.2		ug/Kg		59	35 - 140
Total Tetrachlorobiphenyls	83.4	46.3		ug/Kg		56	31 - 134
Total Trichlorobiphenyls	41.8	23.2		ug/Kg		55	31 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
PCB-52L	*57*		*29 - 120*
PCB-138L	*62*		*20 - 123*

Lab Sample ID: LCSD 410-566243/3-A
Matrix: Solid
Analysis Batch: 566679

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 566243

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
DCB Decachlorobiphenyl	209	243	*1	ug/Kg		117	38 - 166	37	30
Total Dichlorobiphenyls	41.8	25.4		ug/Kg		61	35 - 120	17	30
Total Heptachlorobiphenyls	125	106	*1	ug/Kg		85	33 - 143	33	30
Total Hexachlorobiphenyls	83.6	69.8		ug/Kg		84	32 - 145	29	30
Total Monochlorobiphenyls	41.8	23.4		ug/Kg		56	36 - 120	13	30
Total Octachlorobiphenyls	125	108	*1	ug/Kg		86	28 - 153	36	30
Total Pentachlorobiphenyls	83.5	66.2		ug/Kg		79	35 - 140	30	30
Total Tetrachlorobiphenyls	83.4	57.1		ug/Kg		68	31 - 134	21	30
Total Trichlorobiphenyls	41.8	28.7		ug/Kg		69	31 - 133	21	30

Method: 680 - Polychlorinated Biphenyls by GCMS (Continued)

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
PCB-52L	71		29 - 120
PCB-138L	84		20 - 123

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-561309/1-A
Matrix: Solid
Analysis Batch: 561440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 561309

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		1.7	0.33	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Pyrene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Dibenzofuran	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Benzo[g,h,i]perylene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Benzo[e]pyrene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Indeno[1,2,3-cd]pyrene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Perylene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Benzo[b]fluoranthene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Fluoranthene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Benzo[k]fluoranthene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Acenaphthylene	ND		1.7	0.33	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Chrysene	ND		1.7	0.33	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Benzo[a]pyrene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Dibenz(a,h)anthracene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Benzo[a]anthracene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Acenaphthene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Phenanthrene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Fluorene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
Naphthalene	ND		2.3	1.3	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
2-Methylnaphthalene	ND		1.7	1.0	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C1-Benzo(a)anthracenes/Chrysenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C2-Benzo(a)anthracenes/Chrysenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C3-Benzo(a)Anthracenes/Chrysenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C4-Benzo(a)anthracenes/Chrysenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C1-Fluoranthene/Pyrenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C2-Fluoranthenes/Pyrene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C3-Fluoranthenes/Pyrene	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C1-Fluorenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C2-Fluorenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C3-Fluorenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C1-Naphthalenes	ND		2.3	1.3	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C2-Naphthalenes	ND		2.3	1.3	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C3-Naphthalenes	ND		2.3	1.3	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C4-Naphthalenes	ND		2.3	1.3	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C1-Phenanthrenes/Anthracenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C2-Phenanthrenes/Anthracenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C3-Phenanthrenes/Anthracenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1
C4-Phenanthrenes/Anthracenes	ND		1.7	0.67	ug/Kg		10/09/24 15:07	10/10/24 08:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	101		59 - 120	10/09/24 15:07	10/10/24 08:13	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 410-561309/1-A
Matrix: Solid
Analysis Batch: 561440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 561309

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluoranthene-d10 (Surr)	*98*		*61 - 120*	*10/09/24 15:07*	*10/10/24 08:13*	*1*
1-Methylnaphthalene-d10	*66*		*40 - 120*	*10/09/24 15:07*	*10/10/24 08:13*	*1*

Lab Sample ID: LCS 410-561309/2-A
Matrix: Solid
Analysis Batch: 561440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 561309

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Anthracene	33.3	28.5		ug/Kg		86	65 - 120
Pyrene	33.3	29.7		ug/Kg		89	64 - 120
Dibenzofuran	33.3	21.0		ug/Kg		63	60 - 120
Benzo[g,h,i]perylene	33.3	23.5		ug/Kg		71	60 - 120
Benzo[e]pyrene	34.0	34.4		ug/Kg		101	47 - 128
Indeno[1,2,3-cd]pyrene	33.3	25.6		ug/Kg		77	56 - 126
Perylene	33.4	36.1		ug/Kg		108	80 - 120
Benzo[b]fluoranthene	33.3	37.4		ug/Kg		112	65 - 120
Fluoranthene	33.3	30.6		ug/Kg		92	62 - 120
Benzo[k]fluoranthene	33.3	35.5		ug/Kg		107	69 - 120
Acenaphthylene	33.3	23.5		ug/Kg		70	62 - 120
Chrysene	33.3	31.2		ug/Kg		94	66 - 120
Benzo[a]pyrene	33.3	35.0		ug/Kg		105	67 - 121
Dibenz(a,h)anthracene	33.3	23.3		ug/Kg		70	60 - 120
Benzo[a]anthracene	33.3	34.7		ug/Kg		104	60 - 120
Acenaphthene	33.3	21.7		ug/Kg		65	60 - 120
Phenanthrene	33.3	26.6		ug/Kg		80	63 - 120
Fluorene	33.3	22.4		ug/Kg		67	61 - 120
Naphthalene	33.3	24.1		ug/Kg		72	59 - 120
2-Methylnaphthalene	33.3	15.2	*-	ug/Kg		46	54 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Benzo(a)pyrene-d12 (Surr)	*101*		*59 - 120*
Fluoranthene-d10 (Surr)	*97*		*61 - 120*
1-Methylnaphthalene-d10	*49*		*40 - 120*

Lab Sample ID: 410-191197-8 MS
Matrix: Solid
Analysis Batch: 561440

Client Sample ID: 241004-IRI-1-TOP
Prep Type: Total/NA
Prep Batch: 561309

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Anthracene	ND		39.0	39.7		ug/Kg	☼	102	65 - 120
Pyrene	ND		39.0	28.1		ug/Kg	☼	72	64 - 120
Dibenzofuran	ND		39.0	30.2		ug/Kg	☼	77	70 - 130
Benzo[g,h,i]perylene	ND		39.0	40.7		ug/Kg	☼	104	60 - 120
Benzo[e]pyrene	ND		39.7	40.6		ug/Kg	☼	102	47 - 128
Indeno[1,2,3-cd]pyrene	ND		39.0	42.9		ug/Kg	☼	110	56 - 126
Perylene	18	F1	39.0	80.0	F1	ug/Kg	☼	159	80 - 120
Benzo[b]fluoranthene	ND	cn	39.0	43.0		ug/Kg	☼	110	65 - 120
Fluoranthene	ND		39.0	40.8		ug/Kg	☼	105	62 - 120

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 410-191197-8 MS
Matrix: Solid
Analysis Batch: 561440

Client Sample ID: 241004-IRI-1-TOP
Prep Type: Total/NA
Prep Batch: 561309

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[k]fluoranthene	ND		39.0	41.1		ug/Kg	☼	106	69 - 120
Acenaphthylene	ND		39.0	30.7		ug/Kg	☼	79	62 - 120
Chrysene	ND		39.0	35.5		ug/Kg	☼	91	66 - 120
Benzo[a]pyrene	ND		39.0	40.5		ug/Kg	☼	104	67 - 121
Dibenz(a,h)anthracene	ND		39.0	39.0		ug/Kg	☼	100	60 - 120
Benzo[a]anthracene	ND		39.0	41.8		ug/Kg	☼	107	60 - 120
Acenaphthene	ND		39.0	28.9		ug/Kg	☼	74	62 - 120
Phenanthrene	ND		39.0	39.3		ug/Kg	☼	101	63 - 120
Fluorene	ND		39.0	32.5		ug/Kg	☼	83	61 - 120
Naphthalene	ND		39.0	26.8		ug/Kg	☼	69	59 - 120
2-Methylnaphthalene	ND	F1 *- cn	39.0	18.4	F1	ug/Kg	☼	47	54 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*100*		*59 - 120*
Fluoranthene-d10 (Surr)	*105*		*61 - 120*
1-Methylnaphthalene-d10	*49*		*40 - 120*

Lab Sample ID: 410-191197-8 MSD
Matrix: Solid
Analysis Batch: 561959

Client Sample ID: 241004-IRI-1-TOP
Prep Type: Total/NA
Prep Batch: 561309

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Anthracene	ND		38.8	39.9		ug/Kg	☼	103	65 - 120	1	30
Pyrene	ND		38.8	39.0	F2	ug/Kg	☼	101	64 - 120	33	30
Dibenzofuran	ND		38.8	29.5		ug/Kg	☼	76	70 - 130	2	30
Benzo[g,h,i]perylene	ND		38.8	38.5		ug/Kg	☼	99	60 - 120	5	30
Benzo[e]pyrene	ND		39.5	38.2		ug/Kg	☼	96	47 - 128	6	30
Indeno[1,2,3-cd]pyrene	ND		38.8	40.7		ug/Kg	☼	105	56 - 126	5	30
Perylene	18	F1	38.9	141	F1 F2	ug/Kg	☼	316	80 - 120	55	30
Benzo[b]fluoranthene	ND	cn	38.8	41.9		ug/Kg	☼	108	65 - 120	3	30
Fluoranthene	ND		38.8	39.7		ug/Kg	☼	102	62 - 120	3	30
Benzo[k]fluoranthene	ND		38.8	39.8		ug/Kg	☼	103	69 - 120	3	30
Acenaphthylene	ND		38.8	34.5		ug/Kg	☼	89	62 - 120	12	30
Chrysene	ND		38.8	36.5		ug/Kg	☼	94	66 - 120	3	30
Benzo[a]pyrene	ND		38.8	38.8		ug/Kg	☼	100	67 - 121	4	30
Dibenz(a,h)anthracene	ND		38.8	36.5		ug/Kg	☼	94	60 - 120	7	30
Benzo[a]anthracene	ND		38.8	42.0		ug/Kg	☼	108	60 - 120	1	30
Acenaphthene	ND		38.8	31.8		ug/Kg	☼	82	62 - 120	9	30
Phenanthrene	ND		38.8	43.1		ug/Kg	☼	111	63 - 120	9	30
Fluorene	ND		38.8	26.7		ug/Kg	☼	69	61 - 120	20	30
Naphthalene	ND		38.8	28.5		ug/Kg	☼	73	59 - 120	6	30
2-Methylnaphthalene	ND	F1 *- cn	38.8	28.0	F2	ug/Kg	☼	72	54 - 120	41	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*93*		*59 - 120*
Fluoranthene-d10 (Surr)	*89*		*61 - 120*
1-Methylnaphthalene-d10	*89*		*40 - 120*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-560349/1-B
Matrix: Solid
Analysis Batch: 565454

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 560349

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.83	0.36	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
alpha-BHC (1C)	ND		0.83	0.38	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
alpha-Chlordane (1C)	ND		0.83	0.17	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
beta-BHC (1C)	ND		1.0	0.44	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
delta-BHC (1C)	ND		1.0	0.45	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Dieldrin (1C)	ND		1.7	0.33	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Endosulfan I (1C)	ND		0.83	0.22	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Endosulfan II (1C)	ND		2.3	1.1	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Endosulfan sulfate (1C)	ND		1.7	0.39	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Endrin (1C)	ND		1.7	0.68	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Endrin aldehyde (1C)	ND		1.7	0.38	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Endrin ketone (1C)	ND		2.0	0.60	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
gamma-BHC (Lindane) (1C)	ND		0.83	0.21	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
gamma-Chlordane (1C)	ND		0.83	0.25	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Heptachlor (1C)	ND		0.83	0.31	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Heptachlor epoxide (1C)	ND		0.83	0.35	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Methoxychlor (1C)	ND		6.7	2.6	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
Toxaphene (1C)	ND		33	14	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
p,p'-DDD (1C)	ND		1.7	0.80	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
p,p'-DDE (1C)	ND		1.7	0.70	ug/Kg		10/07/24 17:40	10/21/24 03:06	1
p,p'-DDT (1C)	ND		1.7	0.79	ug/Kg		10/07/24 17:40	10/21/24 03:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*81*		*54 - 143*	*10/07/24 17:40*	*10/21/24 03:06*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*82*		*54 - 143*	*10/07/24 17:40*	*10/21/24 03:06*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*75*		*20 - 131*	*10/07/24 17:40*	*10/21/24 03:06*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*79*		*20 - 131*	*10/07/24 17:40*	*10/21/24 03:06*	*1*

Lab Sample ID: LCS 410-560349/2-B
Matrix: Solid
Analysis Batch: 565454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 560349

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin (2C)	3.33	2.67		ug/Kg		80	49 - 130
alpha-BHC (2C)	3.33	2.68		ug/Kg		80	32 - 141
alpha-Chlordane (1C)	3.33	2.59		ug/Kg		78	54 - 129
beta-BHC (2C)	3.33	2.62		ug/Kg		79	50 - 132
delta-BHC (2C)	3.33	2.75		ug/Kg		82	47 - 141
Dieldrin (2C)	6.67	5.73		ug/Kg		86	54 - 136
Endosulfan I (1C)	3.33	2.48		ug/Kg		74	51 - 124
Endosulfan II (2C)	6.67	5.48		ug/Kg		82	56 - 125
Endosulfan sulfate (2C)	6.67	5.37		ug/Kg		80	39 - 136
Endrin (2C)	6.67	5.42		ug/Kg		81	56 - 129
Endrin aldehyde (2C)	6.67	4.92		ug/Kg		74	46 - 133
Endrin ketone (2C)	6.67	5.41		ug/Kg		81	55 - 128
gamma-BHC (Lindane) (2C)	3.33	2.76		ug/Kg		83	32 - 138
gamma-Chlordane (2C)	3.33	2.86		ug/Kg		86	52 - 137
Heptachlor (2C)	3.33	2.70		ug/Kg		81	52 - 139

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 410-560349/2-B
Matrix: Solid
Analysis Batch: 565454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 560349

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor epoxide (2C)	3.33	2.75		ug/Kg		83	55 - 133
Methoxychlor (2C)	33.3	29.4		ug/Kg		88	54 - 148
p,p'-DDD (2C)	6.67	5.77		ug/Kg		87	59 - 135
p,p'-DDE (2C)	6.67	5.70		ug/Kg		85	57 - 135
p,p'-DDT (2C)	6.67	5.98		ug/Kg		90	53 - 151

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*86*		*54 - 143*
DCB Decachlorobiphenyl (Surr) (2C)	*87*		*54 - 143*
Tetrachloro-m-xylene (Surr) (1C)	*78*		*20 - 131*
Tetrachloro-m-xylene (Surr) (2C)	*81*		*20 - 131*

Lab Sample ID: 410-191197-1 MS
Matrix: Solid
Analysis Batch: 565454

Client Sample ID: 241003-IRI-3-TOP
Prep Type: Total/NA
Prep Batch: 560349

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin (2C)	ND	cn	3.90	4.20	J	ug/Kg	☼	108	49 - 130
alpha-BHC (2C)	ND	F1 cn	3.90	3.93	J	ug/Kg	☼	101	32 - 141
alpha-Chlordane (2C)	ND		3.90	2.30	J p	ug/Kg	☼	59	54 - 129
beta-BHC (2C)	ND		3.90	3.58	J p	ug/Kg	☼	92	50 - 132
delta-BHC (2C)	ND	F1	3.90	8.39	F1	ug/Kg	☼	215	47 - 141
Dieldrin (2C)	ND	cn	7.81	6.96	J	ug/Kg	☼	89	54 - 136
Endosulfan I (2C)	ND	F2 F1	3.90	2.62	J p	ug/Kg	☼	67	51 - 124
Endosulfan II (2C)	ND	F1	7.81	6.54	J	ug/Kg	☼	84	56 - 125
Endosulfan sulfate (2C)	ND	cn	7.81	5.75	J	ug/Kg	☼	74	39 - 136
Endrin (2C)	ND	cn	7.81	6.67	J	ug/Kg	☼	85	56 - 129
Endrin aldehyde (2C)	ND	cn	7.81	6.61	J	ug/Kg	☼	85	46 - 133
Endrin ketone (2C)	ND	cn	7.81	6.68	J	ug/Kg	☼	86	55 - 128
gamma-BHC (Lindane) (1C)	ND	F2 F1 cn	3.90	8.48	F1 p cn	ug/Kg	☼	217	32 - 138
gamma-Chlordane (1C)	ND	cn	3.90	4.00	J cn	ug/Kg	☼	103	52 - 137
Heptachlor (1C)	ND	F1 cn	3.90	9.51	F1 cn	ug/Kg	☼	244	52 - 139
Heptachlor epoxide (2C)	ND	F1 cn	3.90	3.05	J p	ug/Kg	☼	78	55 - 133
Methoxychlor (2C)	ND	F2 cn	39.0	39.7		ug/Kg	☼	102	54 - 148
p,p'-DDD (1C)	ND	cn	7.81	6.89	J cn	ug/Kg	☼	88	59 - 135
p,p'-DDE (2C)	ND	cn	7.81	8.07	J	ug/Kg	☼	103	57 - 135
p,p'-DDT (2C)	ND	F1 cn	7.81	7.88	J	ug/Kg	☼	101	53 - 151

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*100*	*cn*	*54 - 143*
DCB Decachlorobiphenyl (Surr) (2C)	*102*		*54 - 143*
Tetrachloro-m-xylene (Surr) (1C)	*101*	*cn*	*20 - 131*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 410-191197-1 MS
Matrix: Solid
Analysis Batch: 565454

Client Sample ID: 241003-IRI-3-TOP
Prep Type: Total/NA
Prep Batch: 560349

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene (Surr) (2C)	77		20 - 131

Lab Sample ID: 410-191197-1 MSD
Matrix: Solid
Analysis Batch: 565454

Client Sample ID: 241003-IRI-3-TOP
Prep Type: Total/NA
Prep Batch: 560349

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin (1C)	ND	cn	3.95	3.30	J cn	ug/Kg	☼	84	49 - 130	24	50
alpha-BHC (1C)	ND	F1 cn	3.95	ND	F1 cn	ug/Kg	☼	0	32 - 141	NC	50
alpha-Chlordane (2C)	ND		3.95	2.41	J p	ug/Kg	☼	61	54 - 129	5	50
beta-BHC (2C)	ND		3.95	2.75	J p	ug/Kg	☼	69	50 - 132	27	50
delta-BHC (2C)	ND	F1	3.95	5.66	J F1	ug/Kg	☼	143	47 - 141	39	50
Dieldrin (1C)	ND	cn	7.90	6.29	J cn	ug/Kg	☼	80	54 - 136	10	50
Endosulfan I (2C)	ND	F2 F1	3.95	1.52	J p F2 F1	ug/Kg	☼	38	51 - 124	53	50
Endosulfan II (1C)	ND	F1 cn	7.90	ND	F1 cn	ug/Kg	☼	0	56 - 125	NC	50
Endosulfan sulfate (1C)	ND	cn	7.90	3.84	J cn	ug/Kg	☼	49	39 - 136	40	50
Endrin (1C)	ND	cn	7.90	5.88	J cn	ug/Kg	☼	74	56 - 129	13	50
Endrin aldehyde (2C)	ND	cn	7.90	5.33	J	ug/Kg	☼	67	46 - 133	21	35
Endrin ketone (1C)	ND	cn	7.90	4.38	J cn	ug/Kg	☼	55	55 - 128	42	50
gamma-BHC (Lindane) (1C)	ND	F2 F1 cn	3.95	2.33	J p F2 cn	ug/Kg	☼	59	32 - 138	114	50
gamma-Chlordane (1C)	ND	cn	3.95	3.81	J cn	ug/Kg	☼	96	52 - 137	5	50
Heptachlor (2C)	ND	F1 cn	3.95	2.00	J p F2 F1	ug/Kg	☼	51	52 - 139	131	50
Heptachlor epoxide (1C)	ND	F1 cn	3.95	3.56	J cn	ug/Kg	☼	90	55 - 133	15	50
Methoxychlor (1C)	ND	F2 cn	39.5	22.2	J F2 cn	ug/Kg	☼	56	54 - 148	56	50
p,p'-DDD (1C)	ND	cn	7.90	6.32	J cn	ug/Kg	☼	80	59 - 135	9	50
p,p'-DDE (1C)	ND	cn	7.90	6.92	J cn	ug/Kg	☼	88	57 - 135	15	50
p,p'-DDT (2C)	ND		7.90	5.44	J	ug/Kg	☼	69	53 - 151	30	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	89	cn	54 - 143
DCB Decachlorobiphenyl (Surr) (2C)	89		54 - 143
Tetrachloro-m-xylene (Surr) (1C)	92	cn	20 - 131
Tetrachloro-m-xylene (Surr) (2C)	86		20 - 131

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-561950/1-A
Matrix: Solid
Analysis Batch: 563561

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		3.0	2.0	mg/Kg			10/16/24 01:51	1
Nitrite as N	ND		2.0	1.0	mg/Kg			10/16/24 01:51	1
Nitrate Nitrite as N	ND		3.0	1.0	mg/Kg			10/16/24 01:51	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 410-561950/2-A
Matrix: Solid
Analysis Batch: 563561

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	20.0	18.6		mg/Kg		93	90 - 110
Nitrite as N	20.0	19.3		mg/Kg		96	90 - 110

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 410-563559/1-A
Matrix: Solid
Analysis Batch: 565171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,4,6,7,8-HpCDD	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,4,6,7,8-HpCDF	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,4,7,8-HxCDD	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,4,7,8-HxCDF	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,4,7,8,9-HpCDF	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,6,7,8-HxCDD	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,6,7,8-HxCDF	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,7,8-PeCDD	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,7,8-PeCDF	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,7,8,9-HxCDD	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
1,2,3,7,8,9-HxCDF	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
2,3,4,6,7,8-HxCDF	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
2,3,4,7,8-PeCDF	ND		5.0	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
2,3,7,8-TCDD	ND		1.0	0.20	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
2,3,7,8-TCDF	ND		1.0	0.20	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
OCDD	ND		10	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1
OCDF	ND		10	2.0	ng/Kg		10/15/24 18:42	10/20/24 16:03	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-1,2,3,4,6,7,8-HpCDD	*60*		*23 - 140*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*62*		*28 - 143*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,4,7,8-HxCDD	*56*		*32 - 141*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,4,7,8-HxCDF	*57*		*26 - 152*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,4,7,8,9-HpCDF	*55*		*26 - 138*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,6,7,8-HxCDD	*59*		*28 - 130*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,6,7,8-HxCDF	*64*		*26 - 123*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,7,8-PeCDD	*67*		*25 - 181*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,7,8-PeCDF	*61*		*24 - 185*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,7,8,9-HxCDD	*61*		*28 - 130*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-1,2,3,7,8,9-HxCDF	*55*		*29 - 147*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-2,3,4,6,7,8-HxCDF	*58*		*28 - 136*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-2,3,4,7,8-PeCDF	*69*		*21 - 178*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-2,3,7,8-TCDD	*52*		*25 - 164*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-2,3,7,8-TCDF	*51*		*24 - 169*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-OCDD	*62*		*17 - 157*	*10/15/24 18:42*	*10/20/24 16:03*	*1*
13C-OCDF	*58*		*17 - 157*	*10/15/24 18:42*	*10/20/24 16:03*	*1*

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 410-563559/2-A
Matrix: Solid
Analysis Batch: 565171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563559

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3,4,6,7,8-HpCDD			100	99.7		ng/Kg		100	70 - 140		
1,2,3,4,6,7,8-HpCDF			100	103		ng/Kg		103	82 - 122		
1,2,3,4,7,8-HxCDD			100	105		ng/Kg		105	70 - 164		
1,2,3,4,7,8-HxCDF			100	105		ng/Kg		105	72 - 134		
1,2,3,4,7,8,9-HpCDF			100	102		ng/Kg		102	78 - 138		
1,2,3,6,7,8-HxCDD			100	103		ng/Kg		103	76 - 134		
1,2,3,6,7,8-HxCDF			100	106		ng/Kg		106	84 - 130		
1,2,3,7,8-PeCDD			100	103		ng/Kg		103	70 - 142		
1,2,3,7,8-PeCDF			100	104		ng/Kg		104	80 - 134		
1,2,3,7,8,9-HxCDD			100	103		ng/Kg		103	64 - 162		
1,2,3,7,8,9-HxCDF			100	103		ng/Kg		103	78 - 130		
2,3,4,6,7,8-HxCDF			100	106		ng/Kg		106	70 - 156		
2,3,4,7,8-PeCDF			100	104		ng/Kg		104	68 - 160		
2,3,7,8-TCDD			20.0	20.6		ng/Kg		103	67 - 158		
2,3,7,8-TCDF			20.0	21.4		ng/Kg		107	75 - 158		
OCDD			200	198		ng/Kg		99	78 - 144		
OCDF			200	201		ng/Kg		100	63 - 170		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-1,2,3,4,6,7,8-HpCDD	*83*		*26 - 166*
13C-1,2,3,4,6,7,8-HpCDF	*87*		*21 - 158*
13C-1,2,3,4,7,8-HxCDD	*82*		*21 - 193*
13C-1,2,3,4,7,8-HxCDF	*85*		*19 - 202*
13C-1,2,3,4,7,8,9-HpCDF	*75*		*20 - 186*
13C-1,2,3,6,7,8-HxCDD	*83*		*25 - 163*
13C-1,2,3,6,7,8-HxCDF	*91*		*21 - 159*
13C-1,2,3,7,8-PeCDD	*98*		*21 - 227*
13C-1,2,3,7,8-PeCDF	*90*		*21 - 192*
13C-1,2,3,7,8,9-HxCDD	*85*		*25 - 163*
13C-1,2,3,7,8,9-HxCDF	*80*		*17 - 205*
13C-2,3,4,6,7,8-HxCDF	*85*		*22 - 176*
13C-2,3,4,7,8-PeCDF	*99*		*13 - 328*
13C-2,3,7,8-TCDD	*81*		*20 - 175*
13C-2,3,7,8-TCDF	*80*		*22 - 152*
13C-OCDD	*86*		*13 - 199*
13C-OCDF	*78*		*13 - 199*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-564378/1-A
Matrix: Solid
Analysis Batch: 565763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		30	9.0	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Antimony	ND		5.0	1.7	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Arsenic	ND		5.0	1.4	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Barium	ND		0.50	0.15	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Beryllium	ND		0.50	0.10	mg/Kg		10/17/24 22:00	10/21/24 08:28	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 410-564378/1-A
Matrix: Solid
Analysis Batch: 565763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.50	0.10	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Calcium	ND		50	21	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Chromium	ND		1.5	0.60	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Cobalt	ND		0.50	0.15	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Copper	ND		2.0	0.77	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Iron	ND		20	8.0	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Lead	ND		1.5	0.60	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Magnesium	ND		20	4.0	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Manganese	ND		1.0	0.40	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Nickel	ND		1.0	0.40	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Potassium	ND		100	35	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Selenium	ND		5.0	1.5	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Silver	ND		1.0	0.40	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Sodium	ND		100	40	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Thallium	ND		3.0	1.3	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Vanadium	ND		1.0	0.43	mg/Kg		10/17/24 22:00	10/21/24 08:28	1
Zinc	ND		2.0	0.80	mg/Kg		10/17/24 22:00	10/21/24 08:28	1

Lab Sample ID: LCS 410-564378/2-A
Matrix: Solid
Analysis Batch: 565763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 564378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	500	489		mg/Kg		98	88 - 110
Antimony	10.0	9.65		mg/Kg		97	80 - 120
Arsenic	50.0	47.5		mg/Kg		95	90 - 113
Barium	50.0	50.2		mg/Kg		100	90 - 111
Beryllium	5.00	4.99		mg/Kg		100	90 - 113
Cadmium	5.00	4.94		mg/Kg		99	90 - 110
Calcium	500	494		mg/Kg		99	90 - 111
Chromium	50.0	49.7		mg/Kg		99	90 - 113
Cobalt	50.0	49.3		mg/Kg		99	90 - 110
Copper	50.0	48.7		mg/Kg		97	90 - 110
Iron	500	503		mg/Kg		101	89 - 111
Lead	5.00	4.86		mg/Kg		97	85 - 116
Magnesium	500	498		mg/Kg		100	89 - 111
Manganese	50.0	49.8		mg/Kg		100	90 - 111
Nickel	50.0	49.9		mg/Kg		100	90 - 111
Potassium	500	497		mg/Kg		99	90 - 113
Selenium	10.0	9.33		mg/Kg		93	81 - 119
Silver	5.00	4.68		mg/Kg		94	86 - 112
Sodium	500	496		mg/Kg		99	88 - 114
Thallium	10.0	10.4		mg/Kg		104	80 - 117
Vanadium	50.0	48.8		mg/Kg		98	90 - 111
Zinc	50.0	48.5		mg/Kg		97	90 - 110

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 410-191197-3 MS
Matrix: Solid
Analysis Batch: 565763

Client Sample ID: 241003-IRI-4-BOTTOM
Prep Type: Total/NA
Prep Batch: 564378

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	970	F1	448	2000	F1	mg/Kg	☼	230	75 - 125
Antimony	ND		8.97	9.22		mg/Kg	☼	103	75 - 125
Arsenic	ND		44.8	43.8		mg/Kg	☼	98	75 - 125
Barium	4.2		44.8	58.7		mg/Kg	☼	122	75 - 125
Beryllium	ND		4.48	4.50		mg/Kg	☼	100	75 - 125
Cadmium	ND		4.48	4.44		mg/Kg	☼	99	75 - 125
Calcium	3900		448	4500	4	mg/Kg	☼	135	75 - 125
Chromium	1.8		44.8	45.8		mg/Kg	☼	98	75 - 125
Cobalt	0.28	J	44.8	44.6		mg/Kg	☼	99	75 - 125
Copper	ND		44.8	44.3		mg/Kg	☼	99	75 - 125
Iron	690	F1	448	1400	F1	mg/Kg	☼	159	75 - 125
Lead	0.70	J F1 F2	4.48	5.62		mg/Kg	☼	110	75 - 125
Magnesium	290		448	758		mg/Kg	☼	105	75 - 125
Manganese	6.2		44.8	54.3		mg/Kg	☼	107	75 - 125
Nickel	0.89	J	44.8	45.3		mg/Kg	☼	99	75 - 125
Potassium	220	F1	448	848	F1	mg/Kg	☼	141	75 - 125
Selenium	ND		8.97	9.65		mg/Kg	☼	108	75 - 125
Silver	ND		4.48	4.34		mg/Kg	☼	97	75 - 125
Sodium	1700	F1 F2	448	1840	F1	mg/Kg	☼	36	75 - 125
Thallium	ND		8.97	9.30		mg/Kg	☼	104	75 - 125
Vanadium	2.0		44.8	47.1		mg/Kg	☼	100	75 - 125
Zinc	2.4	F1 F2	44.8	47.2		mg/Kg	☼	100	75 - 125

Lab Sample ID: 410-191197-3 MSD
Matrix: Solid
Analysis Batch: 565763

Client Sample ID: 241003-IRI-4-BOTTOM
Prep Type: Total/NA
Prep Batch: 564378

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	970	F1	436	2090	F1	mg/Kg	☼	256	75 - 125	4	20
Antimony	ND		8.71	8.58		mg/Kg	☼	99	75 - 125	7	20
Arsenic	ND		43.6	42.6		mg/Kg	☼	98	75 - 125	3	20
Barium	4.2		43.6	58.0		mg/Kg	☼	123	75 - 125	1	20
Beryllium	ND		4.36	4.36		mg/Kg	☼	100	75 - 125	3	20
Cadmium	ND		4.36	4.28		mg/Kg	☼	98	75 - 125	4	20
Calcium	3900		436	5010	4	mg/Kg	☼	256	75 - 125	11	20
Chromium	1.8		43.6	45.1		mg/Kg	☼	100	75 - 125	1	20
Cobalt	0.28	J	43.6	43.8		mg/Kg	☼	100	75 - 125	2	20
Copper	ND		43.6	53.3		mg/Kg	☼	122	75 - 125	18	20
Iron	690	F1	436	1460	F1	mg/Kg	☼	176	75 - 125	4	20
Lead	0.70	J F1 F2	4.36	17.6	F1 F2	mg/Kg	☼	388	75 - 125	103	20
Magnesium	290		436	778		mg/Kg	☼	113	75 - 125	3	20
Manganese	6.2		43.6	54.9		mg/Kg	☼	112	75 - 125	1	20
Nickel	0.89	J	43.6	52.7		mg/Kg	☼	119	75 - 125	15	20
Potassium	220	F1	436	933	F1	mg/Kg	☼	164	75 - 125	9	20
Selenium	ND		8.71	8.34		mg/Kg	☼	96	75 - 125	15	20
Silver	ND		4.36	4.13		mg/Kg	☼	95	75 - 125	5	20
Sodium	1700	F1 F2	436	2360	F1 F2	mg/Kg	☼	156	75 - 125	25	20
Thallium	ND		8.71	8.51		mg/Kg	☼	98	75 - 125	9	20
Vanadium	2.0		43.6	44.8		mg/Kg	☼	98	75 - 125	5	20

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 410-191197-3 MSD
Matrix: Solid
Analysis Batch: 565763

Client Sample ID: 241003-IRI-4-BOTTOM
Prep Type: Total/NA
Prep Batch: 564378

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	2.4	F1 F2	43.6	72.0	F1 F2	mg/Kg	☼	160	75 - 125	42	20

Lab Sample ID: 410-191197-3 DU
Matrix: Solid
Analysis Batch: 565763

Client Sample ID: 241003-IRI-4-BOTTOM
Prep Type: Total/NA
Prep Batch: 564378

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	970	F1	1040		mg/Kg	☼	6	20
Antimony	ND		ND		mg/Kg	☼	NC	20
Arsenic	ND		ND		mg/Kg	☼	NC	20
Barium	4.2		4.46		mg/Kg	☼	6	20
Beryllium	ND		ND		mg/Kg	☼	NC	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Calcium	3900		2870	F3	mg/Kg	☼	30	20
Chromium	1.8		1.55		mg/Kg	☼	13	20
Cobalt	0.28	J	0.325	J	mg/Kg	☼	14	20
Copper	ND		ND		mg/Kg	☼	NC	20
Iron	690	F1	653		mg/Kg	☼	5	20
Lead	0.70	J F1 F2	1.02	J F5	mg/Kg	☼	37	20
Magnesium	290		289		mg/Kg	☼	0.7	20
Manganese	6.2		6.96		mg/Kg	☼	11	20
Nickel	0.89	J	0.779	J	mg/Kg	☼	14	20
Potassium	220	F1	219		mg/Kg	☼	0.8	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Silver	ND		ND		mg/Kg	☼	NC	20
Sodium	1700	F1 F2	1600		mg/Kg	☼	5	20
Thallium	ND		ND		mg/Kg	☼	NC	20
Vanadium	2.0		2.01		mg/Kg	☼	0.5	20
Zinc	2.4	F1 F2	2.62		mg/Kg	☼	10	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-565444/1-A
Matrix: Solid
Analysis Batch: 566863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 565444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060	0.020	mg/Kg		10/20/24 23:35	10/23/24 07:02	1

Lab Sample ID: LCS 410-565444/2-A
Matrix: Solid
Analysis Batch: 566863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 565444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.181		mg/Kg		109	80 - 120

Method: 2540G-2015 - Total, Fixed, and Volatile Solids

Lab Sample ID: LCS 410-560153/1
Matrix: Solid
Analysis Batch: 560153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Solids	10.5	10.5		%		100	94 - 108
Percent Moisture	89.5	89.5		%		100	94 - 108

Lab Sample ID: 410-191197-1 DU
Matrix: Solid
Analysis Batch: 560153

Client Sample ID: 241003-IRI-3-TOP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	84		85.2		%		2	5
Percent Moisture	16		14.8	F3	%		9	5

Lab Sample ID: 410-191197-3 DU
Matrix: Solid
Analysis Batch: 560154

Client Sample ID: 241003-IRI-4-BOTTOM
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	81		82.8		%		2	5
Percent Moisture	19		17.2	F3	%		8	5

Lab Sample ID: 410-191197-9 DU
Matrix: Solid
Analysis Batch: 560154

Client Sample ID: 241004-IRI-2-BOTTOM
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	82		81.2		%		0.6	5
Percent Moisture	18		18.8		%		3	5

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-560824/2-A
Matrix: Solid
Analysis Batch: 561272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 560824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160	74	mg/Kg		10/08/24 16:00	10/09/24 12:47	1

Lab Sample ID: LCS 410-560824/1-A
Matrix: Solid
Analysis Batch: 561272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 560824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	422	389		mg/Kg		92	70 - 130

Lab Sample ID: 410-191197-1 MS
Matrix: Solid
Analysis Batch: 561272

Client Sample ID: 241003-IRI-3-TOP
Prep Type: Total/NA
Prep Batch: 560824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	ND	F1	440	236	F1	mg/Kg	☼	54	70 - 130

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 410-191197-3 MS — **Client Sample ID: 241003-IRI-4-BOTTOM**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 561272 — **Prep Batch: 560824**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	ND	F1	418	253	F1	mg/Kg	☼	61	70 - 130

Lab Sample ID: 410-191197-1 DU — **Client Sample ID: 241003-IRI-3-TOP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 561272 — **Prep Batch: 560824**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND	F1	ND		mg/Kg	☼	NC	20

Lab Sample ID: 410-191197-3 DU — **Client Sample ID: 241003-IRI-4-BOTTOM**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 561272 — **Prep Batch: 560824**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND	F1	ND		mg/Kg	☼	NC	20

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 410-564745/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 565799 — **Prep Batch: 564745**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	ND		20	10	mg/Kg		10/21/24 04:00	10/21/24 12:11	1
Total Phosphorus as PO4	ND		61	31	mg/Kg		10/21/24 04:00	10/21/24 12:11	1

Lab Sample ID: LCS 410-564745/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 565799 — **Prep Batch: 564745**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	251	271		mg/Kg		108	85 - 115
Total Phosphorus as PO4	770	830		mg/Kg		108	85 - 115

Method: 4500 NH3 C-2011 - Ammonia

Lab Sample ID: MB 410-560638/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 560653 — **Prep Batch: 560638**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia-N	ND		15	5.0	mg/Kg		10/08/24 09:57	10/08/24 10:17	1

Lab Sample ID: LCS 410-560638/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 560653 — **Prep Batch: 560638**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia-N	200	193		mg/Kg		96	90 - 110

Method: Lloyd Kahn - Organic Carbon, Total (TOC)

Lab Sample ID: MB 410-562633/34
Matrix: Solid
Analysis Batch: 562633

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		300	100	mg/Kg			10/12/24 21:50	1

Lab Sample ID: MB 410-562633/5
Matrix: Solid
Analysis Batch: 562633

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		300	100	mg/Kg			10/12/24 16:50	1

Lab Sample ID: LCS 410-562633/33
Matrix: Solid
Analysis Batch: 562633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	3820	2980		mg/Kg		78	36 - 163

Lab Sample ID: LCS 410-562633/4
Matrix: Solid
Analysis Batch: 562633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	3820	2850		mg/Kg		74	36 - 163

GC/MS Semi VOA

Prep Batch: 561309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	3546	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	3546	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	3546	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	3546	
MB 410-561309/1-A	Method Blank	Total/NA	Solid	3546	
LCS 410-561309/2-A	Lab Control Sample	Total/NA	Solid	3546	
410-191197-8 MS	241004-IRI-1-TOP	Total/NA	Solid	3546	
410-191197-8 MSD	241004-IRI-1-TOP	Total/NA	Solid	3546	

Analysis Batch: 561440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	8270E SIM	561309
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	8270E SIM	561309
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	8270E SIM	561309
MB 410-561309/1-A	Method Blank	Total/NA	Solid	8270E SIM	561309
LCS 410-561309/2-A	Lab Control Sample	Total/NA	Solid	8270E SIM	561309
410-191197-8 MS	241004-IRI-1-TOP	Total/NA	Solid	8270E SIM	561309

Analysis Batch: 561959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	8270E SIM	561309
410-191197-8 MSD	241004-IRI-1-TOP	Total/NA	Solid	8270E SIM	561309

Prep Batch: 566243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	680	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	680	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	680	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	680	
MB 410-566243/1-A	Method Blank	Total/NA	Solid	680	
LCS 410-566243/2-A	Lab Control Sample	Total/NA	Solid	680	
LCSD 410-566243/3-A	Lab Control Sample Dup	Total/NA	Solid	680	

Analysis Batch: 566679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	680	566243
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	680	566243
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	680	566243
MB 410-566243/1-A	Method Blank	Total/NA	Solid	680	566243
LCS 410-566243/2-A	Lab Control Sample	Total/NA	Solid	680	566243
LCSD 410-566243/3-A	Lab Control Sample Dup	Total/NA	Solid	680	566243

Analysis Batch: 567341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	680	566243

GC Semi VOA

Prep Batch: 560349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 560349 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	3546	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	3546	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	3546	
MB 410-560349/1-B	Method Blank	Total/NA	Solid	3546	
LCS 410-560349/2-B	Lab Control Sample	Total/NA	Solid	3546	
410-191197-1 MS	241003-IRI-3-TOP	Total/NA	Solid	3546	
410-191197-1 MSD	241003-IRI-3-TOP	Total/NA	Solid	3546	

Cleanup Batch: 565130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	3640A	560349
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	3640A	560349
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	3640A	560349
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	3640A	560349
MB 410-560349/1-B	Method Blank	Total/NA	Solid	3640A	560349
LCS 410-560349/2-B	Lab Control Sample	Total/NA	Solid	3640A	560349
410-191197-1 MS	241003-IRI-3-TOP	Total/NA	Solid	3640A	560349
410-191197-1 MSD	241003-IRI-3-TOP	Total/NA	Solid	3640A	560349

Analysis Batch: 565454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	8081B	565130
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	8081B	565130
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	8081B	565130
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	8081B	565130
MB 410-560349/1-B	Method Blank	Total/NA	Solid	8081B	565130
LCS 410-560349/2-B	Lab Control Sample	Total/NA	Solid	8081B	565130
410-191197-1 MS	241003-IRI-3-TOP	Total/NA	Solid	8081B	565130
410-191197-1 MSD	241003-IRI-3-TOP	Total/NA	Solid	8081B	565130

HPLC/IC

Leach Batch: 561950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Soluble	Solid	DI Leach	
410-191197-3	241003-IRI-4-BOTTOM	Soluble	Solid	DI Leach	
410-191197-8	241004-IRI-1-TOP	Soluble	Solid	DI Leach	
410-191197-9	241004-IRI-2-BOTTOM	Soluble	Solid	DI Leach	
MB 410-561950/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-561950/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Analysis Batch: 563561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Soluble	Solid	EPA 300.0 R2.1	561950
410-191197-3	241003-IRI-4-BOTTOM	Soluble	Solid	EPA 300.0 R2.1	561950
410-191197-8	241004-IRI-1-TOP	Soluble	Solid	EPA 300.0 R2.1	561950
410-191197-9	241004-IRI-2-BOTTOM	Soluble	Solid	EPA 300.0 R2.1	561950
MB 410-561950/1-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	561950
LCS 410-561950/2-A	Lab Control Sample	Soluble	Solid	EPA 300.0 R2.1	561950

Specialty Organics

Prep Batch: 563559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	1613B	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	1613B	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	1613B	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	1613B	
MB 410-563559/1-A	Method Blank	Total/NA	Solid	1613B	
LCS 410-563559/2-A	Lab Control Sample	Total/NA	Solid	1613B	

Analysis Batch: 565171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-563559/1-A	Method Blank	Total/NA	Solid	1613B	563559
LCS 410-563559/2-A	Lab Control Sample	Total/NA	Solid	1613B	563559

Analysis Batch: 566446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	1613B	563559
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	1613B	563559
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	1613B	563559

Analysis Batch: 567592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	1613B	563559

Metals

Prep Batch: 564378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	3050B	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	3050B	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	3050B	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	3050B	
MB 410-564378/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-564378/2-A	Lab Control Sample	Total/NA	Solid	3050B	
410-191197-3 MS	241003-IRI-4-BOTTOM	Total/NA	Solid	3050B	
410-191197-3 MSD	241003-IRI-4-BOTTOM	Total/NA	Solid	3050B	
410-191197-3 DU	241003-IRI-4-BOTTOM	Total/NA	Solid	3050B	

Prep Batch: 565444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	7471B	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	7471B	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	7471B	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	7471B	
MB 410-565444/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-565444/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 565763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	6010D	564378
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	6010D	564378
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	6010D	564378
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	6010D	564378

Metals (Continued)

Analysis Batch: 565763 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-564378/1-A	Method Blank	Total/NA	Solid	6010D	564378
LCS 410-564378/2-A	Lab Control Sample	Total/NA	Solid	6010D	564378
410-191197-3 MS	241003-IRI-4-BOTTOM	Total/NA	Solid	6010D	564378
410-191197-3 MSD	241003-IRI-4-BOTTOM	Total/NA	Solid	6010D	564378
410-191197-3 DU	241003-IRI-4-BOTTOM	Total/NA	Solid	6010D	564378

Analysis Batch: 566863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	7471B	565444
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	7471B	565444
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	7471B	565444
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	7471B	565444
MB 410-565444/1-A	Method Blank	Total/NA	Solid	7471B	565444
LCS 410-565444/2-A	Lab Control Sample	Total/NA	Solid	7471B	565444

General Chemistry

Analysis Batch: 560036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	Moisture	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	Moisture	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	Moisture	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	Moisture	

Analysis Batch: 560153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	2540G-2015	
LCS 410-560153/1	Lab Control Sample	Total/NA	Solid	2540G-2015	
410-191197-1 DU	241003-IRI-3-TOP	Total/NA	Solid	2540G-2015	

Analysis Batch: 560154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	2540G-2015	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	2540G-2015	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	2540G-2015	
LCS 410-560154/2	Lab Control Sample	Total/NA	Solid	2540G-2015	
410-191197-3 DU	241003-IRI-4-BOTTOM	Total/NA	Solid	2540G-2015	
410-191197-9 DU	241004-IRI-2-BOTTOM	Total/NA	Solid	2540G-2015	

Prep Batch: 560638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	4500 NH3 B-2011	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	4500 NH3 B-2011	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	4500 NH3 B-2011	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	4500 NH3 B-2011	
MB 410-560638/1-A	Method Blank	Total/NA	Solid	4500 NH3 B-2011	
LCS 410-560638/2-A	Lab Control Sample	Total/NA	Solid	4500 NH3 B-2011	

General Chemistry

Analysis Batch: 560653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	4500 NH3 C-2011	560638
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	4500 NH3 C-2011	560638
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	4500 NH3 C-2011	560638
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	4500 NH3 C-2011	560638
MB 410-560638/1-A	Method Blank	Total/NA	Solid	4500 NH3 C-2011	560638
LCS 410-560638/2-A	Lab Control Sample	Total/NA	Solid	4500 NH3 C-2011	560638

Prep Batch: 560824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	351.2	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	351.2	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	351.2	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	351.2	
MB 410-560824/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-560824/1-A	Lab Control Sample	Total/NA	Solid	351.2	
410-191197-1 MS	241003-IRI-3-TOP	Total/NA	Solid	351.2	
410-191197-3 MS	241003-IRI-4-BOTTOM	Total/NA	Solid	351.2	
410-191197-1 DU	241003-IRI-3-TOP	Total/NA	Solid	351.2	
410-191197-3 DU	241003-IRI-4-BOTTOM	Total/NA	Solid	351.2	

Analysis Batch: 561272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	351.2	560824
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	351.2	560824
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	351.2	560824
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	351.2	560824
MB 410-560824/2-A	Method Blank	Total/NA	Solid	351.2	560824
LCS 410-560824/1-A	Lab Control Sample	Total/NA	Solid	351.2	560824
410-191197-1 MS	241003-IRI-3-TOP	Total/NA	Solid	351.2	560824
410-191197-3 MS	241003-IRI-4-BOTTOM	Total/NA	Solid	351.2	560824
410-191197-1 DU	241003-IRI-3-TOP	Total/NA	Solid	351.2	560824
410-191197-3 DU	241003-IRI-4-BOTTOM	Total/NA	Solid	351.2	560824

Analysis Batch: 561350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	Total Nitrogen	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	Total Nitrogen	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	Total Nitrogen	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	Total Nitrogen	

Analysis Batch: 562633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	Lloyd Kahn	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	Lloyd Kahn	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	Lloyd Kahn	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	Lloyd Kahn	
MB 410-562633/34	Method Blank	Total/NA	Solid	Lloyd Kahn	

General Chemistry (Continued)

Analysis Batch: 562633 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-562633/5	Method Blank	Total/NA	Solid	Lloyd Kahn	
LCS 410-562633/33	Lab Control Sample	Total/NA	Solid	Lloyd Kahn	
LCS 410-562633/4	Lab Control Sample	Total/NA	Solid	Lloyd Kahn	

Prep Batch: 564745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	365.1	
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	365.1	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	365.1	
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	365.1	
MB 410-564745/1-A	Method Blank	Total/NA	Solid	365.1	
LCS 410-564745/2-A	Lab Control Sample	Total/NA	Solid	365.1	

Analysis Batch: 565799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	365.1	564745
410-191197-3	241003-IRI-4-BOTTOM	Total/NA	Solid	365.1	564745
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	365.1	564745
410-191197-9	241004-IRI-2-BOTTOM	Total/NA	Solid	365.1	564745
MB 410-564745/1-A	Method Blank	Total/NA	Solid	365.1	564745
LCS 410-564745/2-A	Lab Control Sample	Total/NA	Solid	365.1	564745

Geotechnical

Analysis Batch: 565211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-191197-1	241003-IRI-3-TOP	Total/NA	Solid	D422	
410-191197-2	241004-IRI-3-TOP	Total/NA	Solid	D422	
410-191197-4	2024-IRI-CORE-01_GS	Total/NA	Solid	D422	
410-191197-5	2024-IRI-CORE-02_GS	Total/NA	Solid	D422	
410-191197-6	2024-IRI-CORE-19_GS	Total/NA	Solid	D422	
410-191197-7	2024-IRI-CORE-22_GS	Total/NA	Solid	D422	
410-191197-8	241004-IRI-1-TOP	Total/NA	Solid	D422	

Lab Chronicle

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Client Sample ID: 241003-IRI-3-TOP
Lab Sample ID: 410-191197-1
Date Collected: 10/03/24 19:10
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G-2015		1	560153	M98K	ELLE	10/07/24 11:13 - 10/08/24 06:00 ¹
Total/NA	Analysis	Moisture		1	560036	UVJN	ELLE	10/07/24 08:11
Total/NA	Analysis	Total Nitrogen		1	561350	UKJF	ELLE	10/09/24 15:49
Total/NA	Analysis	D422		1	565211	UYB0	ELLE	10/08/24 15:20

Client Sample ID: 241003-IRI-3-TOP
Lab Sample ID: 410-191197-1
Date Collected: 10/03/24 19:10
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	680			566243	UJSZ	ELLE	10/22/24 09:46
Total/NA	Analysis	680		1	566679	WN7O	ELLE	10/23/24 13:00
Total/NA	Prep	3546			561309	JDJ2	ELLE	10/09/24 15:07
Total/NA	Analysis	8270E SIM		1	561440	UJM0	ELLE	10/10/24 13:24
Total/NA	Prep	3546			560349	MD4W	ELLE	10/07/24 17:40
Total/NA	Cleanup	3640A			565130	U9KU	ELLE	10/18/24 15:21
Total/NA	Analysis	8081B		5	565454	WN7O	ELLE	10/21/24 05:55
Soluble	Leach	DI Leach			561950	PQ9E	ELLE	10/11/24 00:54
Soluble	Analysis	EPA 300.0 R2.1		1	563561	W7FX	ELLE	10/16/24 04:59
Total/NA	Prep	1613B			563559	SA8Q	ELLE	10/15/24 18:42
Total/NA	Analysis	1613B		1	566446	TJK2	ELLE	10/23/24 10:31
Total/NA	Prep	3050B			564378	UAMX	ELLE	10/17/24 22:00
Total/NA	Analysis	6010D		1	565763	MT26	ELLE	10/21/24 09:01
Total/NA	Prep	7471B			565444	UAMX	ELLE	10/20/24 23:35
Total/NA	Analysis	7471B		1	566863	HNC4	ELLE	10/23/24 07:41
Total/NA	Prep	351.2			560824	NLE3	ELLE	10/08/24 16:00 - 10/08/24 19:00 ¹
Total/NA	Analysis	351.2		1	561272	JCG7	ELLE	10/09/24 12:52
Total/NA	Prep	365.1			564745	PQ9E	ELLE	10/21/24 04:00 - 10/21/24 05:00 ¹
Total/NA	Analysis	365.1		1	565799	JCG7	ELLE	10/21/24 12:12
Total/NA	Prep	4500 NH3 B-2011			560638	UML5	ELLE	10/08/24 09:57
Total/NA	Analysis	4500 NH3 C-2011		1	560653	UML5	ELLE	10/08/24 10:17
Total/NA	Analysis	Lloyd Kahn		1	562633	P684	ELLE	10/12/24 17:01

Client Sample ID: 241004-IRI-3-TOP
Lab Sample ID: 410-191197-2
Date Collected: 10/04/24 09:50
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D422		1	565211	UYB0	ELLE	10/08/24 15:20

Lab Chronicle

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Client Sample ID: 241003-IRI-4-BOTTOM
Lab Sample ID: 410-191197-3
Date Collected: 10/03/24 19:15
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G-2015		1	560154	M98K	ELLE	10/07/24 11:14 - 10/08/24 10:10 [1]
Total/NA	Analysis	Moisture		1	560036	UVJN	ELLE	10/07/24 08:11
Total/NA	Analysis	Total Nitrogen		1	561350	UKJF	ELLE	10/09/24 15:49

Client Sample ID: 241003-IRI-4-BOTTOM
Lab Sample ID: 410-191197-3
Date Collected: 10/03/24 19:15
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	680			566243	UJSZ	ELLE	10/22/24 09:46
Total/NA	Analysis	680		1	566679	WN7O	ELLE	10/23/24 13:25
Total/NA	Prep	3546			561309	JDJ2	ELLE	10/09/24 15:07
Total/NA	Analysis	8270E SIM		1	561440	UJM0	ELLE	10/10/24 14:08
Total/NA	Prep	3546			560349	MD4W	ELLE	10/07/24 17:40
Total/NA	Cleanup	3640A			565130	U9KU	ELLE	10/18/24 15:21
Total/NA	Analysis	8081B		20	565454	WN7O	ELLE	10/21/24 06:05
Soluble	Leach	DI Leach			561950	PQ9E	ELLE	10/11/24 00:54
Soluble	Analysis	EPA 300.0 R2.1		1	563561	W7FX	ELLE	10/16/24 05:10
Total/NA	Prep	1613B			563559	SA8Q	ELLE	10/15/24 18:42
Total/NA	Analysis	1613B		1	567592	UC8F	ELLE	10/24/24 23:43
Total/NA	Prep	3050B			564378	UAMX	ELLE	10/17/24 22:00
Total/NA	Analysis	6010D		1	565763	MT26	ELLE	10/21/24 08:34
Total/NA	Prep	7471B			565444	UAMX	ELLE	10/20/24 23:35
Total/NA	Analysis	7471B		1	566863	HNC4	ELLE	10/23/24 07:47
Total/NA	Prep	351.2			560824	NLE3	ELLE	10/08/24 16:00 - 10/08/24 19:00 [1]
Total/NA	Analysis	351.2		1	561272	JCG7	ELLE	10/09/24 13:15
Total/NA	Prep	365.1			564745	PQ9E	ELLE	10/21/24 04:00 - 10/21/24 05:00 [1]
Total/NA	Analysis	365.1		1	565799	JCG7	ELLE	10/21/24 12:13
Total/NA	Prep	4500 NH3 B-2011			560638	UML5	ELLE	10/08/24 09:57
Total/NA	Analysis	4500 NH3 C-2011		1	560653	UML5	ELLE	10/08/24 10:17
Total/NA	Analysis	Lloyd Kahn		1	562633	P684	ELLE	10/12/24 17:42

Client Sample ID: 2024-IRI-CORE-01_GS
Lab Sample ID: 410-191197-4
Date Collected: 10/04/24 11:35
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D422		1	565211	UYB0	ELLE	10/08/24 15:20

Client Sample ID: 2024-IRI-CORE-02_GS
Lab Sample ID: 410-191197-5
Date Collected: 10/04/24 11:30
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D422		1	565211	UYB0	ELLE	10/08/24 15:20

Client Sample ID: 2024-IRI-CORE-19_GS
Lab Sample ID: 410-191197-6
Date Collected: 10/04/24 11:30
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D422		1	565211	UYB0	ELLE	10/08/24 15:20

Client Sample ID: 2024-IRI-CORE-22_GS
Lab Sample ID: 410-191197-7
Date Collected: 10/04/24 11:55
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D422		1	565211	UYB0	ELLE	10/08/24 15:20

Client Sample ID: 241004-IRI-1-TOP
Lab Sample ID: 410-191197-8
Date Collected: 10/04/24 12:05
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G-2015		1	560154	M98K	ELLE	10/07/24 11:14 - 10/08/24 10:10 [1]
Total/NA	Analysis	Moisture		1	560036	UVJN	ELLE	10/07/24 08:11
Total/NA	Analysis	Total Nitrogen		1	561350	UKJF	ELLE	10/09/24 15:49
Total/NA	Analysis	D422		1	565211	UYB0	ELLE	10/08/24 15:20

Client Sample ID: 241004-IRI-1-TOP
Lab Sample ID: 410-191197-8
Date Collected: 10/04/24 12:05
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	680			566243	UJSZ	ELLE	10/22/24 09:46
Total/NA	Analysis	680		1	567341	WN7O	ELLE	10/24/24 11:43
Total/NA	Prep	3546			561309	JDJ2	ELLE	10/09/24 15:07
Total/NA	Analysis	8270E SIM		1	561440	UJM0	ELLE	10/10/24 14:52
Total/NA	Prep	3546			560349	MD4W	ELLE	10/07/24 17:40
Total/NA	Cleanup	3640A			565130	U9KU	ELLE	10/18/24 15:21
Total/NA	Analysis	8081B		10	565454	WN7O	ELLE	10/21/24 06:16
Soluble	Leach	DI Leach			561950	PQ9E	ELLE	10/11/24 00:54
Soluble	Analysis	EPA 300.0 R2.1		1	563561	W7FX	ELLE	10/16/24 05:21
Total/NA	Prep	1613B			563559	SA8Q	ELLE	10/15/24 18:42
Total/NA	Analysis	1613B		1	566446	TJK2	ELLE	10/23/24 12:11
Total/NA	Prep	3050B			564378	UAMX	ELLE	10/17/24 22:00
Total/NA	Analysis	6010D		1	565763	MT26	ELLE	10/21/24 09:04
Total/NA	Prep	7471B			565444	UAMX	ELLE	10/20/24 23:35
Total/NA	Analysis	7471B		1	566863	HNC4	ELLE	10/23/24 07:49
Total/NA	Prep	351.2			560824	NLE3	ELLE	10/08/24 16:00 - 10/08/24 19:00 [1]
Total/NA	Analysis	351.2		1	561272	JCG7	ELLE	10/09/24 13:12
Total/NA	Prep	365.1			564745	PQ9E	ELLE	10/21/24 04:00 - 10/21/24 05:00 [1]
Total/NA	Analysis	365.1		1	565799	JCG7	ELLE	10/21/24 12:13
Total/NA	Prep	4500 NH3 B-2011			560638	UML5	ELLE	10/08/24 09:57
Total/NA	Analysis	4500 NH3 C-2011		1	560653	UML5	ELLE	10/08/24 10:17

Lab Chronicle

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Client Sample ID: 241004-IRI-1-TOP
Lab Sample ID: 410-191197-8
Date Collected: 10/04/24 12:05
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Lloyd Kahn		1	562633	P684	ELLE	10/12/24 17:52

Client Sample ID: 241004-IRI-2-BOTTOM
Lab Sample ID: 410-191197-9
Date Collected: 10/04/24 12:00
Matrix: Solid
Date Received: 10/05/24 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G-2015		1	560154	M98K	ELLE	10/07/24 11:14 - 10/08/24 10:10 [1]
Total/NA	Analysis	Moisture		1	560036	UVJN	ELLE	10/07/24 08:11
Total/NA	Analysis	Total Nitrogen		1	561350	UKJF	ELLE	10/09/24 15:49

Client Sample ID: 241004-IRI-2-BOTTOM
Lab Sample ID: 410-191197-9
Date Collected: 10/04/24 12:00
Matrix: Solid
Date Received: 10/05/24 10:00
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	680			566243	UJSZ	ELLE	10/22/24 09:46
Total/NA	Analysis	680		1	566679	WN7O	ELLE	10/23/24 14:16
Total/NA	Prep	3546			561309	JDJ2	ELLE	10/09/24 15:07
Total/NA	Analysis	8270E SIM		1	561959	UJM0	ELLE	10/11/24 11:33
Total/NA	Prep	3546			560349	MD4W	ELLE	10/07/24 17:40
Total/NA	Cleanup	3640A			565130	U9KU	ELLE	10/18/24 15:21
Total/NA	Analysis	8081B		10	565454	WN7O	ELLE	10/21/24 06:26
Soluble	Leach	DI Leach			561950	PQ9E	ELLE	10/11/24 00:54
Soluble	Analysis	EPA 300.0 R2.1		1	563561	W7FX	ELLE	10/16/24 06:17
Total/NA	Prep	1613B			563559	SA8Q	ELLE	10/15/24 18:42
Total/NA	Analysis	1613B		1	566446	TJK2	ELLE	10/23/24 13:01
Total/NA	Prep	3050B			564378	UAMX	ELLE	10/17/24 22:00
Total/NA	Analysis	6010D		1	565763	MT26	ELLE	10/21/24 09:07
Total/NA	Prep	7471B			565444	UAMX	ELLE	10/20/24 23:35
Total/NA	Analysis	7471B		1	566863	HNC4	ELLE	10/23/24 07:51
Total/NA	Prep	351.2			560824	NLE3	ELLE	10/08/24 16:00 - 10/08/24 19:00 [1]
Total/NA	Analysis	351.2		1	561272	JCG7	ELLE	10/09/24 13:13
Total/NA	Prep	365.1			564745	PQ9E	ELLE	10/21/24 04:00 - 10/21/24 05:00 [1]
Total/NA	Analysis	365.1		1	565799	JCG7	ELLE	10/21/24 12:13
Total/NA	Prep	4500 NH3 B-2011			560638	UML5	ELLE	10/08/24 09:57
Total/NA	Analysis	4500 NH3 C-2011		1	560653	UML5	ELLE	10/08/24 10:17
Total/NA	Analysis	Lloyd Kahn		1	562633	P684	ELLE	10/12/24 18:03

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1613B	1613B	Solid	1,2,3,4,6,7,8-HpCDD
1613B	1613B	Solid	1,2,3,4,6,7,8-HpCDF
1613B	1613B	Solid	1,2,3,4,7,8,9-HpCDF
1613B	1613B	Solid	1,2,3,4,7,8-HxCDD
1613B	1613B	Solid	1,2,3,4,7,8-HxCDF
1613B	1613B	Solid	1,2,3,6,7,8-HxCDD
1613B	1613B	Solid	1,2,3,6,7,8-HxCDF
1613B	1613B	Solid	1,2,3,7,8,9-HxCDD
1613B	1613B	Solid	1,2,3,7,8,9-HxCDF
1613B	1613B	Solid	1,2,3,7,8-PeCDD
1613B	1613B	Solid	1,2,3,7,8-PeCDF
1613B	1613B	Solid	2,3,4,6,7,8-HxCDF
1613B	1613B	Solid	2,3,4,7,8-PeCDF
1613B	1613B	Solid	2,3,7,8-TCDD
1613B	1613B	Solid	2,3,7,8-TCDF
1613B	1613B	Solid	OCDD
1613B	1613B	Solid	OCDF
2540G-2015		Solid	Percent Moisture
2540G-2015		Solid	Total Solids
351.2	351.2	Solid	Total Kjeldahl Nitrogen
365.1	365.1	Solid	Total Phosphorus as P
365.1	365.1	Solid	Total Phosphorus as PO4
4500 NH3 C-2011	4500 NH3 B-2011	Solid	Ammonia-N
6010D	3050B	Solid	Aluminum
6010D	3050B	Solid	Antimony
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Beryllium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Calcium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Cobalt
6010D	3050B	Solid	Copper
6010D	3050B	Solid	Iron
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Magnesium
6010D	3050B	Solid	Manganese
6010D	3050B	Solid	Nickel
6010D	3050B	Solid	Potassium
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
6010D	3050B	Solid	Sodium
6010D	3050B	Solid	Thallium
6010D	3050B	Solid	Vanadium
6010D	3050B	Solid	Zinc

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
680	680	Solid	DCB Decachlorobiphenyl
680	680	Solid	Total Dichlorobiphenyls
680	680	Solid	Total Heptachlorobiphenyls
680	680	Solid	Total Hexachlorobiphenyls
680	680	Solid	Total Monochlorobiphenyls
680	680	Solid	Total Nonachlorobiphenyls
680	680	Solid	Total Octachlorobiphenyls
680	680	Solid	Total Pentachlorobiphenyls
680	680	Solid	Total Tetrachlorobiphenyls
680	680	Solid	Total Trichlorobiphenyls
7471B	7471B	Solid	Mercury
8081B	3546	Solid	Aldrin (1C)
8081B	3546	Solid	alpha-BHC (1C)
8081B	3546	Solid	alpha-Chlordane (1C)
8081B	3546	Solid	alpha-Chlordane (2C)
8081B	3546	Solid	beta-BHC (2C)
8081B	3546	Solid	delta-BHC (1C)
8081B	3546	Solid	Dieldrin (1C)
8081B	3546	Solid	Endosulfan I (1C)
8081B	3546	Solid	Endosulfan I (2C)
8081B	3546	Solid	Endosulfan II (1C)
8081B	3546	Solid	Endosulfan sulfate (1C)
8081B	3546	Solid	Endrin (1C)
8081B	3546	Solid	Endrin aldehyde (1C)
8081B	3546	Solid	Endrin ketone (1C)
8081B	3546	Solid	gamma-BHC (Lindane) (1C)
8081B	3546	Solid	gamma-Chlordane (1C)
8081B	3546	Solid	Heptachlor (1C)
8081B	3546	Solid	Heptachlor epoxide (1C)
8081B	3546	Solid	Heptachlor epoxide (2C)
8081B	3546	Solid	Methoxychlor (1C)
8081B	3546	Solid	p,p'-DDD (1C)
8081B	3546	Solid	p,p'-DDE (1C)
8081B	3546	Solid	p,p'-DDT (1C)
8081B	3546	Solid	Toxaphene (1C)
8270E SIM	3546	Solid	2-Methylnaphthalene
8270E SIM	3546	Solid	Acenaphthene
8270E SIM	3546	Solid	Acenaphthylene
8270E SIM	3546	Solid	Anthracene
8270E SIM	3546	Solid	Benzo[a]anthracene
8270E SIM	3546	Solid	Benzo[a]pyrene
8270E SIM	3546	Solid	Benzo[b]fluoranthene
8270E SIM	3546	Solid	Benzo[e]pyrene
8270E SIM	3546	Solid	Benzo[g,h,i]perylene
8270E SIM	3546	Solid	Benzo[k]fluoranthene
8270E SIM	3546	Solid	C1-Benzo(a)anthracenes/Chrysenes
8270E SIM	3546	Solid	C1-Fluoranthene/Pyrenes

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270E SIM	3546	Solid	C1-Fluorenes
8270E SIM	3546	Solid	C1-Naphthalenes
8270E SIM	3546	Solid	C1-Phenanthrenes/Anthracenes
8270E SIM	3546	Solid	C2-Benzo(a)anthracenes/Chrysenes
8270E SIM	3546	Solid	C2-Fluoranthenes/Pyrene
8270E SIM	3546	Solid	C2-Fluorenes
8270E SIM	3546	Solid	C2-Naphthalenes
8270E SIM	3546	Solid	C2-Phenanthrenes/Anthracenes
8270E SIM	3546	Solid	C3-Benzo(a)Anthracenes/Chrysenes
8270E SIM	3546	Solid	C3-Fluoranthenes/Pyrene
8270E SIM	3546	Solid	C3-Fluorenes
8270E SIM	3546	Solid	C3-Naphthalenes
8270E SIM	3546	Solid	C3-Phenanthrenes/Anthracenes
8270E SIM	3546	Solid	C4-Benzo(a)anthracenes/Chrysenes
8270E SIM	3546	Solid	C4-Naphthalenes
8270E SIM	3546	Solid	C4-Phenanthrenes/Anthracenes
8270E SIM	3546	Solid	Chrysene
8270E SIM	3546	Solid	Dibenz(a,h)anthracene
8270E SIM	3546	Solid	Dibenzofuran
8270E SIM	3546	Solid	Fluoranthene
8270E SIM	3546	Solid	Fluorene
8270E SIM	3546	Solid	Indeno[1,2,3-cd]pyrene
8270E SIM	3546	Solid	Naphthalene
8270E SIM	3546	Solid	Perylene
8270E SIM	3546	Solid	Phenanthrene
8270E SIM	3546	Solid	Pyrene
D422		Solid	0.075 mm (Sieve Size #200)
D422		Solid	0.15 mm (Sieve Size #100)
D422		Solid	0.18 mm (Sieve Size #80)
D422		Solid	0.25 mm (Sieve Size #60)
D422		Solid	0.425 mm (Sieve Size #40)
D422		Solid	0.85 mm (Sieve Size #20)
D422		Solid	1.4 um (Hydrometer Reading 7)
D422		Solid	13.4 um (Hydrometer Reading 3)
D422		Solid	19 mm (Sieve Size 0.75 inch)
D422		Solid	2 mm (Sieve Size #10)
D422		Solid	22.9 um (Hydrometer Reading 2)
D422		Solid	25 mm (Sieve Size 1 inch)
D422		Solid	3.3 um (Hydrometer Reading 6)
D422		Solid	36.1 um (Hydrometer Reading 1)
D422		Solid	37.5 mm (Sieve Size 1.5 inch)
D422		Solid	4.75 mm (Sieve Size #4)
D422		Solid	50 mm (Sieve Size 2 inch)
D422		Solid	6.7 um (Hydrometer Reading 5)
D422		Solid	9.5 mm (Sieve Size 0.375 inch)
D422		Solid	9.8 um (Hydrometer Reading 4)
D422		Solid	Clay

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
D422		Solid	Coarse Sand
D422		Solid	Fine Sand
D422		Solid	Gravel
D422		Solid	Medium Sand
D422		Solid	Sand
D422		Solid	Silt
EPA 300.0 R2.1		Solid	Nitrate as N
EPA 300.0 R2.1		Solid	Nitrate Nitrite as N
EPA 300.0 R2.1		Solid	Nitrite as N
Lloyd Kahn		Solid	Total Organic Carbon
Moisture		Solid	Percent Moisture
Total Nitrogen		Solid	Nitrogen, Total

Method Summary

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Method	Method Description	Protocol	Laboratory
680	Polychlorinated Biphenyls by GCMS	EPA	ELLE
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
8081B	Organochlorine Pesticides (GC)	SW846	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE
1613B	Dioxins and Furans (HRGC/HRMS)	EPA	ELLE
6010D	Metals (ICP)	SW846	ELLE
7471B	Mercury (CVAA)	SW846	ELLE
2540G-2015	Total, Fixed, and Volatile Solids	SM	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
365.1	Phosphorus, Total	EPA	ELLE
4500 NH3 C-2011	Ammonia	SM	ELLE
Lloyd Kahn	Organic Carbon, Total (TOC)	EPA	ELLE
Moisture	Percent Moisture	EPA	ELLE
Total Nitrogen	Nitrogen, Total	EPA	ELLE
D422	Grain Size	ASTM	ELLE
1613B	Soxhlet Extraction	EPA	ELLE
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
3546	Microwave Extraction	SW846	ELLE
3640A	Gel-Permeation Cleanup	SW846	ELLE
365.1	Sample Digestion for Total Phosphorus	MCAWW	ELLE
4500 NH3 B-2011	Ammonia, Distillation	SM	ELLE
680	Polychlorinated Biphenyls by GCMS Preparation for Solids	EPA	ELLE
7471B	Preparation, Mercury	SW846	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	ELLE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Anchor QEA LLC
Job ID: 410-191197-1
Project/Site: DNREC Sediments Indian River Inlet

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-191197-1	241003-IRI-3-TOP	Solid	10/03/24 19:10	10/05/24 10:00
410-191197-2	241004-IRI-3-TOP	Solid	10/04/24 09:50	10/05/24 10:00
410-191197-3	241003-IRI-4-BOTTOM	Solid	10/03/24 19:15	10/05/24 10:00
410-191197-4	2024-IRI-CORE-01_GS	Solid	10/04/24 11:35	10/05/24 10:00
410-191197-5	2024-IRI-CORE-02_GS	Solid	10/04/24 11:30	10/05/24 10:00
410-191197-6	2024-IRI-CORE-19_GS	Solid	10/04/24 11:30	10/05/24 10:00
410-191197-7	2024-IRI-CORE-22_GS	Solid	10/04/24 11:55	10/05/24 10:00
410-191197-8	241004-IRI-1-TOP	Solid	10/04/24 12:05	10/05/24 10:00
410-191197-9	241004-IRI-2-BOTTOM	Solid	10/04/24 12:00	10/05/24 10:00

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Cu

410-191197 Chain of Custody

eurofins Environment Testing

Client Information	Sampler: ZB, LF, KH, VW	Carrier Tracking No(s):	COC No: 410-129955-36634.1
Client Contact: Tyler Howe	Phone: (302) 521-0061	State of Origin:	Page: Page 1 of 1
Company: Anchor QEA LLC	PWSID:	Analysis Requested	Job #:
Address: 290 Elwood Davis Road Suite 340	Due Date Requested:		Preservation Codes: N - None
City: Liverpool	TAT Requested (days): RUSH		
State, Zip: NY, 13088	Compliance Project: Δ Yes Δ No		
Phone: 315-883-8928(Tel)	PO #: 241468-01.01		
Email: thowe@anchorqea.com	WO #:		Other:
Project Name: DNREC Sediments Indian River Inlet	Project #: 41020899		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	D422 - Routine Grainsize	1613B, 2540G, 300_ORGFMS, 351.2, 365.1, 6020B, 680, 7471B, 8081B, 8270E_SIM_ALK, Lloyd_Kahn_Mod,	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N		
241003-1R1-3-TOP	10/3/24	19:10	C	Solid			N	N	4	3x - 4 oz. Jars 1x - 16 oz. jars
241004-1R1-3-TOP	10/4/24	09:50	C	Solid			N		1	
241003-1R1-4-BOTTOM	10/3/24	19:15	C	Solid				N	3	
2024-1R1-CORE-01_GS	10/4/24	11:35	G	Solid			N		1	
2024-1R1-CORE-02_GS	10/4/24	11:30	G	Solid			N		1	
2024-1R1-CORE-19_GS	10/4/24	11:30	G	Solid			N		1	
2024-1R1-CORE-22_GS	10/4/24	11:55	G	Solid			N		1	
241004-1R1-1-TOP	10/4/24	12:05	C	Solid			N	N	4	3x - 4oz. Jars 1x - 16 oz. Jar
241004-1R1-2-BOTTOM	10/4/24	12:00	C	Solid				N	3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Zach Burcham	10/4/24 @ 13:00	AQ			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10/5/24 10:00	Company ELLE

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: R 3.3 - C 2.9

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Anchor QEA LLC

Job Number: 410-191197-1

Login Number: 191197

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Ballard, Megan

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	