Appendix F
Laboratory Analytical Reports

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4157-1
Client Project/Site: I295/Rt 37 - Johnston, RI
Revision: 1

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
5/23/2022 2:36:34 PM

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Definitions/Glossary

Client: AECOM
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Qualifiers

GC/MS VOA

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.

GC Semi VOA

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.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

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)
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Narrative

Job Narrative
620-4157-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 5/5/2022. The report (revision 1) is being revised due to: Report revised to include Vanadium per request of the client..

Receipt
The samples were received on 4/26/2022 3:45 PM. 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 was 3.8º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The VOC preservative codes are not listed on the CoC

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) analyzed in 620-10289 was outside the method criteria for the following analyte(s): Benzidine. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. 2,4-Dinitrophenol, Hexachlorobutadiene, Hexachloroethane, N-Nitrosodimethylamine, and Pentachloronitrobenzene.

Methods 8270, 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 620-10219 and analytical batch 620-10289 recovered outside control limits for the following analyte(s): 4-Chloroaniline, Benzidine, Pyridine and Benzoic acid have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Methods 8270, 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 620-10219 and analytical batch 620-10289 recovered outside control limits for the following analytes: bis (2-chloroisopropyl) ether, Naphthalene and Pyridine.

Methods 8270, 8270D: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. 4-Nitroaniline, Aniline, and Benzidine. Any reportable values should be considered Estimates.

Method 8270D: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Aniline, Benzidine and Nitrobenzene.

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

GC Semi VOA
Method 8081B: The continuing calibration verification (CCV) associated with batch 620-10488 recovered outside acceptance criteria on the primary column, low biased, for 4,4'-DDT and Methoxychlor. The analytes were within acceptance criteria on the confirmation column, and

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Laboratory: Eurofins New England (Continued)

reported as primary.

Method 8081B: The continuing calibration verification (CCV) associated with batch 620-10488 recovered outside acceptance criteria, low biased, for 4,4'-DDT and Methoxychlor. These analytes recovered low as they are active compounds. The target analytes were not affected.

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

Metals
Method 6010D: The continuing calibration verification (CCV) associated with batch 620-10195 recovered above the upper control limit for silver. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TP-2 (6-7) (620-4157-1), TP-2 (0-6) (620-4157-2), TP-3 (0-6) (620-4157-3), TP-3 (6-7) (620-4157-4), TP-1 (0-6) (620-4157-5), TP-1 (6-7) (620-4157-6), TP-4 (0-6) (620-4157-7) and TP-4 (6-7) (620-4157-8).

Method 6010D: 4157-1 and 4157-1 duplicate RPD high for copper, 4157-1 MS and MSD passed so data is acceptable.
TP-2 (6-7) (620-4157-1)

Method 6010D: The continuing calibration verification (CCV) associated with batch 620-10247 recovered above the upper control limit for silver. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TP-5 (0-6) (620-4157-9) and TP-5 (6-7) (620-4157-10).

Methods 7471A, 7471B: 4157-1 MSD low for mercury, sample data is acceptable since the other matrix spikes in this set passed.
TP-2 (6-7) (620-4157-1)

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

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

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-2 (6-7) — Lab Sample ID: 620-4157-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	23.7		23.1		ug/Kg	1	☼	8260C	Total/NA
TEPH (C9-C36)	487		24.4		mg/Kg	1	☼	8100	Total/NA
Beryllium	1.40		0.930		mg/Kg	1	☼	6010D	Total/NA
Barium	32.6		1.86		mg/Kg	1	☼	6010D	Total/NA
Chromium	10.8		1.86		mg/Kg	1	☼	6010D	Total/NA
Copper	9.29		1.86		mg/Kg	1	☼	6010D	Total/NA
Lead	8.94		2.79		mg/Kg	1	☼	6010D	Total/NA
Nickel	6.03		1.86		mg/Kg	1	☼	6010D	Total/NA
Zinc	29.6		5.58		mg/Kg	1	☼	6010D	Total/NA
Manganese	82.3		1.86		mg/Kg	1	☼	6010D	Total/NA
Vanadium	10.2		2.79		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP-2 (0-6) — Lab Sample ID: 620-4157-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	22.1		15.8		ug/Kg	1	☼	8260C	Total/NA
TEPH (C9-C36)	435		39.0		mg/Kg	1	☼	8100	Total/NA
Beryllium	1.42		0.776		mg/Kg	1	☼	6010D	Total/NA
Barium	27.7		1.55		mg/Kg	1	☼	6010D	Total/NA
Chromium	13.2		1.55		mg/Kg	1	☼	6010D	Total/NA
Copper	60.9		1.55		mg/Kg	1	☼	6010D	Total/NA
Lead	14.6		2.33		mg/Kg	1	☼	6010D	Total/NA
Nickel	8.37		1.55		mg/Kg	1	☼	6010D	Total/NA
Zinc	60.7		4.66		mg/Kg	1	☼	6010D	Total/NA
Manganese	93.0		1.55		mg/Kg	1	☼	6010D	Total/NA
Vanadium	14.6		2.33		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP-3 (0-6) — Lab Sample ID: 620-4157-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	97.7		75.4		ug/Kg	1	☼	8270D	Total/NA
Anthracene	128		75.4		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	275		75.4		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	211		75.4		ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	218		75.4		ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	124		75.4		ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	212		75.4		ug/Kg	1	☼	8270D	Total/NA
Chrysene	260		75.4		ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	555		75.4		ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	116		75.4		ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	433		75.4		ug/Kg	1	☼	8270D	Total/NA
Pyrene	418		75.4		ug/Kg	1	☼	8270D	Total/NA
PCB-1254	135		24.9		ug/Kg	1	☼	8082A	Total/NA
TEPH (C9-C36)	185		15.5		mg/Kg	1	☼	8100	Total/NA
Arsenic	1.99		1.82		mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.772		0.605		mg/Kg	1	☼	6010D	Total/NA
Barium	43.7		1.21		mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.647		0.605		mg/Kg	1	☼	6010D	Total/NA
Chromium	11.8		1.21		mg/Kg	1	☼	6010D	Total/NA
Copper	508		1.21		mg/Kg	1	☼	6010D	Total/NA
Lead	68.0		1.82		mg/Kg	1	☼	6010D	Total/NA
Nickel	12.0		1.21		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-3 (0-6) (Continued) — Lab Sample ID: 620-4157-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Zinc	261		3.63		mg/Kg	1	☼	6010D	Total/NA
Manganese	141		1.21		mg/Kg	1	☼	6010D	Total/NA
Vanadium	17.9		1.82		mg/Kg	1	☼	6010D	Total/NA
Mercury	0.116		0.0552		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TP-3 (6-7) — Lab Sample ID: 620-4157-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	324		318		ug/Kg	4	☼	8270D	Total/NA
Fluoranthene	686		318		ug/Kg	4	☼	8270D	Total/NA
Phenanthrene	437		318		ug/Kg	4	☼	8270D	Total/NA
Pyrene	534		318		ug/Kg	4	☼	8270D	Total/NA
PCB-1254	93.1		24.3		ug/Kg	1	☼	8082A	Total/NA
TEPH (C9-C36)	165		16.5		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.00		1.82		mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.641		0.607		mg/Kg	1	☼	6010D	Total/NA
Barium	38.7		1.21		mg/Kg	1	☼	6010D	Total/NA
Cadmium	1.44		0.607		mg/Kg	1	☼	6010D	Total/NA
Chromium	11.3		1.21		mg/Kg	1	☼	6010D	Total/NA
Copper	1100		1.21		mg/Kg	1	☼	6010D	Total/NA
Lead	151		1.82		mg/Kg	1	☼	6010D	Total/NA
Nickel	16.3		1.21		mg/Kg	1	☼	6010D	Total/NA
Zinc	540		3.64		mg/Kg	1	☼	6010D	Total/NA
Manganese	86.4		1.21		mg/Kg	1	☼	6010D	Total/NA
Vanadium	15.7		1.82		mg/Kg	1	☼	6010D	Total/NA
Mercury	0.170		0.0569		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TP-1 (0-6) — Lab Sample ID: 620-4157-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	139		16.1		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.25		1.85		mg/Kg	1	☼	6010D	Total/NA
Barium	23.3		1.24		mg/Kg	1	☼	6010D	Total/NA
Chromium	9.02		1.24		mg/Kg	1	☼	6010D	Total/NA
Copper	8.13		1.24		mg/Kg	1	☼	6010D	Total/NA
Lead	6.85		1.85		mg/Kg	1	☼	6010D	Total/NA
Nickel	6.72		1.24		mg/Kg	1	☼	6010D	Total/NA
Zinc	24.2		3.71		mg/Kg	1	☼	6010D	Total/NA
Manganese	130		1.24		mg/Kg	1	☼	6010D	Total/NA
Vanadium	12.8		1.85		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP-1 (6-7) — Lab Sample ID: 620-4157-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	375		71.3		mg/Kg	4	☼	8100	Total/NA
Arsenic	2.33		2.07		mg/Kg	1	☼	6010D	Total/NA
Beryllium	1.40		0.689		mg/Kg	1	☼	6010D	Total/NA
Barium	30.1		1.38		mg/Kg	1	☼	6010D	Total/NA
Chromium	11.3		1.38		mg/Kg	1	☼	6010D	Total/NA
Copper	10.9		1.38		mg/Kg	1	☼	6010D	Total/NA
Lead	7.50		2.07		mg/Kg	1	☼	6010D	Total/NA
Nickel	8.41		1.38		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-1 (6-7) (Continued) — Lab Sample ID: 620-4157-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Zinc	38.4		4.14		mg/Kg	1	☼	6010D	Total/NA
Manganese	90.4		1.38		mg/Kg	1	☼	6010D	Total/NA
Vanadium	12.9		2.07		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP-4 (0-6) — Lab Sample ID: 620-4157-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	9.51		6.94		ug/Kg	1	☼	8260C	Total/NA
TEPH (C9-C36)	62.3		13.4		mg/Kg	1	☼	8100	Total/NA
Arsenic	1.76		1.57		mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.696		0.524		mg/Kg	1	☼	6010D	Total/NA
Barium	26.2		1.05		mg/Kg	1	☼	6010D	Total/NA
Chromium	9.86		1.05		mg/Kg	1	☼	6010D	Total/NA
Copper	9.88		1.05		mg/Kg	1	☼	6010D	Total/NA
Lead	9.84		1.57		mg/Kg	1	☼	6010D	Total/NA
Nickel	7.09		1.05		mg/Kg	1	☼	6010D	Total/NA
Zinc	31.0		3.14		mg/Kg	1	☼	6010D	Total/NA
Manganese	141		1.05		mg/Kg	1	☼	6010D	Total/NA
Vanadium	12.3		1.57		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP-4 (6-7) — Lab Sample ID: 620-4157-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	11.9		7.12		ug/Kg	1	☼	8260C	Total/NA
Fluoranthene	69.4		66.4		ug/Kg	1	☼	8270D	Total/NA
TEPH (C9-C36)	44.1		13.7		mg/Kg	1	☼	8100	Total/NA
Beryllium	0.644		0.541		mg/Kg	1	☼	6010D	Total/NA
Barium	22.2		1.08		mg/Kg	1	☼	6010D	Total/NA
Chromium	6.96		1.08		mg/Kg	1	☼	6010D	Total/NA
Copper	8.41		1.08		mg/Kg	1	☼	6010D	Total/NA
Lead	8.05		1.62		mg/Kg	1	☼	6010D	Total/NA
Nickel	5.30		1.08		mg/Kg	1	☼	6010D	Total/NA
Zinc	29.6		3.25		mg/Kg	1	☼	6010D	Total/NA
Manganese	122		1.08		mg/Kg	1	☼	6010D	Total/NA
Vanadium	9.85		1.62		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP-5 (0-6) — Lab Sample ID: 620-4157-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Acetone	157		41.5		ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	19.0		8.30		ug/Kg	1	☼	8260C	Total/NA
TEPH (C9-C36)	48.5		13.1		mg/Kg	1	☼	8100	Total/NA
Barium	17.1		5.26		mg/Kg	5	☼	6010D	Total/NA
Lead	19.4		3.15		mg/Kg	2	☼	6010D	Total/NA
Nickel	2.22		2.10		mg/Kg	2	☼	6010D	Total/NA
Zinc	61.0		6.31		mg/Kg	2	☼	6010D	Total/NA
Manganese	216		5.26		mg/Kg	5	☼	6010D	Total/NA

Client Sample ID: TP-5 (6-7) — Lab Sample ID: 620-4157-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Acetone	47.2		38.8		ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	15.2		7.77		ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-5 (6-7) (Continued)
Lab Sample ID: 620-4157-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	49.9		13.7		mg/Kg	1	☼	8100	Total/NA
Barium	16.1		5.40		mg/Kg	5	☼	6010D	Total/NA
Lead	25.2		8.10		mg/Kg	5	☼	6010D	Total/NA
Zinc	103		16.2		mg/Kg	5	☼	6010D	Total/NA
Manganese	310		5.40		mg/Kg	5	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-2 (6-7)
Date Collected: 04/25/22 08:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-1
Matrix: Solid
Percent Solids: 52.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Acetone	ND		115		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Acrylonitrile	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Benzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Bromobenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Bromochloromethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Bromodichloromethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Bromoform	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Bromomethane	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
2-Butanone (MEK)	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
n-Butylbenzene	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
sec-Butylbenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
tert-Butylbenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Carbon disulfide	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Carbon tetrachloride	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Chlorobenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Chloroethane	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Chloroform	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Chloromethane	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
2-Chlorotoluene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
4-Chlorotoluene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2-Dibromo-3-Chloropropane	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Dibromochloromethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2-Dibromoethane (EDB)	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Dibromomethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2-Dichlorobenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,3-Dichlorobenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,4-Dichlorobenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Dichlorodifluoromethane (Freon 12)	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,1-Dichloroethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2-Dichloroethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,1-Dichloroethene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
cis-1,2-Dichloroethene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
trans-1,2-Dichloroethene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2-Dichloropropane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,3-Dichloropropane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
2,2-Dichloropropane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,1-Dichloropropene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
cis-1,3-Dichloropropene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
trans-1,3-Dichloropropene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Ethylbenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Hexachlorobutadiene	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
2-Hexanone (MBK)	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Isopropylbenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
4-Isopropyltoluene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Methyl tert-butyl ether	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
4-Methyl-2-pentanone (MIBK)	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Methylene Chloride	**23.7**		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Naphthalene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1

Client Sample ID: TP-2 (6-7)
Date Collected: 04/25/22 08:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-1
Matrix: Solid
Percent Solids: 52.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Styrene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,1,1,2-Tetrachloroethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,1,2,2-Tetrachloroethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Tetrachloroethene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Toluene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2,3-Trichlorobenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2,4-Trichlorobenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,3,5-Trichlorobenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,1,1-Trichloroethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,1,2-Trichloroethane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Trichloroethene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Trichlorofluoromethane (Freon 11)	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2,3-Trichloropropane	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,2,4-Trimethylbenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,3,5-Trimethylbenzene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Vinyl chloride	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
m,p-Xylene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
o-Xylene	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Tetrahydrofuran	ND		23.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Ethyl ether	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Tert-amyl methyl ether	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Ethyl tert-butyl ether	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
di-Isopropyl ether	ND		11.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
tert-Butanol	ND		231		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
1,4-Dioxane	ND		231		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
trans-1,4-Dichloro-2-butene	ND		57.7		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1
Ethanol	ND		2310		ug/Kg	☼	05/03/22 12:41	05/03/22 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:04*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:04*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:04*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
1,2,4-Trichlorobenzene	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
1,2-Dichlorobenzene	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
1,3-Dichlorobenzene	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
1,4-Dichlorobenzene	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
1-Methylnaphthalene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2,4,5-Trichlorophenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2,4,6-Trichlorophenol	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2,4-Dichlorophenol	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2,4-Dimethylphenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2,4-Dinitrophenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2,4-Dinitrotoluene	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2,6-Dinitrotoluene	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-2 (6-7)
Date Collected: 04/25/22 08:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-1
Matrix: Solid
Percent Solids: 52.1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2-Chlorophenol	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2-Methylnaphthalene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2-Methylphenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2-Nitroaniline	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
2-Nitrophenol	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
3 & 4 Methylphenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
3,3'-Dichlorobenzidine	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
3-Nitroaniline	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
4,6-Dinitro-2-methylphenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
4-Bromophenyl phenyl ether	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
4-Chloro-3-methylphenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
4-Chloroaniline	ND	*-	2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
4-Chlorophenyl phenyl ether	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
4-Nitroaniline	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
4-Nitrophenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Acenaphthene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Acenaphthylene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Aniline	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Anthracene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Azobenzene/Diphenyldiazene	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Benzidine	ND	*-	9680		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Benzo[a]anthracene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Benzo[a]pyrene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Benzo[b]fluoranthene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Benzo[g,h,i]perylene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Benzo[k]fluoranthene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Benzoic acid	ND	*-	4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Benzyl alcohol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Bis(2-chloroethoxy)methane	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Bis(2-chloroethyl)ether	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
bis (2-chloroisopropyl) ether	ND	*1	2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Bis(2-ethylhexyl) phthalate	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Butyl benzyl phthalate	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Carbazole	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Chrysene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Dibenz(a,h)anthracene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Dibenzofuran	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Diethyl phthalate	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Dimethyl phthalate	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Di-n-butyl phthalate	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Di-n-octyl phthalate	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Fluoranthene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Fluorene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Hexachlorobenzene	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Hexachlorobutadiene	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Hexachlorocyclopentadiene	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Hexachloroethane	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Indeno[1,2,3-cd]pyrene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4

Client Sample ID: TP-2 (6-7)
Date Collected: 04/25/22 08:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-1
Matrix: Solid
Percent Solids: 52.1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Naphthalene	ND	*1	978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Nitrobenzene	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
N-Nitrosodimethylamine	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
N-Nitrosodi-n-propylamine	ND		2450		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
N-Nitrosodiphenylamine	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Pentachloronitrobenzene	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Pentachlorophenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Phenanthrene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Phenol	ND		4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Pyrene	ND		978		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4
Pyridine	ND	*-	4840		ug/Kg	☼	04/27/22 16:35	05/02/22 16:56	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*30 - 130*	*04/27/22 16:35*	*05/02/22 16:56*	*4*
2-Fluorophenol (Surr)	*55*		*15 - 110*	*04/27/22 16:35*	*05/02/22 16:56*	*4*
Nitrobenzene-d5 (Surr)	*40*		*30 - 130*	*04/27/22 16:35*	*05/02/22 16:56*	*4*
Phenol-d5 (Surr)	*48*		*15 - 110*	*04/27/22 16:35*	*05/02/22 16:56*	*4*
2,4,6-Tribromophenol (Surr)	*60*		*15 - 110*	*04/27/22 16:35*	*05/02/22 16:56*	*4*
Terphenyl-d14 (Surr)	*48*		*30 - 130*	*04/27/22 16:35*	*05/02/22 16:56*	*4*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
beta-BHC	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
delta-BHC	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
gamma-BHC (Lindane)	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Heptachlor	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Aldrin	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Heptachlor epoxide	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Endosulfan I	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Dieldrin	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
4,4'-DDE	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Endrin	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Endosulfan II	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
4,4'-DDD	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Endosulfan sulfate	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
4,4'-DDT	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Methoxychlor	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Endrin ketone	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Endrin aldehyde	ND		15.3		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
cis-Chlordane	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
trans-Chlordane	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Toxaphene	ND		192		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1
Alachlor	ND		9.58		ug/Kg	☼	05/02/22 16:01	05/05/22 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*31*		*30 - 150*	*05/02/22 16:01*	*05/05/22 15:02*	*1*
Tetrachloro-m-xylene	*46*		*30 - 150*	*05/02/22 16:01*	*05/05/22 15:02*	*1*
DCB Decachlorobiphenyl (Surr)	*40*		*30 - 150*	*05/02/22 16:01*	*05/05/22 15:02*	*1*

Client Sample ID: TP-2 (6-7)
Date Collected: 04/25/22 08:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-1
Matrix: Solid
Percent Solids: 52.1

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*32*		*30 - 150*	*05/02/22 16:01*	*05/05/22 15:02*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1
PCB-1221	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1
PCB-1232	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1
PCB-1242	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1
PCB-1248	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1
PCB-1254	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1
PCB-1260	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1
PCB-1262	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1
PCB-1268	ND		38.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*45*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:00*	*1*
Tetrachloro-m-xylene	*43*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:00*	*1*
DCB Decachlorobiphenyl (Surr)	*40*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:00*	*1*
DCB Decachlorobiphenyl (Surr)	*39*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:00*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**487**		24.4	mg/Kg	☼	04/28/22 14:01	04/29/22 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*76*		*40 - 140*	*04/28/22 14:01*	*04/29/22 22:36*	*1*
o-Terphenyl (Surr)	*86*		*40 - 140*	*04/28/22 14:01*	*04/29/22 22:36*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.30	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Arsenic	ND		2.79	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Beryllium	**1.40**		0.930	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Barium	**32.6**		1.86	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Cadmium	ND		0.930	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Chromium	**10.8**		1.86	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Copper	**9.29**		1.86	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Lead	**8.94**		2.79	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Nickel	**6.03**		1.86	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Selenium	ND		2.79	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Silver	ND	^+	2.79	mg/Kg	☼	04/27/22 09:16	04/27/22 21:30	1
Thallium	ND		5.58	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Zinc	**29.6**		5.58	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Manganese	**82.3**		1.86	mg/Kg	☼	04/27/22 09:16	04/28/22 11:50	1
Vanadium	**10.2**		2.79	mg/Kg	☼	04/27/22 09:16	04/27/22 21:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F1	0.0892	mg/Kg	☼	04/27/22 09:21	04/27/22 18:13	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-2 (6-7)

Date Collected: 04/25/22 08:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-1

Matrix: Solid
Percent Solids: 52.1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	47.9		0.1		%			04/27/22 15:01	1
Percent Solids	52.1		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-2 (0-6)
Date Collected: 04/25/22 08:20
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-2
Matrix: Solid
Percent Solids: 61.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Acetone	ND		78.9		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Acrylonitrile	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Benzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Bromobenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Bromochloromethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Bromodichloromethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Bromoform	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Bromomethane	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
2-Butanone (MEK)	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
n-Butylbenzene	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
sec-Butylbenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
tert-Butylbenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Carbon disulfide	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Carbon tetrachloride	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Chlorobenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Chloroethane	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Chloroform	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Chloromethane	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
2-Chlorotoluene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
4-Chlorotoluene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2-Dibromo-3-Chloropropane	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Dibromochloromethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2-Dibromoethane (EDB)	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Dibromomethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2-Dichlorobenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,3-Dichlorobenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,4-Dichlorobenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Dichlorodifluoromethane (Freon 12)	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,1-Dichloroethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2-Dichloroethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,1-Dichloroethene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
cis-1,2-Dichloroethene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
trans-1,2-Dichloroethene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2-Dichloropropane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,3-Dichloropropane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
2,2-Dichloropropane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,1-Dichloropropene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
cis-1,3-Dichloropropene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
trans-1,3-Dichloropropene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Ethylbenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Hexachlorobutadiene	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
2-Hexanone (MBK)	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Isopropylbenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
4-Isopropyltoluene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Methyl tert-butyl ether	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
4-Methyl-2-pentanone (MIBK)	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Methylene Chloride	**22.1**		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Naphthalene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1

Client Sample ID: TP-2 (0-6)
Date Collected: 04/25/22 08:20
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-2
Matrix: Solid
Percent Solids: 61.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Styrene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,1,1,2-Tetrachloroethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,1,2,2-Tetrachloroethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Tetrachloroethene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Toluene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2,3-Trichlorobenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2,4-Trichlorobenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,3,5-Trichlorobenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,1,1-Trichloroethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,1,2-Trichloroethane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Trichloroethene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Trichlorofluoromethane (Freon 11)	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2,3-Trichloropropane	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,2,4-Trimethylbenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,3,5-Trimethylbenzene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Vinyl chloride	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
m,p-Xylene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
o-Xylene	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Tetrahydrofuran	ND		15.8		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Ethyl ether	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Tert-amyl methyl ether	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Ethyl tert-butyl ether	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
di-Isopropyl ether	ND		7.89		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
tert-Butanol	ND		158		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
1,4-Dioxane	ND		158		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
trans-1,4-Dichloro-2-butene	ND		39.5		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1
Ethanol	ND		1580		ug/Kg	☼	05/03/22 12:41	05/03/22 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:31*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:31*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:31*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
1,2,4-Trichlorobenzene	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
1,2-Dichlorobenzene	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
1,3-Dichlorobenzene	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
1,4-Dichlorobenzene	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
1-Methylnaphthalene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2,4,5-Trichlorophenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2,4,6-Trichlorophenol	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2,4-Dichlorophenol	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2,4-Dimethylphenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2,4-Dinitrophenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2,4-Dinitrotoluene	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2,6-Dinitrotoluene	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4

Client Sample ID: TP-2 (0-6)
Date Collected: 04/25/22 08:20
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-2
Matrix: Solid
Percent Solids: 61.8

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2-Chlorophenol	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2-Methylnaphthalene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2-Methylphenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2-Nitroaniline	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
2-Nitrophenol	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
3 & 4 Methylphenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
3,3'-Dichlorobenzidine	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
3-Nitroaniline	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
4,6-Dinitro-2-methylphenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
4-Bromophenyl phenyl ether	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
4-Chloro-3-methylphenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
4-Chloroaniline	ND	*-	1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
4-Chlorophenyl phenyl ether	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
4-Nitroaniline	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
4-Nitrophenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Acenaphthene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Acenaphthylene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Aniline	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Anthracene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Azobenzene/Diphenyldiazene	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Benzidine	ND	*-	4120		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Benzo[a]anthracene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Benzo[a]pyrene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Benzo[b]fluoranthene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Benzo[g,h,i]perylene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Benzo[k]fluoranthene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Benzoic acid	ND	*-	2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Benzyl alcohol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Bis(2-chloroethoxy)methane	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Bis(2-chloroethyl)ether	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
bis (2-chloroisopropyl) ether	ND	*1	1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Bis(2-ethylhexyl) phthalate	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Butyl benzyl phthalate	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Carbazole	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Chrysene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Dibenz(a,h)anthracene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Dibenzofuran	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Diethyl phthalate	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Dimethyl phthalate	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Di-n-butyl phthalate	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Di-n-octyl phthalate	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Fluoranthene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Fluorene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Hexachlorobenzene	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Hexachlorobutadiene	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Hexachlorocyclopentadiene	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Hexachloroethane	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Indeno[1,2,3-cd]pyrene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4

Client Sample ID: TP-2 (0-6)
Date Collected: 04/25/22 08:20
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-2
Matrix: Solid
Percent Solids: 61.8

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Naphthalene	ND	*1	416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Nitrobenzene	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
N-Nitrosodimethylamine	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
N-Nitrosodi-n-propylamine	ND		1040		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
N-Nitrosodiphenylamine	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Pentachloronitrobenzene	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Pentachlorophenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Phenanthrene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Phenol	ND		2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Pyrene	ND		416		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4
Pyridine	ND	*-	2060		ug/Kg	☼	04/27/22 16:35	05/02/22 17:24	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*47*		*30 - 130*	*04/27/22 16:35*	*05/02/22 17:24*	*4*
2-Fluorophenol (Surr)	*59*		*15 - 110*	*04/27/22 16:35*	*05/02/22 17:24*	*4*
Nitrobenzene-d5 (Surr)	*43*		*30 - 130*	*04/27/22 16:35*	*05/02/22 17:24*	*4*
Phenol-d5 (Surr)	*50*		*15 - 110*	*04/27/22 16:35*	*05/02/22 17:24*	*4*
2,4,6-Tribromophenol (Surr)	*52*		*15 - 110*	*04/27/22 16:35*	*05/02/22 17:24*	*4*
Terphenyl-d14 (Surr)	*46*		*30 - 130*	*04/27/22 16:35*	*05/02/22 17:24*	*4*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
beta-BHC	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
delta-BHC	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
gamma-BHC (Lindane)	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Heptachlor	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Aldrin	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Heptachlor epoxide	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Endosulfan I	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Dieldrin	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
4,4'-DDE	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Endrin	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Endosulfan II	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
4,4'-DDD	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Endosulfan sulfate	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
4,4'-DDT	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Methoxychlor	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Endrin ketone	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Endrin aldehyde	ND		12.9		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
cis-Chlordane	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
trans-Chlordane	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Toxaphene	ND		161		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1
Alachlor	ND		8.05		ug/Kg	☼	05/02/22 16:01	05/05/22 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*39*		*30 - 150*	*05/02/22 16:01*	*05/05/22 15:18*	*1*
Tetrachloro-m-xylene	*50*		*30 - 150*	*05/02/22 16:01*	*05/05/22 15:18*	*1*
DCB Decachlorobiphenyl (Surr)	*50*		*30 - 150*	*05/02/22 16:01*	*05/05/22 15:18*	*1*

Client Sample ID: TP-2 (0-6)
Date Collected: 04/25/22 08:20
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-2
Matrix: Solid
Percent Solids: 61.8

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*35*		*30 - 150*	*05/02/22 16:01*	*05/05/22 15:18*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1
PCB-1221	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1
PCB-1232	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1
PCB-1242	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1
PCB-1248	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1
PCB-1254	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1
PCB-1260	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1
PCB-1262	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1
PCB-1268	ND		32.2	ug/Kg	☼	05/02/22 16:01	05/04/22 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:17*	*1*
Tetrachloro-m-xylene	*58*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:17*	*1*
DCB Decachlorobiphenyl (Surr)	*52*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:17*	*1*
DCB Decachlorobiphenyl (Surr)	*52*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:17*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**435**		39.0	mg/Kg	☼	04/28/22 14:01	04/29/22 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*90*		*40 - 140*	*04/28/22 14:01*	*04/29/22 23:01*	*1*
o-Terphenyl (Surr)	*112*		*40 - 140*	*04/28/22 14:01*	*04/29/22 23:01*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		7.76	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Arsenic	ND		2.33	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Beryllium	**1.42**		0.776	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Barium	**27.7**		1.55	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Cadmium	ND		0.776	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Chromium	**13.2**		1.55	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Copper	**60.9**		1.55	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Lead	**14.6**		2.33	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Nickel	**8.37**		1.55	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Selenium	ND		2.33	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Silver	ND	^+	2.33	mg/Kg	☼	04/27/22 09:16	04/27/22 21:59	1
Thallium	ND		4.66	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Zinc	**60.7**		4.66	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Manganese	**93.0**		1.55	mg/Kg	☼	04/27/22 09:16	04/28/22 12:19	1
Vanadium	**14.6**		2.33	mg/Kg	☼	04/27/22 09:16	04/27/22 21:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0745	mg/Kg	☼	04/27/22 09:21	04/27/22 18:24	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-2 (0-6)

Date Collected: 04/25/22 08:20
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-2

Matrix: Solid
Percent Solids: 61.8

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	38.2		0.1		%			04/27/22 15:01	1
Percent Solids	61.8		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-3 (0-6)
Date Collected: 04/25/22 09:30
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-3
Matrix: Solid
Percent Solids: 79.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Acetone	ND		58.1		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Acrylonitrile	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Benzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Bromobenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Bromochloromethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Bromodichloromethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Bromoform	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Bromomethane	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
2-Butanone (MEK)	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
n-Butylbenzene	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
sec-Butylbenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
tert-Butylbenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Carbon disulfide	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Carbon tetrachloride	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Chlorobenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Chloroethane	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Chloroform	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Chloromethane	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
2-Chlorotoluene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
4-Chlorotoluene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2-Dibromo-3-Chloropropane	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Dibromochloromethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2-Dibromoethane (EDB)	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Dibromomethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2-Dichlorobenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,3-Dichlorobenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,4-Dichlorobenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Dichlorodifluoromethane (Freon 12)	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,1-Dichloroethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2-Dichloroethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,1-Dichloroethene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
cis-1,2-Dichloroethene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
trans-1,2-Dichloroethene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2-Dichloropropane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,3-Dichloropropane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
2,2-Dichloropropane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,1-Dichloropropene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
cis-1,3-Dichloropropene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
trans-1,3-Dichloropropene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Ethylbenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Hexachlorobutadiene	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
2-Hexanone (MBK)	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Isopropylbenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
4-Isopropyltoluene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Methyl tert-butyl ether	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
4-Methyl-2-pentanone (MIBK)	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Methylene Chloride	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Naphthalene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1

Client Sample ID: TP-3 (0-6)
Date Collected: 04/25/22 09:30
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-3
Matrix: Solid
Percent Solids: 79.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Styrene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,1,1,2-Tetrachloroethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,1,2,2-Tetrachloroethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Tetrachloroethene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Toluene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2,3-Trichlorobenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2,4-Trichlorobenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,3,5-Trichlorobenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,1,1-Trichloroethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,1,2-Trichloroethane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Trichloroethene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Trichlorofluoromethane (Freon 11)	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2,3-Trichloropropane	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,2,4-Trimethylbenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,3,5-Trimethylbenzene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Vinyl chloride	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
m,p-Xylene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
o-Xylene	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Tetrahydrofuran	ND		11.6		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Ethyl ether	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Tert-amyl methyl ether	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Ethyl tert-butyl ether	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
di-Isopropyl ether	ND		5.81		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
tert-Butanol	ND		116		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
1,4-Dioxane	ND		116		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
trans-1,4-Dichloro-2-butene	ND		29.0		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1
Ethanol	ND		1160		ug/Kg	☼	05/03/22 12:41	05/03/22 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:58*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:58*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 15:58*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
1,2,4-Trichlorobenzene	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
1,2-Dichlorobenzene	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
1,3-Dichlorobenzene	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
1,4-Dichlorobenzene	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
1-Methylnaphthalene	ND		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2,4,5-Trichlorophenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2,4,6-Trichlorophenol	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2,4-Dichlorophenol	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2,4-Dimethylphenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2,4-Dinitrophenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2,4-Dinitrotoluene	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2,6-Dinitrotoluene	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1

Client Sample ID: TP-3 (0-6)
Date Collected: 04/25/22 09:30
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-3
Matrix: Solid
Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2-Chlorophenol	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2-Methylnaphthalene	ND		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2-Methylphenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2-Nitroaniline	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
2-Nitrophenol	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
3 & 4 Methylphenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
3,3'-Dichlorobenzidine	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
3-Nitroaniline	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
4,6-Dinitro-2-methylphenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
4-Bromophenyl phenyl ether	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
4-Chloro-3-methylphenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
4-Chloroaniline	ND	*-	189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
4-Chlorophenyl phenyl ether	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
4-Nitroaniline	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
4-Nitrophenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Acenaphthene	**97.7**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Acenaphthylene	ND		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Aniline	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Anthracene	**128**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Azobenzene/Diphenyldiazene	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Benzidine	ND	*-	746		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Benzo[a]anthracene	**275**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Benzo[a]pyrene	**211**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Benzo[b]fluoranthene	**218**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Benzo[g,h,i]perylene	**124**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Benzo[k]fluoranthene	**212**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Benzoic acid	ND	*-	373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Benzyl alcohol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Bis(2-chloroethoxy)methane	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Bis(2-chloroethyl)ether	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
bis (2-chloroisopropyl) ether	ND	*1	189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Bis(2-ethylhexyl) phthalate	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Butyl benzyl phthalate	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Carbazole	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Chrysene	**260**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Dibenz(a,h)anthracene	ND		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Dibenzofuran	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Diethyl phthalate	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Dimethyl phthalate	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Di-n-butyl phthalate	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Di-n-octyl phthalate	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Fluoranthene	**555**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Fluorene	ND		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Hexachlorobenzene	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Hexachlorobutadiene	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Hexachlorocyclopentadiene	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Hexachloroethane	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Indeno[1,2,3-cd]pyrene	**116**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1

Client Sample ID: TP-3 (0-6)
Date Collected: 04/25/22 09:30
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-3
Matrix: Solid
Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Naphthalene	ND	*1	75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Nitrobenzene	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
N-Nitrosodimethylamine	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
N-Nitrosodi-n-propylamine	ND		189		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
N-Nitrosodiphenylamine	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Pentachloronitrobenzene	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Pentachlorophenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Phenanthrene	**433**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Phenol	ND		373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Pyrene	**418**		75.4		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1
Pyridine	ND	*-	373		ug/Kg	☼	04/27/22 16:35	05/04/22 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*30 - 130*	*04/27/22 16:35*	*05/04/22 18:45*	*1*
2-Fluorophenol (Surr)	*87*		*15 - 110*	*04/27/22 16:35*	*05/04/22 18:45*	*1*
Nitrobenzene-d5 (Surr)	*62*		*30 - 130*	*04/27/22 16:35*	*05/04/22 18:45*	*1*
Phenol-d5 (Surr)	*77*		*15 - 110*	*04/27/22 16:35*	*05/04/22 18:45*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*15 - 110*	*04/27/22 16:35*	*05/04/22 18:45*	*1*
Terphenyl-d14 (Surr)	*63*		*30 - 130*	*04/27/22 16:35*	*05/04/22 18:45*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
beta-BHC	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
delta-BHC	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
gamma-BHC (Lindane)	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Heptachlor	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Aldrin	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Heptachlor epoxide	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Endosulfan I	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Dieldrin	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
4,4'-DDE	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Endrin	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Endosulfan II	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
4,4'-DDD	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Endosulfan sulfate	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
4,4'-DDT	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Methoxychlor	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Endrin ketone	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Endrin aldehyde	ND		9.98		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
cis-Chlordane	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
trans-Chlordane	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Toxaphene	ND		125		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1
Alachlor	ND		6.23		ug/Kg	☼	05/02/22 16:01	05/05/22 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*54*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:46*	*1*
Tetrachloro-m-xylene	*56*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:46*	*1*
DCB Decachlorobiphenyl (Surr)	*44*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:46*	*1*

Client Sample ID: TP-3 (0-6)
Date Collected: 04/25/22 09:30
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-3
Matrix: Solid
Percent Solids: 79.9

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*34*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:46*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1
PCB-1221	ND		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1
PCB-1232	ND		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1
PCB-1242	ND		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1
PCB-1248	ND		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1
PCB-1254	**135**		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1
PCB-1260	ND		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1
PCB-1262	ND		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1
PCB-1268	ND		24.9	ug/Kg	☼	05/02/22 16:01	05/04/22 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:34*	*1*
Tetrachloro-m-xylene	*55*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:34*	*1*
DCB Decachlorobiphenyl (Surr)	*55*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:34*	*1*
DCB Decachlorobiphenyl (Surr)	*52*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:34*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**185**		15.5	mg/Kg	☼	04/28/22 14:01	04/29/22 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*104*		*40 - 140*	*04/28/22 14:01*	*04/29/22 23:27*	*1*
o-Terphenyl (Surr)	*111*		*40 - 140*	*04/28/22 14:01*	*04/29/22 23:27*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.05	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Arsenic	**1.99**		1.82	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Beryllium	**0.772**		0.605	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Barium	**43.7**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Cadmium	**0.647**		0.605	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Chromium	**11.8**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Copper	**508**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Lead	**68.0**		1.82	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Nickel	**12.0**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Selenium	ND		1.82	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Silver	ND	^+	1.82	mg/Kg	☼	04/27/22 09:16	04/27/22 22:06	1
Thallium	ND		3.63	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Zinc	**261**		3.63	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Manganese	**141**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:26	1
Vanadium	**17.9**		1.82	mg/Kg	☼	04/27/22 09:16	04/27/22 22:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.116**		0.0552	mg/Kg	☼	04/27/22 09:21	04/27/22 18:26	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-3 (0-6)

Date Collected: 04/25/22 09:30
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-3

Matrix: Solid
Percent Solids: 79.9

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.1		0.1		%			04/27/22 15:01	1
Percent Solids	79.9		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-3 (6-7)
Date Collected: 04/25/22 09:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-4
Matrix: Solid
Percent Solids: 80.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Acetone	ND		35.5		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Acrylonitrile	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Benzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Bromobenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Bromochloromethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Bromodichloromethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Bromoform	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Bromomethane	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
2-Butanone (MEK)	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
n-Butylbenzene	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
sec-Butylbenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
tert-Butylbenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Carbon disulfide	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Carbon tetrachloride	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Chlorobenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Chloroethane	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Chloroform	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Chloromethane	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
2-Chlorotoluene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
4-Chlorotoluene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2-Dibromo-3-Chloropropane	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Dibromochloromethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2-Dibromoethane (EDB)	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Dibromomethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2-Dichlorobenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,3-Dichlorobenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,4-Dichlorobenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Dichlorodifluoromethane (Freon 12)	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,1-Dichloroethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2-Dichloroethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,1-Dichloroethene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
cis-1,2-Dichloroethene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
trans-1,2-Dichloroethene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2-Dichloropropane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,3-Dichloropropane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
2,2-Dichloropropane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,1-Dichloropropene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
cis-1,3-Dichloropropene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
trans-1,3-Dichloropropene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Ethylbenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Hexachlorobutadiene	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
2-Hexanone (MBK)	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Isopropylbenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
4-Isopropyltoluene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Methyl tert-butyl ether	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
4-Methyl-2-pentanone (MIBK)	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Methylene Chloride	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Naphthalene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1

Client Sample ID: TP-3 (6-7)
Date Collected: 04/25/22 09:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-4
Matrix: Solid
Percent Solids: 80.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Styrene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,1,1,2-Tetrachloroethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,1,2,2-Tetrachloroethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Tetrachloroethene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Toluene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2,3-Trichlorobenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2,4-Trichlorobenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,3,5-Trichlorobenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,1,1-Trichloroethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,1,2-Trichloroethane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Trichloroethene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Trichlorofluoromethane (Freon 11)	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2,3-Trichloropropane	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,2,4-Trimethylbenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,3,5-Trimethylbenzene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Vinyl chloride	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
m,p-Xylene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
o-Xylene	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Tetrahydrofuran	ND		7.10		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Ethyl ether	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Tert-amyl methyl ether	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Ethyl tert-butyl ether	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
di-Isopropyl ether	ND		3.55		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
tert-Butanol	ND		71.0		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
1,4-Dioxane	ND		71.0		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
trans-1,4-Dichloro-2-butene	ND		17.8		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1
Ethanol	ND		710		ug/Kg	☼	05/03/22 12:41	05/03/22 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/03/22 12:41*	*05/03/22 16:25*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*05/03/22 12:41*	*05/03/22 16:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*	*05/03/22 12:41*	*05/03/22 16:25*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*05/03/22 12:41*	*05/03/22 16:25*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
1,2,4-Trichlorobenzene	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
1,2-Dichlorobenzene	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
1,3-Dichlorobenzene	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
1,4-Dichlorobenzene	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
1-Methylnaphthalene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2,4,5-Trichlorophenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2,4,6-Trichlorophenol	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2,4-Dichlorophenol	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2,4-Dimethylphenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2,4-Dinitrophenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2,4-Dinitrotoluene	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2,6-Dinitrotoluene	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4

Client Sample ID: TP-3 (6-7)
Date Collected: 04/25/22 09:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-4
Matrix: Solid
Percent Solids: 80.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2-Chlorophenol	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2-Methylnaphthalene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2-Methylphenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2-Nitroaniline	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
2-Nitrophenol	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
3 & 4 Methylphenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
3,3'-Dichlorobenzidine	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
3-Nitroaniline	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
4,6-Dinitro-2-methylphenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
4-Bromophenyl phenyl ether	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
4-Chloro-3-methylphenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
4-Chloroaniline	ND	*-	795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
4-Chlorophenyl phenyl ether	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
4-Nitroaniline	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
4-Nitrophenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Acenaphthene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Acenaphthylene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Aniline	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Anthracene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Azobenzene/Diphenyldiazene	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Benzidine	ND	*-	3140		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Benzo[a]anthracene	**324**		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Benzo[a]pyrene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Benzo[b]fluoranthene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Benzo[g,h,i]perylene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Benzo[k]fluoranthene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Benzoic acid	ND	*-	1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Benzyl alcohol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Bis(2-chloroethoxy)methane	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Bis(2-chloroethyl)ether	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
bis (2-chloroisopropyl) ether	ND	*1	795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Bis(2-ethylhexyl) phthalate	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Butyl benzyl phthalate	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Carbazole	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Chrysene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Dibenz(a,h)anthracene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Dibenzofuran	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Diethyl phthalate	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Dimethyl phthalate	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Di-n-butyl phthalate	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Di-n-octyl phthalate	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Fluoranthene	**686**		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Fluorene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Hexachlorobenzene	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Hexachlorobutadiene	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Hexachlorocyclopentadiene	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Hexachloroethane	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Indeno[1,2,3-cd]pyrene	ND		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4

Client Sample ID: TP-3 (6-7)
Date Collected: 04/25/22 09:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-4
Matrix: Solid
Percent Solids: 80.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Naphthalene	ND	*1	318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Nitrobenzene	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
N-Nitrosodimethylamine	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
N-Nitrosodi-n-propylamine	ND		795		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
N-Nitrosodiphenylamine	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Pentachloronitrobenzene	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Pentachlorophenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Phenanthrene	**437**		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Phenol	ND		1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Pyrene	**534**		318		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4
Pyridine	ND	*-	1570		ug/Kg	☼	04/27/22 16:35	05/02/22 17:53	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*30 - 130*	*04/27/22 16:35*	*05/02/22 17:53*	*4*
2-Fluorophenol (Surr)	*61*		*15 - 110*	*04/27/22 16:35*	*05/02/22 17:53*	*4*
Nitrobenzene-d5 (Surr)	*44*		*30 - 130*	*04/27/22 16:35*	*05/02/22 17:53*	*4*
Phenol-d5 (Surr)	*57*		*15 - 110*	*04/27/22 16:35*	*05/02/22 17:53*	*4*
2,4,6-Tribromophenol (Surr)	*61*		*15 - 110*	*04/27/22 16:35*	*05/02/22 17:53*	*4*
Terphenyl-d14 (Surr)	*56*		*30 - 130*	*04/27/22 16:35*	*05/02/22 17:53*	*4*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
beta-BHC	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
delta-BHC	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
gamma-BHC (Lindane)	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Heptachlor	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Aldrin	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Heptachlor epoxide	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Endosulfan I	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Dieldrin	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
4,4'-DDE	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Endrin	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Endosulfan II	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
4,4'-DDD	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Endosulfan sulfate	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
4,4'-DDT	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Methoxychlor	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Endrin ketone	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Endrin aldehyde	ND		9.70		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
cis-Chlordane	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
trans-Chlordane	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Toxaphene	ND		121		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1
Alachlor	ND		6.06		ug/Kg	☼	05/02/22 16:01	05/05/22 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*31*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:30*	*1*
Tetrachloro-m-xylene	*42*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:30*	*1*
DCB Decachlorobiphenyl (Surr)	*42*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:30*	*1*

Client Sample ID: TP-3 (6-7)
Date Collected: 04/25/22 09:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-4
Matrix: Solid
Percent Solids: 80.4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*32*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:30*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1
PCB-1221	ND		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1
PCB-1232	ND		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1
PCB-1242	ND		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1
PCB-1248	ND		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1
PCB-1254	**93.1**		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1
PCB-1260	ND		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1
PCB-1262	ND		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1
PCB-1268	ND		24.3	ug/Kg	☼	05/02/22 16:01	05/04/22 20:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*49*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:51*	*1*
Tetrachloro-m-xylene	*46*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:51*	*1*
DCB Decachlorobiphenyl (Surr)	*39*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:51*	*1*
DCB Decachlorobiphenyl (Surr)	*35*		*30 - 150*	*05/02/22 16:01*	*05/04/22 20:51*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**165**		16.5	mg/Kg	☼	04/28/22 14:01	04/29/22 23:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	*106*		*40 - 140*	*04/28/22 14:01*	*04/29/22 23:52*	*1*
o-Terphenyl (Surr)	*104*		*40 - 140*	*04/28/22 14:01*	*04/29/22 23:52*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.07	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Arsenic	**2.00**		1.82	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Beryllium	**0.641**		0.607	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Barium	**38.7**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Cadmium	**1.44**		0.607	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Chromium	**11.3**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Copper	**1100**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Lead	**151**		1.82	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Nickel	**16.3**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Selenium	ND		1.82	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Silver	ND	^+	1.82	mg/Kg	☼	04/27/22 09:16	04/27/22 22:14	1
Thallium	ND		3.64	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Zinc	**540**		3.64	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Manganese	**86.4**		1.21	mg/Kg	☼	04/27/22 09:16	04/28/22 12:33	1
Vanadium	**15.7**		1.82	mg/Kg	☼	04/27/22 09:16	04/27/22 22:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.170**		0.0569	mg/Kg	☼	04/27/22 09:21	04/27/22 18:28	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-3 (6-7)

Date Collected: 04/25/22 09:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-4

Matrix: Solid
Percent Solids: 80.4

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.6		0.1		%			04/27/22 15:01	1
Percent Solids	80.4		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-1 (0-6)
Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5
Matrix: Solid
Percent Solids: 76.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Acetone	ND		48.7		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Acrylonitrile	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Benzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Bromobenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Bromochloromethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Bromodichloromethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Bromoform	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Bromomethane	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
2-Butanone (MEK)	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
n-Butylbenzene	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
sec-Butylbenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
tert-Butylbenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Carbon disulfide	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Carbon tetrachloride	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Chlorobenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Chloroethane	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Chloroform	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Chloromethane	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
2-Chlorotoluene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
4-Chlorotoluene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2-Dibromo-3-Chloropropane	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Dibromochloromethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2-Dibromoethane (EDB)	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Dibromomethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2-Dichlorobenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,3-Dichlorobenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,4-Dichlorobenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Dichlorodifluoromethane (Freon 12)	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,1-Dichloroethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2-Dichloroethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,1-Dichloroethene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
cis-1,2-Dichloroethene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
trans-1,2-Dichloroethene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2-Dichloropropane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,3-Dichloropropane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
2,2-Dichloropropane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,1-Dichloropropene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
cis-1,3-Dichloropropene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
trans-1,3-Dichloropropene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Ethylbenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Hexachlorobutadiene	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
2-Hexanone (MBK)	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Isopropylbenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
4-Isopropyltoluene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Methyl tert-butyl ether	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
4-Methyl-2-pentanone (MIBK)	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Methylene Chloride	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Naphthalene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1

Client Sample ID: TP-1 (0-6)
Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5
Matrix: Solid
Percent Solids: 76.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Styrene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,1,1,2-Tetrachloroethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,1,2,2-Tetrachloroethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Tetrachloroethene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Toluene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2,3-Trichlorobenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2,4-Trichlorobenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,3,5-Trichlorobenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,1,1-Trichloroethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,1,2-Trichloroethane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Trichloroethene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Trichlorofluoromethane (Freon 11)	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2,3-Trichloropropane	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,2,4-Trimethylbenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,3,5-Trimethylbenzene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Vinyl chloride	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
m,p-Xylene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
o-Xylene	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Tetrahydrofuran	ND		9.75		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Ethyl ether	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Tert-amyl methyl ether	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Ethyl tert-butyl ether	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
di-Isopropyl ether	ND		4.87		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
tert-Butanol	ND		97.5		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
1,4-Dioxane	ND		97.5		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
trans-1,4-Dichloro-2-butene	ND		24.4		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1
Ethanol	ND		975		ug/Kg	☼	05/03/22 12:41	05/03/22 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/03/22 12:41*	*05/03/22 16:53*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*05/03/22 12:41*	*05/03/22 16:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*05/03/22 12:41*	*05/03/22 16:53*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 16:53*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
1,2,4-Trichlorobenzene	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
1,2-Dichlorobenzene	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
1,3-Dichlorobenzene	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
1,4-Dichlorobenzene	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
1-Methylnaphthalene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2,4,5-Trichlorophenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2,4,6-Trichlorophenol	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2,4-Dichlorophenol	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2,4-Dimethylphenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2,4-Dinitrophenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2,4-Dinitrotoluene	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2,6-Dinitrotoluene	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-1 (0-6)
Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5
Matrix: Solid
Percent Solids: 76.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2-Chlorophenol	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2-Methylnaphthalene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2-Methylphenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2-Nitroaniline	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
2-Nitrophenol	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
3 & 4 Methylphenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
3,3'-Dichlorobenzidine	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
3-Nitroaniline	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
4,6-Dinitro-2-methylphenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
4-Bromophenyl phenyl ether	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
4-Chloro-3-methylphenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
4-Chloroaniline	ND	*-	206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
4-Chlorophenyl phenyl ether	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
4-Nitroaniline	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
4-Nitrophenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Acenaphthene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Acenaphthylene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Aniline	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Anthracene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Azobenzene/Diphenyldiazene	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Benzidine	ND	*-	815		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Benzo[a]anthracene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Benzo[a]pyrene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Benzo[b]fluoranthene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Benzo[g,h,i]perylene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Benzo[k]fluoranthene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Benzoic acid	ND	*-	407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Benzyl alcohol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Bis(2-chloroethoxy)methane	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Bis(2-chloroethyl)ether	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
bis (2-chloroisopropyl) ether	ND	*1	206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Bis(2-ethylhexyl) phthalate	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Butyl benzyl phthalate	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Carbazole	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Chrysene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Dibenz(a,h)anthracene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Dibenzofuran	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Diethyl phthalate	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Dimethyl phthalate	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Di-n-butyl phthalate	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Di-n-octyl phthalate	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Fluoranthene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Fluorene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Hexachlorobenzene	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Hexachlorobutadiene	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Hexachlorocyclopentadiene	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Hexachloroethane	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Indeno[1,2,3-cd]pyrene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-1 (0-6)
Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5
Matrix: Solid
Percent Solids: 76.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Naphthalene	ND	*1	82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Nitrobenzene	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
N-Nitrosodimethylamine	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
N-Nitrosodi-n-propylamine	ND		206		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
N-Nitrosodiphenylamine	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Pentachloronitrobenzene	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Pentachlorophenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Phenanthrene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Phenol	ND		407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Pyrene	ND		82.3		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1
Pyridine	ND	*-	407		ug/Kg	☼	04/27/22 16:35	05/04/22 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*30 - 130*	*04/27/22 16:35*	*05/04/22 19:14*	*1*
2-Fluorophenol (Surr)	*91*		*15 - 110*	*04/27/22 16:35*	*05/04/22 19:14*	*1*
Nitrobenzene-d5 (Surr)	*62*		*30 - 130*	*04/27/22 16:35*	*05/04/22 19:14*	*1*
Phenol-d5 (Surr)	*79*		*15 - 110*	*04/27/22 16:35*	*05/04/22 19:14*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*15 - 110*	*04/27/22 16:35*	*05/04/22 19:14*	*1*
Terphenyl-d14 (Surr)	*64*		*30 - 130*	*04/27/22 16:35*	*05/04/22 19:14*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
beta-BHC	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
delta-BHC	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
gamma-BHC (Lindane)	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Heptachlor	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Aldrin	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Heptachlor epoxide	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Endosulfan I	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Dieldrin	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
4,4'-DDE	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Endrin	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Endosulfan II	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
4,4'-DDD	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Endosulfan sulfate	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
4,4'-DDT	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Methoxychlor	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Endrin ketone	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Endrin aldehyde	ND		10.2		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
cis-Chlordane	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
trans-Chlordane	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Toxaphene	ND		128		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1
Alachlor	ND		6.38		ug/Kg	☼	05/02/22 16:01	05/05/22 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*60*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:26*	*1*
Tetrachloro-m-xylene	*62*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:26*	*1*
DCB Decachlorobiphenyl (Surr)	*71*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:26*	*1*

Client Sample ID: TP-1 (0-6)
Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5
Matrix: Solid
Percent Solids: 76.9

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*71*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:26*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1
PCB-1221	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1
PCB-1232	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1
PCB-1242	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1
PCB-1248	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1
PCB-1254	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1
PCB-1260	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1
PCB-1262	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1
PCB-1268	ND		25.5	ug/Kg	☼	05/02/22 16:01	05/04/22 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*56*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:08*	*1*
Tetrachloro-m-xylene	*52*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:08*	*1*
DCB Decachlorobiphenyl (Surr)	*52*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:08*	*1*
DCB Decachlorobiphenyl (Surr)	*51*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:08*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**139**		16.1	mg/Kg	☼	04/28/22 14:01	04/30/22 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*89*		*40 - 140*	*04/28/22 14:01*	*04/30/22 00:17*	*1*
o-Terphenyl (Surr)	*93*		*40 - 140*	*04/28/22 14:01*	*04/30/22 00:17*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.18	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Arsenic	**2.25**		1.85	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Beryllium	ND		0.618	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Barium	**23.3**		1.24	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Cadmium	ND		0.618	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Chromium	**9.02**		1.24	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Copper	**8.13**		1.24	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Lead	**6.85**		1.85	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Nickel	**6.72**		1.24	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Selenium	ND		1.85	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Silver	ND	^+	1.85	mg/Kg	☼	04/27/22 09:16	04/27/22 22:36	1
Thallium	ND		3.71	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Zinc	**24.2**		3.71	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Manganese	**130**		1.24	mg/Kg	☼	04/27/22 09:16	04/28/22 12:54	1
Vanadium	**12.8**		1.85	mg/Kg	☼	04/27/22 09:16	04/27/22 22:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0585	mg/Kg	☼	04/27/22 09:21	04/27/22 18:30	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-1 (0-6)
Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5
Matrix: Solid
Percent Solids: 76.9

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23.1		0.1		%			04/27/22 15:01	1
Percent Solids	76.9		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-1 (6-7)
Date Collected: 04/25/22 10:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-6
Matrix: Solid
Percent Solids: 70.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Acetone	ND		39.4		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Acrylonitrile	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Benzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Bromobenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Bromochloromethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Bromodichloromethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Bromoform	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Bromomethane	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
2-Butanone (MEK)	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
n-Butylbenzene	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
sec-Butylbenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
tert-Butylbenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Carbon disulfide	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Carbon tetrachloride	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Chlorobenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Chloroethane	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Chloroform	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Chloromethane	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
2-Chlorotoluene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
4-Chlorotoluene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2-Dibromo-3-Chloropropane	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Dibromochloromethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2-Dibromoethane (EDB)	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Dibromomethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2-Dichlorobenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,3-Dichlorobenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,4-Dichlorobenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Dichlorodifluoromethane (Freon 12)	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,1-Dichloroethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2-Dichloroethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,1-Dichloroethene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
cis-1,2-Dichloroethene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
trans-1,2-Dichloroethene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2-Dichloropropane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,3-Dichloropropane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
2,2-Dichloropropane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,1-Dichloropropene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
cis-1,3-Dichloropropene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
trans-1,3-Dichloropropene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Ethylbenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Hexachlorobutadiene	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
2-Hexanone (MBK)	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Isopropylbenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
4-Isopropyltoluene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Methyl tert-butyl ether	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
4-Methyl-2-pentanone (MIBK)	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Methylene Chloride	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Naphthalene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1

Client Sample ID: TP-1 (6-7)
Date Collected: 04/25/22 10:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-6
Matrix: Solid
Percent Solids: 70.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Styrene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,1,1,2-Tetrachloroethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,1,2,2-Tetrachloroethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Tetrachloroethene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Toluene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2,3-Trichlorobenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2,4-Trichlorobenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,3,5-Trichlorobenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,1,1-Trichloroethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,1,2-Trichloroethane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Trichloroethene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Trichlorofluoromethane (Freon 11)	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2,3-Trichloropropane	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,2,4-Trimethylbenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,3,5-Trimethylbenzene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Vinyl chloride	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
m,p-Xylene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
o-Xylene	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Tetrahydrofuran	ND		7.88		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Ethyl ether	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Tert-amyl methyl ether	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Ethyl tert-butyl ether	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
di-Isopropyl ether	ND		3.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
tert-Butanol	ND		78.8		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
1,4-Dioxane	ND		78.8		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
trans-1,4-Dichloro-2-butene	ND		19.7		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1
Ethanol	ND		788		ug/Kg	☼	05/03/22 12:41	05/03/22 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*05/03/22 12:41*	*05/03/22 17:21*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 17:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*05/03/22 12:41*	*05/03/22 17:21*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*05/03/22 12:41*	*05/03/22 17:21*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
1,2,4-Trichlorobenzene	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
1,2-Dichlorobenzene	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
1,3-Dichlorobenzene	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
1,4-Dichlorobenzene	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
1-Methylnaphthalene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2,4,5-Trichlorophenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2,4,6-Trichlorophenol	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2,4-Dichlorophenol	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2,4-Dimethylphenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2,4-Dinitrophenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2,4-Dinitrotoluene	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2,6-Dinitrotoluene	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-1 (6-7)
Date Collected: 04/25/22 10:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-6
Matrix: Solid
Percent Solids: 70.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2-Chlorophenol	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2-Methylnaphthalene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2-Methylphenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2-Nitroaniline	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
2-Nitrophenol	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
3 & 4 Methylphenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
3,3'-Dichlorobenzidine	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
3-Nitroaniline	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
4,6-Dinitro-2-methylphenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
4-Bromophenyl phenyl ether	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
4-Chloro-3-methylphenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
4-Chloroaniline	ND	*-	466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
4-Chlorophenyl phenyl ether	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
4-Nitroaniline	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
4-Nitrophenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Acenaphthene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Acenaphthylene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Aniline	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Anthracene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Azobenzene/Diphenyldiazene	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Benzidine	ND	*-	1840		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Benzo[a]anthracene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Benzo[a]pyrene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Benzo[b]fluoranthene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Benzo[g,h,i]perylene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Benzo[k]fluoranthene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Benzoic acid	ND	*-	921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Benzyl alcohol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Bis(2-chloroethoxy)methane	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Bis(2-chloroethyl)ether	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
bis (2-chloroisopropyl) ether	ND	*1	466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Bis(2-ethylhexyl) phthalate	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Butyl benzyl phthalate	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Carbazole	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Chrysene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Dibenz(a,h)anthracene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Dibenzofuran	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Diethyl phthalate	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Dimethyl phthalate	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Di-n-butyl phthalate	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Di-n-octyl phthalate	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Fluoranthene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Fluorene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Hexachlorobenzene	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Hexachlorobutadiene	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Hexachlorocyclopentadiene	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Hexachloroethane	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Indeno[1,2,3-cd]pyrene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1

Client Sample ID: TP-1 (6-7)
Date Collected: 04/25/22 10:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-6
Matrix: Solid
Percent Solids: 70.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Naphthalene	ND	*1	186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Nitrobenzene	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
N-Nitrosodimethylamine	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
N-Nitrosodi-n-propylamine	ND		466		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
N-Nitrosodiphenylamine	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Pentachloronitrobenzene	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Pentachlorophenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Phenanthrene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Phenol	ND		921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Pyrene	ND		186		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1
Pyridine	ND	*-	921		ug/Kg	☼	04/27/22 16:35	04/29/22 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*45*		*30 - 130*	*04/27/22 16:35*	*04/29/22 14:55*	*1*
2-Fluorophenol (Surr)	*49*		*15 - 110*	*04/27/22 16:35*	*04/29/22 14:55*	*1*
Nitrobenzene-d5 (Surr)	*50*		*30 - 130*	*04/27/22 16:35*	*04/29/22 14:55*	*1*
Phenol-d5 (Surr)	*53*		*15 - 110*	*04/27/22 16:35*	*04/29/22 14:55*	*1*
2,4,6-Tribromophenol (Surr)	*44*		*15 - 110*	*04/27/22 16:35*	*04/29/22 14:55*	*1*
Terphenyl-d14 (Surr)	*46*		*30 - 130*	*04/27/22 16:35*	*04/29/22 14:55*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
beta-BHC	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
delta-BHC	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
gamma-BHC (Lindane)	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Heptachlor	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Aldrin	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Heptachlor epoxide	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Endosulfan I	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Dieldrin	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
4,4'-DDE	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Endrin	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Endosulfan II	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
4,4'-DDD	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Endosulfan sulfate	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
4,4'-DDT	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Methoxychlor	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Endrin ketone	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Endrin aldehyde	ND		11.3		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
cis-Chlordane	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
trans-Chlordane	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Toxaphene	ND		141		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1
Alachlor	ND		7.06		ug/Kg	☼	05/02/22 16:01	05/05/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*30*	*p*	*30 - 150*	*05/02/22 16:01*	*05/05/22 13:58*	*1*
Tetrachloro-m-xylene	*57*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:58*	*1*
DCB Decachlorobiphenyl (Surr)	*41*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:58*	*1*

Client Sample ID: TP-1 (6-7)
Date Collected: 04/25/22 10:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-6
Matrix: Solid
Percent Solids: 70.6

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*34*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:58*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1
PCB-1221	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1
PCB-1232	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1
PCB-1242	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1
PCB-1248	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1
PCB-1254	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1
PCB-1260	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1
PCB-1262	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1
PCB-1268	ND		28.2	ug/Kg	☼	05/02/22 16:01	05/04/22 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*41*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:25*	*1*
Tetrachloro-m-xylene	*42*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:25*	*1*
DCB Decachlorobiphenyl (Surr)	*38*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:25*	*1*
DCB Decachlorobiphenyl (Surr)	*39*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:25*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**375**		71.3	mg/Kg	☼	04/28/22 14:01	04/30/22 00:42	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*102*		*40 - 140*	*04/28/22 14:01*	*04/30/22 00:42*	*4*
o-Terphenyl (Surr)	*90*		*40 - 140*	*04/28/22 14:01*	*04/30/22 00:42*	*4*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.89	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Arsenic	**2.33**		2.07	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Beryllium	**1.40**		0.689	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Barium	**30.1**		1.38	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Cadmium	ND		0.689	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Chromium	**11.3**		1.38	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Copper	**10.9**		1.38	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Lead	**7.50**		2.07	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Nickel	**8.41**		1.38	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Selenium	ND		2.07	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Silver	ND	^+	2.07	mg/Kg	☼	04/27/22 09:16	04/27/22 22:43	1
Thallium	ND		4.14	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Zinc	**38.4**		4.14	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Manganese	**90.4**		1.38	mg/Kg	☼	04/27/22 09:16	04/28/22 13:01	1
Vanadium	**12.9**		2.07	mg/Kg	☼	04/27/22 09:16	04/27/22 22:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0656	mg/Kg	☼	04/27/22 09:21	04/27/22 18:32	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-1 (6-7)

Date Collected: 04/25/22 10:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-6

Matrix: Solid
Percent Solids: 70.6

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	29.4		0.1		%			04/27/22 15:01	1
Percent Solids	70.6		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-4 (0-6)
Date Collected: 04/26/22 12:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-7
Matrix: Solid
Percent Solids: 89.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Acetone	ND		34.7		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Acrylonitrile	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Benzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Bromobenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Bromochloromethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Bromodichloromethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Bromoform	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Bromomethane	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
2-Butanone (MEK)	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
n-Butylbenzene	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
sec-Butylbenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
tert-Butylbenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Carbon disulfide	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Carbon tetrachloride	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Chlorobenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Chloroethane	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Chloroform	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Chloromethane	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
2-Chlorotoluene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
4-Chlorotoluene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2-Dibromo-3-Chloropropane	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Dibromochloromethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2-Dibromoethane (EDB)	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Dibromomethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2-Dichlorobenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,3-Dichlorobenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,4-Dichlorobenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Dichlorodifluoromethane (Freon 12)	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,1-Dichloroethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2-Dichloroethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,1-Dichloroethene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
cis-1,2-Dichloroethene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
trans-1,2-Dichloroethene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2-Dichloropropane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,3-Dichloropropane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
2,2-Dichloropropane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,1-Dichloropropene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
cis-1,3-Dichloropropene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
trans-1,3-Dichloropropene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Ethylbenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Hexachlorobutadiene	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
2-Hexanone (MBK)	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Isopropylbenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
4-Isopropyltoluene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Methyl tert-butyl ether	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
4-Methyl-2-pentanone (MIBK)	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Methylene Chloride	**9.51**		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Naphthalene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1

Client Sample ID: TP-4 (0-6)

Date Collected: 04/26/22 12:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-7

Matrix: Solid
Percent Solids: 89.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Styrene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,1,1,2-Tetrachloroethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,1,2,2-Tetrachloroethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Tetrachloroethene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Toluene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2,3-Trichlorobenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2,4-Trichlorobenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,3,5-Trichlorobenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,1,1-Trichloroethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,1,2-Trichloroethane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Trichloroethene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Trichlorofluoromethane (Freon 11)	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2,3-Trichloropropane	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,2,4-Trimethylbenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,3,5-Trimethylbenzene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Vinyl chloride	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
m,p-Xylene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
o-Xylene	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Tetrahydrofuran	ND		6.94		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Ethyl ether	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Tert-amyl methyl ether	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Ethyl tert-butyl ether	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
di-Isopropyl ether	ND		3.47		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
tert-Butanol	ND		69.4		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
1,4-Dioxane	ND		69.4		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
trans-1,4-Dichloro-2-butene	ND		17.3		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1
Ethanol	ND		694		ug/Kg	☼	05/03/22 12:41	05/03/22 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*05/03/22 12:41*	*05/03/22 17:47*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 17:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*05/03/22 12:41*	*05/03/22 17:47*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*05/03/22 12:41*	*05/03/22 17:47*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
1,2,4-Trichlorobenzene	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
1,2-Dichlorobenzene	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
1,3-Dichlorobenzene	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
1,4-Dichlorobenzene	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
1-Methylnaphthalene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2,4,5-Trichlorophenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2,4,6-Trichlorophenol	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2,4-Dichlorophenol	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2,4-Dimethylphenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2,4-Dinitrophenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2,4-Dinitrotoluene	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2,6-Dinitrotoluene	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-4 (0-6)
Date Collected: 04/26/22 12:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-7
Matrix: Solid
Percent Solids: 89.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2-Chlorophenol	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2-Methylnaphthalene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2-Methylphenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2-Nitroaniline	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
2-Nitrophenol	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
3 & 4 Methylphenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
3,3'-Dichlorobenzidine	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
3-Nitroaniline	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
4,6-Dinitro-2-methylphenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
4-Bromophenyl phenyl ether	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
4-Chloro-3-methylphenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
4-Chloroaniline	ND	*-	177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
4-Chlorophenyl phenyl ether	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
4-Nitroaniline	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
4-Nitrophenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Acenaphthene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Acenaphthylene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Aniline	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Anthracene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Azobenzene/Diphenyldiazene	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Benzidine	ND	*-	700		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Benzo[a]anthracene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Benzo[a]pyrene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Benzo[b]fluoranthene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Benzo[g,h,i]perylene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Benzo[k]fluoranthene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Benzoic acid	ND	*-	350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Benzyl alcohol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Bis(2-chloroethoxy)methane	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Bis(2-chloroethyl)ether	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
bis (2-chloroisopropyl) ether	ND	*1	177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Bis(2-ethylhexyl) phthalate	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Butyl benzyl phthalate	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Carbazole	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Chrysene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Dibenz(a,h)anthracene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Dibenzofuran	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Diethyl phthalate	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Dimethyl phthalate	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Di-n-butyl phthalate	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Di-n-octyl phthalate	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Fluoranthene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Fluorene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Hexachlorobenzene	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Hexachlorobutadiene	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Hexachlorocyclopentadiene	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Hexachloroethane	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Indeno[1,2,3-cd]pyrene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1

Client Sample ID: TP-4 (0-6)
Date Collected: 04/26/22 12:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-7
Matrix: Solid
Percent Solids: 89.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Naphthalene	ND	*1	70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Nitrobenzene	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
N-Nitrosodimethylamine	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
N-Nitrosodi-n-propylamine	ND		177		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
N-Nitrosodiphenylamine	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Pentachloronitrobenzene	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Pentachlorophenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Phenanthrene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Phenol	ND		350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Pyrene	ND		70.8		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1
Pyridine	ND	*-	350		ug/Kg	☼	04/27/22 16:35	04/29/22 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*30 - 130*	*04/27/22 16:35*	*04/29/22 14:26*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*04/27/22 16:35*	*04/29/22 14:26*	*1*
Nitrobenzene-d5 (Surr)	*51*		*30 - 130*	*04/27/22 16:35*	*04/29/22 14:26*	*1*
Phenol-d5 (Surr)	*51*		*15 - 110*	*04/27/22 16:35*	*04/29/22 14:26*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*15 - 110*	*04/27/22 16:35*	*04/29/22 14:26*	*1*
Terphenyl-d14 (Surr)	*63*		*30 - 130*	*04/27/22 16:35*	*04/29/22 14:26*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
beta-BHC	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
delta-BHC	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
gamma-BHC (Lindane)	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Heptachlor	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Aldrin	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Heptachlor epoxide	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Endosulfan I	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Dieldrin	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
4,4'-DDE	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Endrin	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Endosulfan II	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
4,4'-DDD	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Endosulfan sulfate	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
4,4'-DDT	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Methoxychlor	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Endrin ketone	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Endrin aldehyde	ND		8.74		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
cis-Chlordane	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
trans-Chlordane	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Toxaphene	ND		109		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1
Alachlor	ND		5.46		ug/Kg	☼	05/02/22 16:01	05/05/22 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:42*	*1*
Tetrachloro-m-xylene	*73*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:42*	*1*
DCB Decachlorobiphenyl (Surr)	*78*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:42*	*1*

Client Sample ID: TP-4 (0-6)
Date Collected: 04/26/22 12:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-7
Matrix: Solid
Percent Solids: 89.2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*72*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:42*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1
PCB-1221	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1
PCB-1232	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1
PCB-1242	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1
PCB-1248	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1
PCB-1254	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1
PCB-1260	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1
PCB-1262	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1
PCB-1268	ND		21.9	ug/Kg	☼	05/02/22 16:01	05/04/22 21:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*74*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:41*	*1*
Tetrachloro-m-xylene	*71*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:41*	*1*
DCB Decachlorobiphenyl (Surr)	*67*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:41*	*1*
DCB Decachlorobiphenyl (Surr)	*64*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:41*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**62.3**		13.4	mg/Kg	☼	04/28/22 14:01	04/30/22 01:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	*105*		*40 - 140*	*04/28/22 14:01*	*04/30/22 01:07*	*1*
o-Terphenyl (Surr)	*103*		*40 - 140*	*04/28/22 14:01*	*04/30/22 01:07*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.24	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Arsenic	**1.76**		1.57	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Beryllium	**0.696**		0.524	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Barium	**26.2**		1.05	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Cadmium	ND		0.524	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Chromium	**9.86**		1.05	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Copper	**9.88**		1.05	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Lead	**9.84**		1.57	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Nickel	**7.09**		1.05	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Selenium	ND		1.57	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Silver	ND	^+	1.57	mg/Kg	☼	04/27/22 09:16	04/27/22 22:50	1
Thallium	ND		3.14	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Zinc	**31.0**		3.14	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Manganese	**141**		1.05	mg/Kg	☼	04/27/22 09:16	04/28/22 13:08	1
Vanadium	**12.3**		1.57	mg/Kg	☼	04/27/22 09:16	04/27/22 22:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0524	mg/Kg	☼	04/27/22 09:21	04/27/22 18:34	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-4 (0-6)

Date Collected: 04/26/22 12:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-7

Matrix: Solid
Percent Solids: 89.2

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.8		0.1		%			04/27/22 15:01	1
Percent Solids	89.2		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-4 (6-7)
Date Collected: 04/26/22 12:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-8
Matrix: Solid
Percent Solids: 89.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Acetone	ND		35.6		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Acrylonitrile	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Benzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Bromobenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Bromochloromethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Bromodichloromethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Bromoform	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Bromomethane	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
2-Butanone (MEK)	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
n-Butylbenzene	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
sec-Butylbenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
tert-Butylbenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Carbon disulfide	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Carbon tetrachloride	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Chlorobenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Chloroethane	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Chloroform	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Chloromethane	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
2-Chlorotoluene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
4-Chlorotoluene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2-Dibromo-3-Chloropropane	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Dibromochloromethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2-Dibromoethane (EDB)	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Dibromomethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2-Dichlorobenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,3-Dichlorobenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,4-Dichlorobenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Dichlorodifluoromethane (Freon 12)	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,1-Dichloroethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2-Dichloroethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,1-Dichloroethene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
cis-1,2-Dichloroethene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
trans-1,2-Dichloroethene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2-Dichloropropane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,3-Dichloropropane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
2,2-Dichloropropane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,1-Dichloropropene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
cis-1,3-Dichloropropene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
trans-1,3-Dichloropropene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Ethylbenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Hexachlorobutadiene	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
2-Hexanone (MBK)	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Isopropylbenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
4-Isopropyltoluene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Methyl tert-butyl ether	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
4-Methyl-2-pentanone (MIBK)	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Methylene Chloride	**11.9**		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Naphthalene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1

Client Sample ID: TP-4 (6-7)
Date Collected: 04/26/22 12:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-8
Matrix: Solid
Percent Solids: 89.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Styrene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,1,1,2-Tetrachloroethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,1,2,2-Tetrachloroethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Tetrachloroethene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Toluene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2,3-Trichlorobenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2,4-Trichlorobenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,3,5-Trichlorobenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,1,1-Trichloroethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,1,2-Trichloroethane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Trichloroethene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Trichlorofluoromethane (Freon 11)	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2,3-Trichloropropane	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,2,4-Trimethylbenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,3,5-Trimethylbenzene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Vinyl chloride	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
m,p-Xylene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
o-Xylene	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Tetrahydrofuran	ND		7.12		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Ethyl ether	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Tert-amyl methyl ether	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Ethyl tert-butyl ether	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
di-Isopropyl ether	ND		3.56		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
tert-Butanol	ND		71.2		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
1,4-Dioxane	ND		71.2		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
trans-1,4-Dichloro-2-butene	ND		17.8		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1
Ethanol	ND		712		ug/Kg	☼	05/03/22 12:41	05/03/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*05/03/22 12:41*	*05/03/22 18:14*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 18:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*05/03/22 12:41*	*05/03/22 18:14*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*05/03/22 12:41*	*05/03/22 18:14*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
1,2,4-Trichlorobenzene	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
1,2-Dichlorobenzene	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
1,3-Dichlorobenzene	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
1,4-Dichlorobenzene	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
1-Methylnaphthalene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2,4,5-Trichlorophenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2,4,6-Trichlorophenol	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2,4-Dichlorophenol	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2,4-Dimethylphenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2,4-Dinitrophenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2,4-Dinitrotoluene	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2,6-Dinitrotoluene	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-4 (6-7)
Date Collected: 04/26/22 12:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-8
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2-Chlorophenol	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2-Methylnaphthalene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2-Methylphenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2-Nitroaniline	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
2-Nitrophenol	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
3 & 4 Methylphenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
3,3'-Dichlorobenzidine	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
3-Nitroaniline	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
4,6-Dinitro-2-methylphenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
4-Bromophenyl phenyl ether	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
4-Chloro-3-methylphenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
4-Chloroaniline	ND	*-	166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
4-Chlorophenyl phenyl ether	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
4-Nitroaniline	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
4-Nitrophenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Acenaphthene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Acenaphthylene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Aniline	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Anthracene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Azobenzene/Diphenyldiazene	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Benzidine	ND	*-	657		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Benzo[a]anthracene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Benzo[a]pyrene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Benzo[b]fluoranthene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Benzo[g,h,i]perylene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Benzo[k]fluoranthene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Benzoic acid	ND	*-	329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Benzyl alcohol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Bis(2-chloroethoxy)methane	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Bis(2-chloroethyl)ether	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
bis (2-chloroisopropyl) ether	ND	*1	166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Bis(2-ethylhexyl) phthalate	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Butyl benzyl phthalate	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Carbazole	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Chrysene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Dibenz(a,h)anthracene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Dibenzofuran	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Diethyl phthalate	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Dimethyl phthalate	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Di-n-butyl phthalate	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Di-n-octyl phthalate	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Fluoranthene	**69.4**		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Fluorene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Hexachlorobenzene	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Hexachlorobutadiene	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Hexachlorocyclopentadiene	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Hexachloroethane	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Indeno[1,2,3-cd]pyrene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1

Client Sample ID: TP-4 (6-7)
Date Collected: 04/26/22 12:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-8
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Naphthalene	ND	*1	66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Nitrobenzene	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
N-Nitrosodimethylamine	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
N-Nitrosodi-n-propylamine	ND		166		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
N-Nitrosodiphenylamine	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Pentachloronitrobenzene	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Pentachlorophenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Phenanthrene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Phenol	ND		329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Pyrene	ND		66.4		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1
Pyridine	ND	*-	329		ug/Kg	☼	04/27/22 16:35	05/02/22 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*30 - 130*	*04/27/22 16:35*	*05/02/22 15:02*	*1*
2-Fluorophenol (Surr)	*69*		*15 - 110*	*04/27/22 16:35*	*05/02/22 15:02*	*1*
Nitrobenzene-d5 (Surr)	*46*		*30 - 130*	*04/27/22 16:35*	*05/02/22 15:02*	*1*
Phenol-d5 (Surr)	*60*		*15 - 110*	*04/27/22 16:35*	*05/02/22 15:02*	*1*
2,4,6-Tribromophenol (Surr)	*64*		*15 - 110*	*04/27/22 16:35*	*05/02/22 15:02*	*1*
Terphenyl-d14 (Surr)	*62*		*30 - 130*	*04/27/22 16:35*	*05/02/22 15:02*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
beta-BHC	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
delta-BHC	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
gamma-BHC (Lindane)	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Heptachlor	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Aldrin	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Heptachlor epoxide	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Endosulfan I	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Dieldrin	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
4,4'-DDE	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Endrin	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Endosulfan II	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
4,4'-DDD	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Endosulfan sulfate	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
4,4'-DDT	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Methoxychlor	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Endrin ketone	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Endrin aldehyde	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
cis-Chlordane	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
trans-Chlordane	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Toxaphene	ND		110		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1
Alachlor	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:10*	*1*
Tetrachloro-m-xylene	*72*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:10*	*1*
DCB Decachlorobiphenyl (Surr)	*86*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:10*	*1*

Client Sample ID: TP-4 (6-7)
Date Collected: 04/26/22 12:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-8
Matrix: Solid
Percent Solids: 89.4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*71*		*30 - 150*	*05/02/22 16:01*	*05/05/22 13:10*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1
PCB-1221	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1
PCB-1232	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1
PCB-1242	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1
PCB-1248	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1
PCB-1254	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1
PCB-1260	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1
PCB-1262	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1
PCB-1268	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 21:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*79*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:58*	*1*
Tetrachloro-m-xylene	*78*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:58*	*1*
DCB Decachlorobiphenyl (Surr)	*72*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:58*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*30 - 150*	*05/02/22 16:01*	*05/04/22 21:58*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**44.1**		13.7	mg/Kg	☼	04/28/22 14:01	04/30/22 01:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	*101*		*40 - 140*	*04/28/22 14:01*	*04/30/22 01:33*	*1*
o-Terphenyl (Surr)	*96*		*40 - 140*	*04/28/22 14:01*	*04/30/22 01:33*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.41	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Arsenic	ND		1.62	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Beryllium	**0.644**		0.541	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Barium	**22.2**		1.08	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Cadmium	ND		0.541	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Chromium	**6.96**		1.08	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Copper	**8.41**		1.08	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Lead	**8.05**		1.62	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Nickel	**5.30**		1.08	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Selenium	ND		1.62	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Silver	ND	^+	1.62	mg/Kg	☼	04/27/22 09:16	04/27/22 22:57	1
Thallium	ND		3.25	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Zinc	**29.6**		3.25	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Manganese	**122**		1.08	mg/Kg	☼	04/27/22 09:16	04/28/22 13:15	1
Vanadium	**9.85**		1.62	mg/Kg	☼	04/27/22 09:16	04/27/22 22:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0483	mg/Kg	☼	04/27/22 09:21	04/27/22 18:36	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-4 (6-7)

Date Collected: 04/26/22 12:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-8

Matrix: Solid
Percent Solids: 89.4

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		0.1		%			04/27/22 15:01	1
Percent Solids	89.4		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-5 (0-6)
Date Collected: 04/26/22 13:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-9
Matrix: Solid
Percent Solids: 93.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Acetone	**157**		41.5		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Acrylonitrile	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Benzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Bromobenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Bromochloromethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Bromodichloromethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Bromoform	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Bromomethane	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
2-Butanone (MEK)	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
n-Butylbenzene	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
sec-Butylbenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
tert-Butylbenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Carbon disulfide	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Carbon tetrachloride	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Chlorobenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Chloroethane	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Chloroform	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Chloromethane	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
2-Chlorotoluene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
4-Chlorotoluene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2-Dibromo-3-Chloropropane	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Dibromochloromethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2-Dibromoethane (EDB)	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Dibromomethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2-Dichlorobenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,3-Dichlorobenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,4-Dichlorobenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Dichlorodifluoromethane (Freon 12)	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,1-Dichloroethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2-Dichloroethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,1-Dichloroethene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
cis-1,2-Dichloroethene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
trans-1,2-Dichloroethene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2-Dichloropropane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,3-Dichloropropane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
2,2-Dichloropropane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,1-Dichloropropene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
cis-1,3-Dichloropropene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
trans-1,3-Dichloropropene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Ethylbenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Hexachlorobutadiene	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
2-Hexanone (MBK)	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Isopropylbenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
4-Isopropyltoluene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Methyl tert-butyl ether	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
4-Methyl-2-pentanone (MIBK)	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Methylene Chloride	**19.0**		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Naphthalene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1

Client Sample ID: TP-5 (0-6)
Date Collected: 04/26/22 13:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-9
Matrix: Solid
Percent Solids: 93.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Styrene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,1,1,2-Tetrachloroethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,1,2,2-Tetrachloroethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Tetrachloroethene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Toluene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2,3-Trichlorobenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2,4-Trichlorobenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,3,5-Trichlorobenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,1,1-Trichloroethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,1,2-Trichloroethane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Trichloroethene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Trichlorofluoromethane (Freon 11)	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2,3-Trichloropropane	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,2,4-Trimethylbenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,3,5-Trimethylbenzene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Vinyl chloride	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
m,p-Xylene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
o-Xylene	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Tetrahydrofuran	ND		8.30		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Ethyl ether	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Tert-amyl methyl ether	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Ethyl tert-butyl ether	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
di-Isopropyl ether	ND		4.15		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
tert-Butanol	ND		83.0		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
1,4-Dioxane	ND		83.0		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
trans-1,4-Dichloro-2-butene	ND		20.8		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1
Ethanol	ND		830		ug/Kg	☼	05/03/22 12:41	05/03/22 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/03/22 12:41*	*05/03/22 18:41*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*05/03/22 12:41*	*05/03/22 18:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*05/03/22 12:41*	*05/03/22 18:41*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 18:41*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
1,2,4-Trichlorobenzene	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
1,2-Dichlorobenzene	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
1,3-Dichlorobenzene	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
1,4-Dichlorobenzene	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
1-Methylnaphthalene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2,4,5-Trichlorophenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2,4,6-Trichlorophenol	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2,4-Dichlorophenol	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2,4-Dimethylphenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2,4-Dinitrophenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2,4-Dinitrotoluene	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2,6-Dinitrotoluene	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-5 (0-6)
Date Collected: 04/26/22 13:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-9
Matrix: Solid
Percent Solids: 93.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2-Chlorophenol	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2-Methylnaphthalene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2-Methylphenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2-Nitroaniline	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
2-Nitrophenol	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
3 & 4 Methylphenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
3,3'-Dichlorobenzidine	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
3-Nitroaniline	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
4,6-Dinitro-2-methylphenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
4-Bromophenyl phenyl ether	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
4-Chloro-3-methylphenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
4-Chloroaniline	ND	*-	173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
4-Chlorophenyl phenyl ether	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
4-Nitroaniline	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
4-Nitrophenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Acenaphthene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Acenaphthylene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Aniline	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Anthracene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Azobenzene/Diphenyldiazene	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Benzidine	ND	*-	683		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Benzo[a]anthracene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Benzo[a]pyrene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Benzo[b]fluoranthene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Benzo[g,h,i]perylene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Benzo[k]fluoranthene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Benzoic acid	ND	*-	342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Benzyl alcohol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Bis(2-chloroethoxy)methane	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Bis(2-chloroethyl)ether	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
bis (2-chloroisopropyl) ether	ND	*1	173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Bis(2-ethylhexyl) phthalate	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Butyl benzyl phthalate	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Carbazole	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Chrysene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Dibenz(a,h)anthracene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Dibenzofuran	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Diethyl phthalate	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Dimethyl phthalate	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Di-n-butyl phthalate	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Di-n-octyl phthalate	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Fluoranthene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Fluorene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Hexachlorobenzene	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Hexachlorobutadiene	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Hexachlorocyclopentadiene	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Hexachloroethane	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Indeno[1,2,3-cd]pyrene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1

Client Sample ID: TP-5 (0-6)
Date Collected: 04/26/22 13:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-9
Matrix: Solid
Percent Solids: 93.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Naphthalene	ND	*1	69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Nitrobenzene	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
N-Nitrosodimethylamine	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
N-Nitrosodi-n-propylamine	ND		173		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
N-Nitrosodiphenylamine	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Pentachloronitrobenzene	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Pentachlorophenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Phenanthrene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Phenol	ND		342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Pyrene	ND		69.1		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1
Pyridine	ND	*-	342		ug/Kg	☼	04/27/22 16:35	04/29/22 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*30 - 130*	*04/27/22 16:35*	*04/29/22 13:56*	*1*
2-Fluorophenol (Surr)	*49*		*15 - 110*	*04/27/22 16:35*	*04/29/22 13:56*	*1*
Nitrobenzene-d5 (Surr)	*51*		*30 - 130*	*04/27/22 16:35*	*04/29/22 13:56*	*1*
Phenol-d5 (Surr)	*53*		*15 - 110*	*04/27/22 16:35*	*04/29/22 13:56*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*15 - 110*	*04/27/22 16:35*	*04/29/22 13:56*	*1*
Terphenyl-d14 (Surr)	*65*		*30 - 130*	*04/27/22 16:35*	*04/29/22 13:56*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
beta-BHC	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
delta-BHC	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
gamma-BHC (Lindane)	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Heptachlor	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Aldrin	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Heptachlor epoxide	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Endosulfan I	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Dieldrin	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
4,4'-DDE	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Endrin	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Endosulfan II	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
4,4'-DDD	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Endosulfan sulfate	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
4,4'-DDT	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Methoxychlor	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Endrin ketone	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Endrin aldehyde	ND		8.31		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
cis-Chlordane	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
trans-Chlordane	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Toxaphene	ND		104		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1
Alachlor	ND		5.20		ug/Kg	☼	05/02/22 16:01	05/05/22 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*43*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:14*	*1*
Tetrachloro-m-xylene	*60*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:14*	*1*
DCB Decachlorobiphenyl (Surr)	*115*		*30 - 150*	*05/02/22 16:01*	*05/05/22 14:14*	*1*

Client Sample ID: TP-5 (0-6)
Date Collected: 04/26/22 13:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-9
Matrix: Solid
Percent Solids: 93.4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*45*	*p*	*30 - 150*	*05/02/22 16:01*	*05/05/22 14:14*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1
PCB-1221	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1
PCB-1232	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1
PCB-1242	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1
PCB-1248	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1
PCB-1254	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1
PCB-1260	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1
PCB-1262	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1
PCB-1268	ND		20.8	ug/Kg	☼	05/02/22 16:01	05/04/22 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*69*		*30 - 150*	*05/02/22 16:01*	*05/04/22 22:15*	*1*
Tetrachloro-m-xylene	*66*		*30 - 150*	*05/02/22 16:01*	*05/04/22 22:15*	*1*
DCB Decachlorobiphenyl (Surr)	*63*		*30 - 150*	*05/02/22 16:01*	*05/04/22 22:15*	*1*
DCB Decachlorobiphenyl (Surr)	*61*		*30 - 150*	*05/02/22 16:01*	*05/04/22 22:15*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**48.5**		13.1	mg/Kg	☼	04/28/22 14:01	04/30/22 01:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	*93*		*40 - 140*	*04/28/22 14:01*	*04/30/22 01:58*	*1*
o-Terphenyl (Surr)	*95*		*40 - 140*	*04/28/22 14:01*	*04/30/22 01:58*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10.5	mg/Kg	☼	04/27/22 09:16	04/28/22 13:22	2
Arsenic	ND		3.15	mg/Kg	☼	04/27/22 09:16	04/28/22 13:22	2
Beryllium	ND		2.63	mg/Kg	☼	04/27/22 09:16	04/28/22 17:27	5
Barium	**17.1**		5.26	mg/Kg	☼	04/27/22 09:16	04/28/22 17:27	5
Cadmium	ND		1.05	mg/Kg	☼	04/27/22 09:16	04/28/22 13:22	2
Chromium	ND		5.26	mg/Kg	☼	04/27/22 09:16	04/28/22 17:27	5
Copper	ND		5.26	mg/Kg	☼	04/27/22 09:16	04/28/22 17:27	5
Lead	**19.4**		3.15	mg/Kg	☼	04/27/22 09:16	04/28/22 13:22	2
Nickel	**2.22**		2.10	mg/Kg	☼	04/27/22 09:16	04/28/22 13:22	2
Selenium	ND		3.15	mg/Kg	☼	04/27/22 09:16	04/28/22 13:22	2
Silver	ND	^+	7.89	mg/Kg	☼	04/27/22 09:16	04/28/22 17:27	5
Thallium	ND		6.31	mg/Kg	☼	04/27/22 09:16	04/28/22 13:22	2
Zinc	**61.0**		6.31	mg/Kg	☼	04/27/22 09:16	04/28/22 13:22	2
Manganese	**216**		5.26	mg/Kg	☼	04/27/22 09:16	04/28/22 17:27	5
Vanadium	ND		7.89	mg/Kg	☼	04/27/22 09:16	04/28/22 17:27	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0478	mg/Kg	☼	04/27/22 09:21	04/27/22 18:38	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-5 (0-6)

Date Collected: 04/26/22 13:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-9

Matrix: Solid
Percent Solids: 93.4

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.6		0.1		%			04/27/22 15:01	1
Percent Solids	93.4		0.1		%			04/27/22 15:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-5 (6-7)
Date Collected: 04/26/22 13:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-10
Matrix: Solid
Percent Solids: 89.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Acetone	**47.2**		38.8		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Acrylonitrile	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Benzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Bromobenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Bromochloromethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Bromodichloromethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Bromoform	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Bromomethane	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
2-Butanone (MEK)	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
n-Butylbenzene	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
sec-Butylbenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
tert-Butylbenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Carbon disulfide	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Carbon tetrachloride	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Chlorobenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Chloroethane	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Chloroform	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Chloromethane	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
2-Chlorotoluene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
4-Chlorotoluene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2-Dibromo-3-Chloropropane	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Dibromochloromethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2-Dibromoethane (EDB)	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Dibromomethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2-Dichlorobenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,3-Dichlorobenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,4-Dichlorobenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Dichlorodifluoromethane (Freon 12)	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,1-Dichloroethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2-Dichloroethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,1-Dichloroethene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
cis-1,2-Dichloroethene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
trans-1,2-Dichloroethene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2-Dichloropropane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,3-Dichloropropane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
2,2-Dichloropropane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,1-Dichloropropene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
cis-1,3-Dichloropropene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
trans-1,3-Dichloropropene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Ethylbenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Hexachlorobutadiene	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
2-Hexanone (MBK)	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Isopropylbenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
4-Isopropyltoluene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Methyl tert-butyl ether	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
4-Methyl-2-pentanone (MIBK)	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Methylene Chloride	**15.2**		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Naphthalene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1

Client Sample ID: TP-5 (6-7)
Date Collected: 04/26/22 13:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-10
Matrix: Solid
Percent Solids: 89.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Styrene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,1,1,2-Tetrachloroethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,1,2,2-Tetrachloroethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Tetrachloroethene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Toluene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2,3-Trichlorobenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2,4-Trichlorobenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,3,5-Trichlorobenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,1,1-Trichloroethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,1,2-Trichloroethane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Trichloroethene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Trichlorofluoromethane (Freon 11)	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2,3-Trichloropropane	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,2,4-Trimethylbenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,3,5-Trimethylbenzene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Vinyl chloride	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
m,p-Xylene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
o-Xylene	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Tetrahydrofuran	ND		7.77		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Ethyl ether	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Tert-amyl methyl ether	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Ethyl tert-butyl ether	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
di-Isopropyl ether	ND		3.88		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
tert-Butanol	ND		77.7		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
1,4-Dioxane	ND		77.7		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
trans-1,4-Dichloro-2-butene	ND		19.4		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1
Ethanol	ND		777		ug/Kg	☼	05/03/22 12:41	05/03/22 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 19:06*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*05/03/22 12:41*	*05/03/22 19:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*05/03/22 12:41*	*05/03/22 19:06*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*05/03/22 12:41*	*05/03/22 19:06*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
1,2,4-Trichlorobenzene	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
1,2-Dichlorobenzene	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
1,3-Dichlorobenzene	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
1,4-Dichlorobenzene	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
1-Methylnaphthalene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2,4,5-Trichlorophenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2,4,6-Trichlorophenol	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2,4-Dichlorophenol	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2,4-Dimethylphenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2,4-Dinitrophenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2,4-Dinitrotoluene	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2,6-Dinitrotoluene	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-5 (6-7)
Date Collected: 04/26/22 13:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-10
Matrix: Solid
Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2-Chlorophenol	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2-Methylnaphthalene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2-Methylphenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2-Nitroaniline	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
2-Nitrophenol	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
3 & 4 Methylphenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
3,3'-Dichlorobenzidine	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
3-Nitroaniline	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
4,6-Dinitro-2-methylphenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
4-Bromophenyl phenyl ether	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
4-Chloro-3-methylphenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
4-Chloroaniline	ND	*-	182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
4-Chlorophenyl phenyl ether	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
4-Nitroaniline	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
4-Nitrophenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Acenaphthene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Acenaphthylene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Aniline	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Anthracene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Azobenzene/Diphenyldiazene	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Benzidine	ND	*-	719		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Benzo[a]anthracene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Benzo[a]pyrene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Benzo[b]fluoranthene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Benzo[g,h,i]perylene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Benzo[k]fluoranthene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Benzoic acid	ND	*-	359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Benzyl alcohol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Bis(2-chloroethoxy)methane	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Bis(2-chloroethyl)ether	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
bis (2-chloroisopropyl) ether	ND	*1	182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Bis(2-ethylhexyl) phthalate	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Butyl benzyl phthalate	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Carbazole	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Chrysene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Dibenz(a,h)anthracene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Dibenzofuran	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Diethyl phthalate	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Dimethyl phthalate	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Di-n-butyl phthalate	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Di-n-octyl phthalate	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Fluoranthene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Fluorene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Hexachlorobenzene	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Hexachlorobutadiene	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Hexachlorocyclopentadiene	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Hexachloroethane	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Indeno[1,2,3-cd]pyrene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1

Client Sample ID: TP-5 (6-7)
Date Collected: 04/26/22 13:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-10
Matrix: Solid
Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Naphthalene	ND	*1	72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Nitrobenzene	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
N-Nitrosodimethylamine	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
N-Nitrosodi-n-propylamine	ND		182		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
N-Nitrosodiphenylamine	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Pentachloronitrobenzene	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Pentachlorophenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Phenanthrene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Phenol	ND		359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Pyrene	ND		72.7		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1
Pyridine	ND	*-	359		ug/Kg	☼	04/27/22 16:35	05/02/22 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*30 - 130*	*04/27/22 16:35*	*05/02/22 15:31*	*1*
2-Fluorophenol (Surr)	*73*		*15 - 110*	*04/27/22 16:35*	*05/02/22 15:31*	*1*
Nitrobenzene-d5 (Surr)	*48*		*30 - 130*	*04/27/22 16:35*	*05/02/22 15:31*	*1*
Phenol-d5 (Surr)	*67*		*15 - 110*	*04/27/22 16:35*	*05/02/22 15:31*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*15 - 110*	*04/27/22 16:35*	*05/02/22 15:31*	*1*
Terphenyl-d14 (Surr)	*68*		*30 - 130*	*04/27/22 16:35*	*05/02/22 15:31*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
beta-BHC	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
delta-BHC	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
gamma-BHC (Lindane)	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Heptachlor	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Aldrin	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Heptachlor epoxide	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Endosulfan I	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Dieldrin	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
4,4'-DDE	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Endrin	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Endosulfan II	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
4,4'-DDD	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Endosulfan sulfate	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
4,4'-DDT	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Methoxychlor	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Endrin ketone	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Endrin aldehyde	ND		8.81		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
cis-Chlordane	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
trans-Chlordane	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Toxaphene	ND		110		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1
Alachlor	ND		5.51		ug/Kg	☼	05/02/22 16:01	05/05/22 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*55*		*30 - 150*	*05/02/22 16:01*	*05/05/22 12:54*	*1*
Tetrachloro-m-xylene	*56*		*30 - 150*	*05/02/22 16:01*	*05/05/22 12:54*	*1*
DCB Decachlorobiphenyl (Surr)	*69*		*30 - 150*	*05/02/22 16:01*	*05/05/22 12:54*	*1*

Client Sample ID: TP-5 (6-7)
Date Collected: 04/26/22 13:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-10
Matrix: Solid
Percent Solids: 89.6

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*30 - 150*	*05/02/22 16:01*	*05/05/22 12:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1
PCB-1221	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1
PCB-1232	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1
PCB-1242	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1
PCB-1248	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1
PCB-1254	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1
PCB-1260	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1
PCB-1262	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1
PCB-1268	ND		22.0	ug/Kg	☼	05/02/22 16:01	05/04/22 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*30 - 150*	*05/02/22 16:01*	*05/04/22 22:32*	*1*
Tetrachloro-m-xylene	*60*		*30 - 150*	*05/02/22 16:01*	*05/04/22 22:32*	*1*
DCB Decachlorobiphenyl (Surr)	*69*		*30 - 150*	*05/02/22 16:01*	*05/04/22 22:32*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*30 - 150*	*05/02/22 16:01*	*05/04/22 22:32*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**49.9**		13.7	mg/Kg	☼	04/28/22 14:01	04/30/22 02:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*76*		*40 - 140*	*04/28/22 14:01*	*04/30/22 02:23*	*1*
o-Terphenyl (Surr)	*80*		*40 - 140*	*04/28/22 14:01*	*04/30/22 02:23*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		27.0	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Arsenic	ND		8.10	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Beryllium	ND		2.70	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Barium	**16.1**		5.40	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Cadmium	ND		2.70	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Chromium	ND		5.40	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Copper	ND		5.40	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Lead	**25.2**		8.10	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Nickel	ND		5.40	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Selenium	ND		8.10	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Silver	ND	^+	8.10	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Thallium	ND		16.2	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Zinc	**103**		16.2	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Manganese	**310**		5.40	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5
Vanadium	ND		8.10	mg/Kg	☼	04/27/22 09:16	04/28/22 17:41	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0555	mg/Kg	☼	04/27/22 09:21	04/27/22 18:40	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-5 (6-7)

Date Collected: 04/26/22 13:10
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-10

Matrix: Solid
Percent Solids: 89.6

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.4		0.1		%			04/27/22 15:01	1
Percent Solids	89.6		0.1		%			04/27/22 15:01	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4157-1	TP-2 (6-7)	100	98	114	101
620-4157-2	TP-2 (0-6)	94	97	119	103
620-4157-3	TP-3 (0-6)	101	99	114	100
620-4157-4	TP-3 (6-7)	95	98	115	102
620-4157-5	TP-1 (0-6)	98	99	116	100
620-4157-6	TP-1 (6-7)	101	100	113	99
620-4157-7	TP-4 (0-6)	101	100	114	99
620-4157-8	TP-4 (6-7)	102	100	114	99
620-4157-9	TP-5 (0-6)	98	98	116	100
620-4157-10	TP-5 (6-7)	100	99	116	100
LCS 620-10389/1-A	Lab Control Sample	101	101	107	102
LCSD 620-10389/2-A	Lab Control Sample Dup	101	100	109	100
MB 620-10389/3-A	Method Blank	102	100	109	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
620-4157-1	TP-2 (6-7)	48	55	40	48	60	48
620-4157-2	TP-2 (0-6)	47	59	43	50	52	46
620-4157-3	TP-3 (0-6)	64	87	62	77	72	63
620-4157-4	TP-3 (6-7)	54	61	44	57	61	56
620-4157-5	TP-1 (0-6)	65	91	62	79	76	64
620-4157-6	TP-1 (6-7)	45	49	50	53	44	46
620-4157-7	TP-4 (0-6)	48	48	51	51	58	63
620-4157-8	TP-4 (6-7)	54	69	46	60	64	62
620-4157-9	TP-5 (0-6)	50	49	51	53	53	65
620-4157-10	TP-5 (6-7)	60	73	48	67	72	68
LCS 620-10219/2-A	Lab Control Sample	60	64	73	67	71	66
LCSD 620-10219/3-A	Lab Control Sample Dup	51	54	59	53	72	60
MB 620-10219/1-A	Method Blank	63	66	73	65	58	79

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: AECOM
Job ID: 620-4157-1
Project/Site: I295/Rt 37 - Johnston, RI

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4157-1	TP-2 (6-7)	31	46	40	32
620-4157-2	TP-2 (0-6)	39	50	50	35
620-4157-3	TP-3 (0-6)	54	56	44	34
620-4157-4	TP-3 (6-7)	31	42	42	32
620-4157-5	TP-1 (0-6)	60	62	71	71
620-4157-6	TP-1 (6-7)	30 p	57	41	34
620-4157-7	TP-4 (0-6)	71	73	78	72
620-4157-8	TP-4 (6-7)	67	72	86	71
620-4157-9	TP-5 (0-6)	43	60	115	45 p
620-4157-10	TP-5 (6-7)	55	56	69	79
LCS 620-10378/4-A	Lab Control Sample	59		49	
LCSD 620-10378/5-A	Lab Control Sample Dup	61		62	
MB 620-10378/1-A	Method Blank	59		48	

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4157-1	TP-2 (6-7)	45	43	40	39
620-4157-2	TP-2 (0-6)	61	58	52	52
620-4157-3	TP-3 (0-6)	58	55	55	52
620-4157-4	TP-3 (6-7)	49	46	39	35
620-4157-5	TP-1 (0-6)	56	52	52	51
620-4157-6	TP-1 (6-7)	41	42	38	39
620-4157-7	TP-4 (0-6)	74	71	67	64
620-4157-8	TP-4 (6-7)	79	78	72	68
620-4157-9	TP-5 (0-6)	69	66	63	61
620-4157-10	TP-5 (6-7)	61	60	69	68
LCS 620-10378/2-A	Lab Control Sample	77	84	69	74
LCSD 620-10378/3-A	Lab Control Sample Dup	91	93	80	85
MB 620-10378/1-A	Method Blank	83	83	76	76

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	OTPH
Lab Sample ID	Client Sample ID	(40-140)	(40-140)
620-4157-1	TP-2 (6-7)	76	86
620-4157-2	TP-2 (0-6)	90	112
620-4157-3	TP-3 (0-6)	104	111
620-4157-4	TP-3 (6-7)	106	104

Surrogate Summary

Client: AECOM
Job ID: 620-4157-1
Project/Site: I295/Rt 37 - Johnston, RI

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC) (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1COD (40-140)	OTPH (40-140)								
620-4157-5	TP-1 (0-6)	89	93								
620-4157-6	TP-1 (6-7)	102	90								
620-4157-7	TP-4 (0-6)	105	103								
620-4157-8	TP-4 (6-7)	101	96								
620-4157-9	TP-5 (0-6)	93	95								
620-4157-10	TP-5 (6-7)	76	80								
LCS 620-10258/2-A	Lab Control Sample	94	77								
LCSD 620-10258/3-A	Lab Control Sample Dup	96	80								
MB 620-10258/1-A	Method Blank	103	95								

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)
OTPH = o-Terphenyl (Surr)

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-10389/3-A
Matrix: Solid
Analysis Batch: 10390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10389

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Acetone	ND		50.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Acrylonitrile	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Benzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Bromobenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Bromochloromethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Bromodichloromethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Bromoform	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Bromomethane	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
2-Butanone (MEK)	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
n-Butylbenzene	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
sec-Butylbenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
tert-Butylbenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Carbon disulfide	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Carbon tetrachloride	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Chlorobenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Chloroethane	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Chloroform	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Chloromethane	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
2-Chlorotoluene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
4-Chlorotoluene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Dibromochloromethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Dibromomethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,1-Dichloroethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2-Dichloroethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,1-Dichloroethene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2-Dichloropropane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,3-Dichloropropane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
2,2-Dichloropropane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,1-Dichloropropene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Ethylbenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Hexachlorobutadiene	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Isopropylbenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
4-Isopropyltoluene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Methylene Chloride	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-10389/3-A
Matrix: Solid
Analysis Batch: 10390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10389

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
N-Propylbenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Styrene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Tetrachloroethene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Toluene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Trichloroethene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Vinyl chloride	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
m,p-Xylene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
o-Xylene	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Tetrahydrofuran	ND		10.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Ethyl ether	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
di-Isopropyl ether	ND		5.00		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
tert-Butanol	ND		100		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
1,4-Dioxane	ND		100		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		05/03/22 08:43	05/03/22 13:45	1
Ethanol	ND		1000		ug/Kg		05/03/22 08:43	05/03/22 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*05/03/22 08:43*	*05/03/22 13:45*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*05/03/22 08:43*	*05/03/22 13:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*	*05/03/22 08:43*	*05/03/22 13:45*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*05/03/22 08:43*	*05/03/22 13:45*	*1*

Lab Sample ID: LCS 620-10389/1-A
Matrix: Solid
Analysis Batch: 10390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	18.67		ug/Kg		93	91 - 125
Acetone	20.0	21.58	J	ug/Kg		108	47 - 157
Acrylonitrile	20.0	21.75		ug/Kg		109	79 - 129
Benzene	20.0	20.69		ug/Kg		103	88 - 130
Bromobenzene	20.0	19.39		ug/Kg		97	81 - 125
Bromochloromethane	20.0	19.72		ug/Kg		99	85 - 139
Bromodichloromethane	20.0	20.85		ug/Kg		104	84 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-10389/1-A
Matrix: Solid
Analysis Batch: 10390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	19.62		ug/Kg		98	83 - 131
Bromomethane	20.0	24.57		ug/Kg		123	63 - 157
2-Butanone (MEK)	20.0	20.39		ug/Kg		102	58 - 161
n-Butylbenzene	20.0	20.30		ug/Kg		101	83 - 137
sec-Butylbenzene	20.0	21.14		ug/Kg		106	79 - 131
tert-Butylbenzene	20.0	20.13		ug/Kg		101	82 - 131
Carbon disulfide	20.0	21.19		ug/Kg		106	82 - 135
Carbon tetrachloride	20.0	18.77		ug/Kg		94	77 - 139
Chlorobenzene	20.0	20.34		ug/Kg		102	85 - 121
Chloroethane	20.0	26.61		ug/Kg		133	61 - 156
Chloroform	20.0	20.82		ug/Kg		104	89 - 123
Chloromethane	20.0	22.00		ug/Kg		110	81 - 130
2-Chlorotoluene	20.0	21.14		ug/Kg		106	90 - 117
4-Chlorotoluene	20.0	21.11		ug/Kg		106	88 - 121
1,2-Dibromo-3-Chloropropane	20.0	17.98		ug/Kg		90	75 - 142
Dibromochloromethane	20.0	19.55		ug/Kg		98	85 - 131
1,2-Dibromoethane (EDB)	20.0	19.57		ug/Kg		98	85 - 133
Dibromomethane	20.0	20.47		ug/Kg		102	90 - 128
1,2-Dichlorobenzene	20.0	19.37		ug/Kg		97	88 - 128
1,3-Dichlorobenzene	20.0	20.73		ug/Kg		104	78 - 133
1,4-Dichlorobenzene	20.0	20.16		ug/Kg		101	88 - 121
Dichlorodifluoromethane (Freon 12)	20.0	20.53		ug/Kg		103	55 - 159
1,1-Dichloroethane	20.0	20.07		ug/Kg		100	89 - 129
1,2-Dichloroethane	20.0	21.11		ug/Kg		106	82 - 137
1,1-Dichloroethene	20.0	19.55		ug/Kg		98	82 - 138
cis-1,2-Dichloroethene	20.0	19.46		ug/Kg		97	79 - 133
trans-1,2-Dichloroethene	20.0	19.69		ug/Kg		98	81 - 137
1,2-Dichloropropane	20.0	19.80		ug/Kg		99	89 - 128
1,3-Dichloropropane	20.0	19.76		ug/Kg		99	86 - 133
2,2-Dichloropropane	20.0	18.90		ug/Kg		95	91 - 131
1,1-Dichloropropene	20.0	19.15		ug/Kg		96	75 - 137
cis-1,3-Dichloropropene	20.0	19.37		ug/Kg		97	84 - 122
trans-1,3-Dichloropropene	20.0	19.61		ug/Kg		98	90 - 121
Ethylbenzene	20.0	20.80		ug/Kg		104	89 - 126
Hexachlorobutadiene	20.0	17.11		ug/Kg		86	74 - 131
2-Hexanone (MBK)	20.0	19.86		ug/Kg		99	41 - 167
Isopropylbenzene	20.0	19.94		ug/Kg		100	88 - 125
4-Isopropyltoluene	20.0	19.21		ug/Kg		96	86 - 128
Methyl tert-butyl ether	20.0	20.49		ug/Kg		102	74 - 144
4-Methyl-2-pentanone (MIBK)	20.0	20.09		ug/Kg		100	80 - 135
Methylene Chloride	20.0	20.26		ug/Kg		101	87 - 119
Naphthalene	20.0	19.81		ug/Kg		99	60 - 145
N-Propylbenzene	20.0	20.91		ug/Kg		105	87 - 120
Styrene	20.0	20.11		ug/Kg		101	88 - 125
1,1,1,2-Tetrachloroethane	20.0	19.87		ug/Kg		99	81 - 128
1,1,2,2-Tetrachloroethane	20.0	21.20		ug/Kg		106	88 - 126
Tetrachloroethene	20.0	17.98		ug/Kg		90	81 - 124
Toluene	20.0	20.07		ug/Kg		100	84 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-10389/1-A
Matrix: Solid
Analysis Batch: 10390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10389

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichlorobenzene			20.0	18.67		ug/Kg		93	68 - 145		
1,2,4-Trichlorobenzene			20.0	19.46		ug/Kg		97	57 - 141		
1,3,5-Trichlorobenzene			20.0	18.15		ug/Kg		91	70 - 137		
1,1,1-Trichloroethane			20.0	20.08		ug/Kg		100	88 - 131		
1,1,2-Trichloroethane			20.0	20.50		ug/Kg		103	91 - 129		
Trichloroethene			20.0	19.65		ug/Kg		98	88 - 131		
Trichlorofluoromethane (Freon 11)			20.0	20.22		ug/Kg		101	86 - 130		
1,2,3-Trichloropropane			20.0	20.98		ug/Kg		105	92 - 126		
1,2,4-Trimethylbenzene			20.0	21.33		ug/Kg		107	87 - 126		
1,3,5-Trimethylbenzene			20.0	20.73		ug/Kg		104	90 - 125		
Vinyl chloride			20.0	22.06		ug/Kg		110	73 - 145		
m,p-Xylene			20.0	20.15		ug/Kg		101	83 - 122		
o-Xylene			20.0	20.28		ug/Kg		101	87 - 122		
Tetrahydrofuran			20.0	22.59		ug/Kg		113	81 - 134		
Ethyl ether			20.0	22.80		ug/Kg		114	84 - 144		
Tert-amyl methyl ether			20.0	20.18		ug/Kg		101	69 - 151		
Ethyl tert-butyl ether			20.0	20.52		ug/Kg		103	75 - 128		
di-Isopropyl ether			20.0	21.41		ug/Kg		107	82 - 131		
tert-Butanol			200	204.3		ug/Kg		102	85 - 148		
1,4-Dioxane			200	196.8		ug/Kg		98	10 - 178		
trans-1,4-Dichloro-2-butene			20.0	21.94	J	ug/Kg		110	74 - 151		
Ethanol			400	481.6	J	ug/Kg		120	83 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 620-10389/2-A
Matrix: Solid
Analysis Batch: 10390

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10389

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	20.74		ug/Kg		104	91 - 125	11	30
Acetone			20.0	22.69	J	ug/Kg		113	47 - 157	5	30
Acrylonitrile			20.0	21.51		ug/Kg		108	79 - 129	1	30
Benzene			20.0	20.00		ug/Kg		100	88 - 130	3	30
Bromobenzene			20.0	18.10		ug/Kg		90	81 - 125	7	30
Bromochloromethane			20.0	17.97		ug/Kg		90	85 - 139	9	30
Bromodichloromethane			20.0	19.60		ug/Kg		98	84 - 134	6	30
Bromoform			20.0	18.09		ug/Kg		90	83 - 131	8	30
Bromomethane			20.0	23.54		ug/Kg		118	63 - 157	4	30
2-Butanone (MEK)			20.0	21.83		ug/Kg		109	58 - 161	7	30
n-Butylbenzene			20.0	20.87		ug/Kg		104	83 - 137	3	30
sec-Butylbenzene			20.0	20.36		ug/Kg		102	79 - 131	4	30
tert-Butylbenzene			20.0	18.82		ug/Kg		94	82 - 131	7	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-10389/2-A
Matrix: Solid
Analysis Batch: 10390

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10389

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	21.49		ug/Kg		107	82 - 135	1	30
Carbon tetrachloride			20.0	19.68		ug/Kg		98	77 - 139	5	30
Chlorobenzene			20.0	19.42		ug/Kg		97	85 - 121	5	30
Chloroethane			20.0	25.19		ug/Kg		126	61 - 156	5	30
Chloroform			20.0	19.97		ug/Kg		100	89 - 123	4	30
Chloromethane			20.0	20.52		ug/Kg		103	81 - 130	7	30
2-Chlorotoluene			20.0	20.19		ug/Kg		101	90 - 117	5	30
4-Chlorotoluene			20.0	20.46		ug/Kg		102	88 - 121	3	30
1,2-Dibromo-3-Chloropropane			20.0	17.89		ug/Kg		89	75 - 142	0	30
Dibromochloromethane			20.0	17.79		ug/Kg		89	85 - 131	9	30
1,2-Dibromoethane (EDB)			20.0	18.42		ug/Kg		92	85 - 133	6	30
Dibromomethane			20.0	19.21		ug/Kg		96	90 - 128	6	30
1,2-Dichlorobenzene			20.0	18.63		ug/Kg		93	88 - 128	4	30
1,3-Dichlorobenzene			20.0	19.07		ug/Kg		95	78 - 133	8	30
1,4-Dichlorobenzene			20.0	19.44		ug/Kg		97	88 - 121	4	30
Dichlorodifluoromethane (Freon 12)			20.0	22.16		ug/Kg		111	55 - 159	8	30
1,1-Dichloroethane			20.0	19.85		ug/Kg		99	89 - 129	1	30
1,2-Dichloroethane			20.0	20.55		ug/Kg		103	82 - 137	3	30
1,1-Dichloroethene			20.0	20.01		ug/Kg		100	82 - 138	2	30
cis-1,2-Dichloroethene			20.0	18.66		ug/Kg		93	79 - 133	4	30
trans-1,2-Dichloroethene			20.0	18.91		ug/Kg		95	81 - 137	4	30
1,2-Dichloropropane			20.0	19.17		ug/Kg		96	89 - 128	3	30
1,3-Dichloropropane			20.0	18.83		ug/Kg		94	86 - 133	5	30
2,2-Dichloropropane			20.0	19.76		ug/Kg		99	91 - 131	4	30
1,1-Dichloropropene			20.0	20.10		ug/Kg		100	75 - 137	5	30
cis-1,3-Dichloropropene			20.0	18.64		ug/Kg		93	84 - 122	4	30
trans-1,3-Dichloropropene			20.0	19.02		ug/Kg		95	90 - 121	3	30
Ethylbenzene			20.0	20.41		ug/Kg		102	89 - 126	2	30
Hexachlorobutadiene			20.0	16.89		ug/Kg		84	74 - 131	1	30
2-Hexanone (MBK)			20.0	21.40		ug/Kg		107	41 - 167	7	30
Isopropylbenzene			20.0	19.79		ug/Kg		99	88 - 125	1	30
4-Isopropyltoluene			20.0	19.48		ug/Kg		97	86 - 128	1	30
Methyl tert-butyl ether			20.0	19.59		ug/Kg		98	74 - 144	4	30
4-Methyl-2-pentanone (MIBK)			20.0	21.06		ug/Kg		105	80 - 135	5	30
Methylene Chloride			20.0	19.61		ug/Kg		98	87 - 119	3	30
Naphthalene			20.0	18.96		ug/Kg		95	60 - 145	4	30
N-Propylbenzene			20.0	20.75		ug/Kg		104	87 - 120	1	30
Styrene			20.0	19.20		ug/Kg		96	88 - 125	5	30
1,1,1,2-Tetrachloroethane			20.0	18.76		ug/Kg		94	81 - 128	6	30
1,1,2,2-Tetrachloroethane			20.0	20.24		ug/Kg		101	88 - 126	5	30
Tetrachloroethene			20.0	17.94		ug/Kg		90	81 - 124	0	30
Toluene			20.0	19.63		ug/Kg		98	84 - 124	2	30
1,2,3-Trichlorobenzene			20.0	18.05		ug/Kg		90	68 - 145	3	30
1,2,4-Trichlorobenzene			20.0	18.24		ug/Kg		91	57 - 141	6	30
1,3,5-Trichlorobenzene			20.0	17.85		ug/Kg		89	70 - 137	2	30
1,1,1-Trichloroethane			20.0	20.76		ug/Kg		104	88 - 131	3	30
1,1,2-Trichloroethane			20.0	19.61		ug/Kg		98	91 - 129	4	30
Trichloroethene			20.0	19.80		ug/Kg		99	88 - 131	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-10389/2-A
Matrix: Solid
Analysis Batch: 10390

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10389

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	21.76		ug/Kg		109	86 - 130	7	30
1,2,3-Trichloropropane			20.0	20.26		ug/Kg		101	92 - 126	4	30
1,2,4-Trimethylbenzene			20.0	19.84		ug/Kg		99	87 - 126	7	30
1,3,5-Trimethylbenzene			20.0	20.03		ug/Kg		100	90 - 125	3	30
Vinyl chloride			20.0	22.00		ug/Kg		110	73 - 145	0	30
m,p-Xylene			20.0	20.04		ug/Kg		100	83 - 122	1	30
o-Xylene			20.0	19.64		ug/Kg		98	87 - 122	3	30
Tetrahydrofuran			20.0	22.00		ug/Kg		110	81 - 134	3	30
Ethyl ether			20.0	21.12		ug/Kg		106	84 - 144	8	30
Tert-amyl methyl ether			20.0	19.70		ug/Kg		98	69 - 151	2	30
Ethyl tert-butyl ether			20.0	19.88		ug/Kg		99	75 - 128	3	30
di-Isopropyl ether			20.0	21.00		ug/Kg		105	82 - 131	2	30
tert-Butanol			200	205.4		ug/Kg		103	85 - 148	1	30
1,4-Dioxane			200	195.4		ug/Kg		98	10 - 178	1	30
trans-1,4-Dichloro-2-butene			20.0	20.30	J	ug/Kg		101	74 - 151	8	30
Ethanol			400	401.0	J	ug/Kg		100	83 - 135	18	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 620-10219/1-A
Matrix: Solid
Analysis Batch: 10289

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10219

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
1,2,4-Trichlorobenzene	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
1,2-Dichlorobenzene	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
1,3-Dichlorobenzene	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
1,4-Dichlorobenzene	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
1-Methylnaphthalene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2,4,6-Trichlorophenol	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2,4-Dichlorophenol	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2,4-Dimethylphenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2,4-Dinitrophenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2,4-Dinitrotoluene	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2,6-Dinitrotoluene	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2-Chloronaphthalene	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2-Chlorophenol	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2-Methylnaphthalene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2-Methylphenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
2-Nitroaniline	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1

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

Lab Sample ID: MB 620-10219/1-A
Matrix: Solid
Analysis Batch: 10289

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10219

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
3 & 4 Methylphenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
3,3'-Dichlorobenzidine	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
3-Nitroaniline	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
4,6-Dinitro-2-methylphenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
4-Chloroaniline	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
4-Nitroaniline	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
4-Nitrophenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Acenaphthene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Acenaphthylene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Aniline	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Anthracene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Azobenzene/Diphenyldiazene	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Benzidine	ND		660		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Benzo[a]anthracene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Benzo[a]pyrene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Benzo[b]fluoranthene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Benzo[g,h,i]perylene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Benzo[k]fluoranthene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Benzoic acid	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Benzyl alcohol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Bis(2-chloroethyl)ether	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
bis (2-chloroisopropyl) ether	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Bis(2-ethylhexyl) phthalate	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Butyl benzyl phthalate	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Carbazole	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Chrysene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Dibenz(a,h)anthracene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Dibenzofuran	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Diethyl phthalate	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Dimethyl phthalate	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Di-n-butyl phthalate	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Di-n-octyl phthalate	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Fluoranthene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Fluorene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Hexachlorobenzene	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Hexachlorobutadiene	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Hexachlorocyclopentadiene	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Hexachloroethane	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Indeno[1,2,3-cd]pyrene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Isophorone	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Naphthalene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Nitrobenzene	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
N-Nitrosodimethylamine	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
N-Nitrosodi-n-propylamine	ND		167		ug/Kg		04/27/22 16:35	04/29/22 11:03	1

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

Lab Sample ID: MB 620-10219/1-A
Matrix: Solid
Analysis Batch: 10289

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10219

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Pentachloronitrobenzene	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Pentachlorophenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Phenanthrene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Phenol	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Pyrene	ND		66.7		ug/Kg		04/27/22 16:35	04/29/22 11:03	1
Pyridine	ND		330		ug/Kg		04/27/22 16:35	04/29/22 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*30 - 130*	*04/27/22 16:35*	*04/29/22 11:03*	*1*
2-Fluorophenol (Surr)	*66*		*15 - 110*	*04/27/22 16:35*	*04/29/22 11:03*	*1*
Nitrobenzene-d5 (Surr)	*73*		*30 - 130*	*04/27/22 16:35*	*04/29/22 11:03*	*1*
Phenol-d5 (Surr)	*65*		*15 - 110*	*04/27/22 16:35*	*04/29/22 11:03*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*15 - 110*	*04/27/22 16:35*	*04/29/22 11:03*	*1*
Terphenyl-d14 (Surr)	*79*		*30 - 130*	*04/27/22 16:35*	*04/29/22 11:03*	*1*

Lab Sample ID: LCS 620-10219/2-A
Matrix: Solid
Analysis Batch: 10289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10219

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	1670	1071		ug/Kg		64	40 - 140
1,2,4-Trichlorobenzene	1670	1148		ug/Kg		69	40 - 140
1,2-Dichlorobenzene	1670	1099		ug/Kg		66	40 - 140
1,3-Dichlorobenzene	1670	1058		ug/Kg		63	40 - 140
1,4-Dichlorobenzene	1670	986.6		ug/Kg		59	40 - 140
1-Methylnaphthalene	1670	997.5		ug/Kg		60	40 - 140
2,4,5-Trichlorophenol	1670	1004		ug/Kg		60	30 - 130
2,4,6-Trichlorophenol	1670	1053		ug/Kg		63	30 - 130
2,4-Dichlorophenol	1670	1106		ug/Kg		66	30 - 130
2,4-Dimethylphenol	1670	1110		ug/Kg		67	30 - 130
2,4-Dinitrophenol	1670	679.2		ug/Kg		41	30 - 130
2,4-Dinitrotoluene	1670	1108		ug/Kg		66	40 - 140
2,6-Dinitrotoluene	1670	1053		ug/Kg		63	40 - 140
2-Chloronaphthalene	1670	1207		ug/Kg		72	40 - 140
2-Chlorophenol	1670	1037		ug/Kg		62	30 - 130
2-Methylnaphthalene	1670	1331		ug/Kg		80	40 - 140
2-Methylphenol	1670	1088		ug/Kg		65	30 - 130
2-Nitroaniline	1670	1303		ug/Kg		78	40 - 140
2-Nitrophenol	1670	997.3		ug/Kg		60	30 - 130
3 & 4 Methylphenol	1670	1248		ug/Kg		75	30 - 130
3,3'-Dichlorobenzidine	1670	1792		ug/Kg		108	40 - 140
3-Nitroaniline	1670	714.7		ug/Kg		43	40 - 140
4,6-Dinitro-2-methylphenol	1670	896.1		ug/Kg		54	30 - 130
4-Bromophenyl phenyl ether	1670	1290		ug/Kg		77	40 - 140
4-Chloro-3-methylphenol	1670	1287		ug/Kg		77	30 - 130
4-Chloroaniline	1670	498.0	*-	ug/Kg		30	40 - 140
4-Chlorophenyl phenyl ether	1670	1158		ug/Kg		69	40 - 140

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

Lab Sample ID: LCS 620-10219/2-A
Matrix: Solid
Analysis Batch: 10289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10219

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitroaniline	1670	1243		ug/Kg		75	40 - 140
4-Nitrophenol	1670	1437		ug/Kg		86	30 - 130
Acenaphthene	1670	1061		ug/Kg		64	40 - 140
Acenaphthylene	1670	1007		ug/Kg		60	40 - 140
Aniline	1670	676.1		ug/Kg		41	40 - 140
Anthracene	1670	1278		ug/Kg		77	40 - 140
Azobenzene/Diphenyldiazene	1670	1361		ug/Kg		82	40 - 140
Benzidine	1670	ND	*-	ug/Kg		5	40 - 140
Benzo[a]anthracene	1670	1118		ug/Kg		67	40 - 140
Benzo[a]pyrene	1670	1264		ug/Kg		76	40 - 140
Benzo[b]fluoranthene	1670	1204		ug/Kg		72	40 - 140
Benzo[g,h,i]perylene	1670	1139		ug/Kg		68	40 - 140
Benzo[k]fluoranthene	1670	1335		ug/Kg		80	40 - 140
Benzoic acid	1670	344.8	*-	ug/Kg		21	30 - 130
Benzyl alcohol	1670	932.9		ug/Kg		56	40 - 140
Bis(2-chloroethoxy)methane	1670	937.7		ug/Kg		56	40 - 140
Bis(2-chloroethyl)ether	1670	860.1		ug/Kg		52	40 - 140
bis (2-chloroisopropyl) ether	1670	1217		ug/Kg		73	40 - 140
Bis(2-ethylhexyl) phthalate	1670	1211		ug/Kg		73	40 - 140
Butyl benzyl phthalate	1670	1055		ug/Kg		63	40 - 140
Carbazole	1670	1602		ug/Kg		96	40 - 140
Chrysene	1670	1242		ug/Kg		75	40 - 140
Dibenz(a,h)anthracene	1670	1384		ug/Kg		83	40 - 140
Dibenzofuran	1670	1086		ug/Kg		65	40 - 140
Diethyl phthalate	1670	1453		ug/Kg		87	40 - 140
Dimethyl phthalate	1670	1092		ug/Kg		66	40 - 140
Di-n-butyl phthalate	1670	1248		ug/Kg		75	40 - 140
Di-n-octyl phthalate	1670	1320		ug/Kg		79	40 - 140
Fluoranthene	1670	1333		ug/Kg		80	40 - 140
Fluorene	1670	1303		ug/Kg		78	40 - 140
Hexachlorobenzene	1670	1216		ug/Kg		73	40 - 140
Hexachlorobutadiene	1670	1292		ug/Kg		78	40 - 140
Hexachlorocyclopentadiene	1670	1116		ug/Kg		67	40 - 140
Hexachloroethane	1670	1523		ug/Kg		91	40 - 140
Indeno[1,2,3-cd]pyrene	1670	1185		ug/Kg		71	40 - 140
Isophorone	1670	1007		ug/Kg		60	40 - 140
Naphthalene	1670	1118		ug/Kg		67	40 - 140
Nitrobenzene	1670	1241		ug/Kg		74	40 - 140
N-Nitrosodimethylamine	1670	1637		ug/Kg		98	40 - 140
N-Nitrosodi-n-propylamine	1670	1226		ug/Kg		74	40 - 140
N-Nitrosodiphenylamine	1670	1641		ug/Kg		98	40 - 140
Pentachloronitrobenzene	1670	1989		ug/Kg		119	40 - 140
Pentachlorophenol	1670	770.8		ug/Kg		46	30 - 130
Phenanthrene	1670	1222		ug/Kg		73	40 - 140
Phenol	1670	1010		ug/Kg		61	40 - 140
Pyrene	1670	1148		ug/Kg		69	40 - 140
Pyridine	1670	680.9		ug/Kg		41	40 - 140

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

Lab Sample ID: LCS 620-10219/2-A
Matrix: Solid
Analysis Batch: 10289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10219

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*60*		*30 - 130*
2-Fluorophenol (Surr)	*64*		*15 - 110*
Nitrobenzene-d5 (Surr)	*73*		*30 - 130*
Phenol-d5 (Surr)	*67*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*71*		*15 - 110*
Terphenyl-d14 (Surr)	*66*		*30 - 130*

Lab Sample ID: LCSD 620-10219/3-A
Matrix: Solid
Analysis Batch: 10289

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10219

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene			1670	859.4		ug/Kg		52	40 - 140	22	30
1,2,4-Trichlorobenzene			1670	859.6		ug/Kg		52	40 - 140	29	30
1,2-Dichlorobenzene			1670	917.7		ug/Kg		55	40 - 140	18	30
1,3-Dichlorobenzene			1670	880.0		ug/Kg		53	40 - 140	18	30
1,4-Dichlorobenzene			1670	889.5		ug/Kg		53	40 - 140	10	30
1-Methylnaphthalene			1670	803.1		ug/Kg		48	40 - 140	22	30
2,4,5-Trichlorophenol			1670	969.7		ug/Kg		58	30 - 130	4	30
2,4,6-Trichlorophenol			1670	972.1		ug/Kg		58	30 - 130	8	30
2,4-Dichlorophenol			1670	859.3		ug/Kg		52	30 - 130	25	30
2,4-Dimethylphenol			1670	871.6		ug/Kg		52	30 - 130	24	30
2,4-Dinitrophenol			1670	667.7		ug/Kg		40	30 - 130	2	30
2,4-Dinitrotoluene			1670	1126		ug/Kg		68	40 - 140	2	30
2,6-Dinitrotoluene			1670	1009		ug/Kg		61	40 - 140	4	30
2-Chloronaphthalene			1670	986.5		ug/Kg		59	40 - 140	20	30
2-Chlorophenol			1670	868.2		ug/Kg		52	30 - 130	18	30
2-Methylnaphthalene			1670	1038		ug/Kg		62	40 - 140	25	30
2-Methylphenol			1670	949.9		ug/Kg		57	30 - 130	14	30
2-Nitroaniline			1670	1196		ug/Kg		72	40 - 140	9	30
2-Nitrophenol			1670	810.4		ug/Kg		49	30 - 130	21	30
3 & 4 Methylphenol			1670	1043		ug/Kg		63	30 - 130	18	30
3,3'-Dichlorobenzidine			1670	1951		ug/Kg		117	40 - 140	9	30
3-Nitroaniline			1670	771.1		ug/Kg		46	40 - 140	8	30
4,6-Dinitro-2-methylphenol			1670	939.5		ug/Kg		56	30 - 130	5	30
4-Bromophenyl phenyl ether			1670	1271		ug/Kg		76	40 - 140	1	30
4-Chloro-3-methylphenol			1670	1174		ug/Kg		70	30 - 130	9	30
4-Chloroaniline			1670	545.5	*-	ug/Kg		33	40 - 140	9	30
4-Chlorophenyl phenyl ether			1670	1110		ug/Kg		67	40 - 140	4	30
4-Nitroaniline			1670	1277		ug/Kg		77	40 - 140	3	30
4-Nitrophenol			1670	1452		ug/Kg		87	30 - 130	1	30
Acenaphthene			1670	912.8		ug/Kg		55	40 - 140	15	30
Acenaphthylene			1670	892.2		ug/Kg		54	40 - 140	12	30
Aniline			1670	673.4		ug/Kg		40	40 - 140	0	30
Anthracene			1670	1278		ug/Kg		77	40 - 140	0	30
Azobenzene/Diphenyldiazene			1670	1377		ug/Kg		83	40 - 140	1	30
Benzidine			1670	ND	*-	ug/Kg		5	40 - 140	6	30
Benzo[a]anthracene			1670	1167		ug/Kg		70	40 - 140	4	30

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

Lab Sample ID: LCSD 620-10219/3-A
Matrix: Solid
Analysis Batch: 10289

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10219

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene			1670	1265		ug/Kg		76	40 - 140	0	30
Benzo[b]fluoranthene			1670	1146		ug/Kg		69	40 - 140	5	30
Benzo[g,h,i]perylene			1670	1143		ug/Kg		69	40 - 140	0	30
Benzo[k]fluoranthene			1670	1482		ug/Kg		89	40 - 140	10	30
Benzoic acid			1670	330.3	*-	ug/Kg		20	30 - 130	4	30
Benzyl alcohol			1670	790.5		ug/Kg		47	40 - 140	17	30
Bis(2-chloroethoxy)methane			1670	723.7		ug/Kg		43	40 - 140	26	30
Bis(2-chloroethyl)ether			1670	720.4		ug/Kg		43	40 - 140	18	30
bis (2-chloroisopropyl) ether			1670	889.8	*1	ug/Kg		53	40 - 140	31	30
Bis(2-ethylhexyl) phthalate			1670	1196		ug/Kg		72	40 - 140	1	30
Butyl benzyl phthalate			1670	1118		ug/Kg		67	40 - 140	6	30
Carbazole			1670	1549		ug/Kg		93	40 - 140	3	30
Chrysene			1670	1195		ug/Kg		72	40 - 140	4	30
Dibenz(a,h)anthracene			1670	1395		ug/Kg		84	40 - 140	1	30
Dibenzofuran			1670	1004		ug/Kg		60	40 - 140	8	30
Diethyl phthalate			1670	1478		ug/Kg		89	40 - 140	2	30
Dimethyl phthalate			1670	1098		ug/Kg		66	40 - 140	1	30
Di-n-butyl phthalate			1670	1251		ug/Kg		75	40 - 140	0	30
Di-n-octyl phthalate			1670	1322		ug/Kg		79	40 - 140	0	30
Fluoranthene			1670	1153		ug/Kg		69	40 - 140	15	30
Fluorene			1670	1268		ug/Kg		76	40 - 140	3	30
Hexachlorobenzene			1670	1223		ug/Kg		73	40 - 140	1	30
Hexachlorobutadiene			1670	1001		ug/Kg		60	40 - 140	25	30
Hexachlorocyclopentadiene			1670	864.5		ug/Kg		52	40 - 140	25	30
Hexachloroethane			1670	1290		ug/Kg		77	40 - 140	17	30
Indeno[1,2,3-cd]pyrene			1670	1193		ug/Kg		72	40 - 140	1	30
Isophorone			1670	830.9		ug/Kg		50	40 - 140	19	30
Naphthalene			1670	810.3	*1	ug/Kg		49	40 - 140	32	30
Nitrobenzene			1670	947.9		ug/Kg		57	40 - 140	27	30
N-Nitrosodimethylamine			1670	1422		ug/Kg		85	40 - 140	14	30
N-Nitrosodi-n-propylamine			1670	1032		ug/Kg		62	40 - 140	17	30
N-Nitrosodiphenylamine			1670	1736		ug/Kg		104	40 - 140	6	30
Pentachloronitrobenzene			1670	1996		ug/Kg		120	40 - 140	0	30
Pentachlorophenol			1670	777.0		ug/Kg		47	30 - 130	1	30
Phenanthrene			1670	1243		ug/Kg		75	40 - 140	2	30
Phenol			1670	797.5		ug/Kg		48	40 - 140	24	30
Pyrene			1670	1018		ug/Kg		61	40 - 140	12	30
Pyridine			1670	629.9	*-	ug/Kg		38	40 - 140	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*51*		*30 - 130*
2-Fluorophenol (Surr)	*54*		*15 - 110*
Nitrobenzene-d5 (Surr)	*59*		*30 - 130*
Phenol-d5 (Surr)	*53*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*72*		*15 - 110*
Terphenyl-d14 (Surr)	*60*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-10378/1-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10378

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
beta-BHC	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
delta-BHC	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
gamma-BHC (Lindane)	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Heptachlor	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Aldrin	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Heptachlor epoxide	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endosulfan I	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Dieldrin	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
4,4'-DDE	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endrin	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endosulfan II	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
4,4'-DDD	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endosulfan sulfate	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
4,4'-DDT	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Methoxychlor	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endrin ketone	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endrin aldehyde	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
cis-Chlordane	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
trans-Chlordane	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Toxaphene	ND		100		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Alachlor	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:41*	*1*
DCB Decachlorobiphenyl (Surr)	*48*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:41*	*1*

Lab Sample ID: LCS 620-10378/4-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	13.4	8.305		ug/Kg		62	40 - 140
beta-BHC	13.3	8.606		ug/Kg		65	40 - 140
delta-BHC	13.4	7.922		ug/Kg		59	40 - 140
gamma-BHC (Lindane)	13.5	8.530		ug/Kg		63	40 - 140
Heptachlor	13.4	7.630		ug/Kg		57	40 - 140
Aldrin	13.4	8.191		ug/Kg		61	40 - 140
Heptachlor epoxide	13.3	7.889		ug/Kg		59	40 - 140
Endosulfan I	13.3	8.088		ug/Kg		61	40 - 140
Dieldrin	13.4	8.119		ug/Kg		61	40 - 140
4,4'-DDE	13.4	8.039		ug/Kg		60	40 - 140
Endrin	13.4	9.664		ug/Kg		72	40 - 140
Endosulfan II	13.3	7.965	J	ug/Kg		60	40 - 140
4,4'-DDD	13.4	8.877		ug/Kg		66	40 - 140
Endosulfan sulfate	13.4	7.874	J	ug/Kg		59	40 - 140
4,4'-DDT	13.5	6.665	J	ug/Kg		50	40 - 140
Methoxychlor	13.3	7.504	J	ug/Kg		56	40 - 140

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

Lab Sample ID: LCS 620-10378/4-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endrin ketone			13.4	6.988	J	ug/Kg		52	40 - 140		
Endrin aldehyde			13.4	7.750	J	ug/Kg		58	40 - 140		
cis-Chlordane			13.4	7.853		ug/Kg		58	40 - 140		
trans-Chlordane			13.4	8.446		ug/Kg		63	40 - 140		
Alachlor			13.4	8.351	p	ug/Kg		63	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*59*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*49*		*30 - 150*

Lab Sample ID: LCSD 620-10378/5-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	8.583		ug/Kg		64	40 - 140	3	30
beta-BHC			13.3	9.215		ug/Kg		69	40 - 140	7	30
delta-BHC			13.4	9.103		ug/Kg		68	40 - 140	14	30
gamma-BHC (Lindane)			13.5	8.974		ug/Kg		67	40 - 140	5	30
Heptachlor			13.4	8.419		ug/Kg		63	40 - 140	10	30
Aldrin			13.4	8.586		ug/Kg		64	40 - 140	5	30
Heptachlor epoxide			13.3	8.427		ug/Kg		63	40 - 140	7	30
Endosulfan I			13.3	8.779		ug/Kg		66	40 - 140	8	30
Dieldrin			13.4	8.753		ug/Kg		66	40 - 140	8	30
4,4'-DDE			13.4	8.686		ug/Kg		65	40 - 140	8	30
Endrin			13.4	10.54		ug/Kg		79	40 - 140	9	30
Endosulfan II			13.3	8.574		ug/Kg		64	40 - 140	7	30
4,4'-DDD			13.4	9.250		ug/Kg		69	40 - 140	4	30
Endosulfan sulfate			13.4	8.555		ug/Kg		64	40 - 140	8	30
4,4'-DDT			13.5	7.234	J	ug/Kg		54	40 - 140	8	30
Methoxychlor			13.3	7.903	J	ug/Kg		59	40 - 140	5	30
Endrin ketone			13.4	7.553	J	ug/Kg		56	40 - 140	8	30
Endrin aldehyde			13.4	8.210		ug/Kg		61	40 - 140	6	30
cis-Chlordane			13.4	8.541		ug/Kg		64	40 - 140	8	30
trans-Chlordane			13.4	8.778		ug/Kg		66	40 - 140	4	30
Alachlor			13.4	9.580		ug/Kg		72	40 - 140	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*61*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*62*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-10378/1-A
Matrix: Solid
Analysis Batch: 10445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10378

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1221	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1232	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1242	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1248	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1254	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1260	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1262	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1268	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*05/02/22 16:01*	*05/04/22 13:01*	*1*
Tetrachloro-m-xylene	*83*		*30 - 150*	*05/02/22 16:01*	*05/04/22 13:01*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*30 - 150*	*05/02/22 16:01*	*05/04/22 13:01*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*30 - 150*	*05/02/22 16:01*	*05/04/22 13:01*	*1*

Lab Sample ID: LCS 620-10378/2-A
Matrix: Solid
Analysis Batch: 10445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	136.8		ug/Kg		82	61 - 112		
PCB-1016			167	148.7		ug/Kg		89	61 - 112		
PCB-1260			167	138.5		ug/Kg		83	63 - 105		
PCB-1260			167	137.3		ug/Kg		82	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*30 - 150*
Tetrachloro-m-xylene	*84*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*69*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*74*		*30 - 150*

Lab Sample ID: LCSD 620-10378/3-A
Matrix: Solid
Analysis Batch: 10445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	154.9		ug/Kg		93	61 - 112	12	30
PCB-1016			167	167.7		ug/Kg		101	61 - 112	12	30
PCB-1260			167	160.0		ug/Kg		96	63 - 105	14	30
PCB-1260			167	158.5		ug/Kg		95	63 - 105	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*91*		*30 - 150*
Tetrachloro-m-xylene	*93*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*80*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*85*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-10258/1-A
Matrix: Solid
Analysis Batch: 10291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10258

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		04/28/22 14:01	04/29/22 14:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*103*		*40 - 140*	*04/28/22 14:01*	*04/29/22 14:13*	*1*
o-Terphenyl (Surr)	*95*		*40 - 140*	*04/28/22 14:01*	*04/29/22 14:13*	*1*

Lab Sample ID: LCS 620-10258/2-A
Matrix: Solid
Analysis Batch: 10291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10258

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	216.1		mg/Kg		65	22 - 93		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*94*		*40 - 140*
o-Terphenyl (Surr)	*77*		*40 - 140*

Lab Sample ID: LCSD 620-10258/3-A
Matrix: Solid
Analysis Batch: 10291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10258

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	234.8		mg/Kg		70	22 - 93	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*96*		*40 - 140*
o-Terphenyl (Surr)	*80*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-10187/1-A
Matrix: Solid
Analysis Batch: 10195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10187

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND	^+	1.46		mg/Kg		04/27/22 09:16	04/27/22 21:09	1
Vanadium	ND		1.46		mg/Kg		04/27/22 09:16	04/27/22 21:09	1

Lab Sample ID: MB 620-10187/1-A
Matrix: Solid
Analysis Batch: 10247

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10187

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.86		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Arsenic	ND		1.46		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Beryllium	ND		0.486		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Barium	ND		0.972		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Cadmium	ND		0.486		mg/Kg		04/27/22 09:16	04/28/22 11:29	1

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

Lab Sample ID: MB 620-10187/1-A
Matrix: Solid
Analysis Batch: 10247

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10187

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.972		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Copper	ND		0.972		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Lead	ND		1.46		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Nickel	ND		0.972		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Selenium	ND		1.46		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Thallium	ND		2.92		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Zinc	ND		2.92		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Manganese	ND		0.972		mg/Kg		04/27/22 09:16	04/28/22 11:29	1
Vanadium	ND		1.46		mg/Kg		04/27/22 09:16	04/28/22 11:29	1

Lab Sample ID: LCDSRM 620-10187/3-A
Matrix: Solid
Analysis Batch: 10195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10187

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver			29.9	23.79	^+	mg/Kg		79.6	74.6 - 112.7	7	20
Vanadium			194	176.0		mg/Kg		90.7	73.2 - 112.4	5	20

Lab Sample ID: LCDSRM 620-10187/3-A
Matrix: Solid
Analysis Batch: 10247

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10187

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			244	66.40		mg/Kg		27.2	10.0 - 123.0	3	20
Arsenic			109	89.98		mg/Kg		82.5	75.1 - 106.4	6	20
Beryllium			57.0	49.62		mg/Kg		87.1	76.5 - 108.1	2	20
Barium			364	318.0		mg/Kg		87.4	76.9 - 110.2	8	20
Cadmium			48.7	39.78		mg/Kg		81.7	74.7 - 106.0	3	20
Chromium			173	147.7		mg/Kg		85.4	76.3 - 109.8	2	20
Copper			179	160.4		mg/Kg		89.6	79.3 - 110.1	3	20
Lead			101	88.54		mg/Kg		87.7	81.3 - 114.9	6	20
Nickel			52.2	44.14		mg/Kg		84.6	74.7 - 106.7	3	20
Selenium			104	86.08		mg/Kg		82.8	71.4 - 109.6	3	20
Thallium			101	87.06		mg/Kg		86.2	72.6 - 107.9	5	20
Zinc			431	365.1		mg/Kg		84.7	74.9 - 111.4	3	20
Manganese			370	330.2		mg/Kg		89.2	78.4 - 113.0	2	20
Vanadium			194	166.3		mg/Kg		85.7	73.2 - 112.4	4	20

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

Lab Sample ID: LCSSRM 620-10187/2-A
Matrix: Solid
Analysis Batch: 10195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Silver	29.9	25.52	^+	mg/Kg		85.3	74.6 - 112.7
Vanadium	194	185.3		mg/Kg		95.5	73.2 - 112.4

Lab Sample ID: LCSSRM 620-10187/2-A
Matrix: Solid
Analysis Batch: 10247

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	244	68.25		mg/Kg		28.0	10.0 - 123.0
Arsenic	109	95.37		mg/Kg		87.5	75.1 - 106.4
Beryllium	57.0	50.73		mg/Kg		89.0	76.5 - 108.1
Barium	364	345.1		mg/Kg		94.8	76.9 - 110.2
Cadmium	48.7	40.86		mg/Kg		83.9	74.7 - 106.0
Chromium	173	151.0		mg/Kg		87.3	76.3 - 109.8
Copper	179	164.9		mg/Kg		92.1	79.3 - 110.1
Lead	101	93.85		mg/Kg		92.9	81.3 - 114.9
Nickel	52.2	45.33		mg/Kg		86.8	74.7 - 106.7
Selenium	104	88.34		mg/Kg		84.9	71.4 - 109.6
Thallium	101	91.80		mg/Kg		90.9	72.6 - 107.9
Zinc	431	377.8		mg/Kg		87.7	74.9 - 111.4
Manganese	370	336.3		mg/Kg		90.9	78.4 - 113.0
Vanadium	194	172.9		mg/Kg		89.1	73.2 - 112.4

Lab Sample ID: 620-4157-1 MS
Matrix: Solid
Analysis Batch: 10195

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND	^+	224	168.3	^+	mg/Kg	☼	75	75 - 125
Vanadium	10.2		224	206.6		mg/Kg	☼	88	75 - 125

Lab Sample ID: 620-4157-1 MS
Matrix: Solid
Analysis Batch: 10247

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		224	172.8		mg/Kg	☼	77	75 - 125

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

Lab Sample ID: 620-4157-1 MS
Matrix: Solid
Analysis Batch: 10247

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		224	188.5		mg/Kg	☼	83	75 - 125
Beryllium	1.40		224	190.2		mg/Kg	☼	84	75 - 125
Barium	32.6		224	236.0		mg/Kg	☼	91	75 - 125
Cadmium	ND		224	177.2		mg/Kg	☼	79	75 - 125
Chromium	10.8		224	195.4		mg/Kg	☼	82	75 - 125
Copper	9.29		224	205.1		mg/Kg	☼	87	75 - 125
Lead	8.94		224	183.8		mg/Kg	☼	78	75 - 125
Nickel	6.03		224	184.3		mg/Kg	☼	79	75 - 125
Selenium	ND		224	191.7		mg/Kg	☼	85	75 - 125
Thallium	ND		224	215.5		mg/Kg	☼	96	75 - 125
Zinc	29.6		224	209.6		mg/Kg	☼	80	75 - 125
Manganese	82.3		224	300.9		mg/Kg	☼	97	75 - 125

Lab Sample ID: 620-4157-1 MSD
Matrix: Solid
Analysis Batch: 10195

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND	^+	239	184.9	^+	mg/Kg	☼	77	75 - 125	9	20
Vanadium	10.2		239	227.4		mg/Kg	☼	91	75 - 125	10	20

Lab Sample ID: 620-4157-1 MSD
Matrix: Solid
Analysis Batch: 10247

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		239	188.5		mg/Kg	☼	79	75 - 125	9	20
Arsenic	ND		239	205.1		mg/Kg	☼	85	75 - 125	8	20
Beryllium	1.40		239	206.7		mg/Kg	☼	86	75 - 125	8	20
Barium	32.6		239	249.6		mg/Kg	☼	91	75 - 125	6	20
Cadmium	ND		239	192.9		mg/Kg	☼	81	75 - 125	8	20
Chromium	10.8		239	213.3		mg/Kg	☼	85	75 - 125	9	20
Copper	9.29		239	221.4		mg/Kg	☼	89	75 - 125	8	20
Lead	8.94		239	199.9		mg/Kg	☼	80	75 - 125	8	20
Nickel	6.03		239	201.5		mg/Kg	☼	82	75 - 125	9	20
Selenium	ND		239	208.2		mg/Kg	☼	87	75 - 125	8	20
Thallium	ND		239	226.3		mg/Kg	☼	95	75 - 125	5	20
Zinc	29.6		239	227.9		mg/Kg	☼	83	75 - 125	8	20
Manganese	82.3		239	323.4		mg/Kg	☼	101	75 - 125	7	20

Lab Sample ID: 620-4157-1 DU
Matrix: Solid
Analysis Batch: 10195

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	ND	^+	ND	^+	mg/Kg	☼	NC	20
Vanadium	10.2		11.05		mg/Kg	☼	8	20

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

Lab Sample ID: 620-4157-1 DU
Matrix: Solid
Analysis Batch: 10247

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10187

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		ND		mg/Kg	☼	NC	20
Arsenic	ND		ND		mg/Kg	☼	NC	20
Beryllium	1.40		1.636		mg/Kg	☼	15	20
Barium	32.6		33.51		mg/Kg	☼	3	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	10.8		11.20		mg/Kg	☼	4	20
Copper	9.29		17.40	F3	mg/Kg	☼	61	20
Lead	8.94		9.674		mg/Kg	☼	8	20
Nickel	6.03		6.152		mg/Kg	☼	2	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Thallium	ND		ND		mg/Kg	☼	NC	20
Zinc	29.6		33.27		mg/Kg	☼	12	20
Manganese	82.3		83.35		mg/Kg	☼	1	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-10191/1-A
Matrix: Solid
Analysis Batch: 10224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10191

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0461	mg/Kg		04/27/22 09:21	04/27/22 18:09	1

Lab Sample ID: LCSSRM 620-10191/2-A ^20
Matrix: Solid
Analysis Batch: 10224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10191

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	11.0	9.538		mg/Kg		86.7	64.3 - 118.2

Lab Sample ID: 620-4157-1 MS
Matrix: Solid
Analysis Batch: 10224

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10191

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	F1	0.384	0.3945		mg/Kg	☼	80	75 - 125

Lab Sample ID: 620-4157-1 MSD
Matrix: Solid
Analysis Batch: 10224

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10191

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F1	0.345	0.3318	F1	mg/Kg	☼	71	75 - 125	17	20

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 620-4157-1 DU
Matrix: Solid
Analysis Batch: 10224

Client Sample ID: TP-2 (6-7)
Prep Type: Total/NA
Prep Batch: 10191

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

Method: Moisture - Percent Moisture

Lab Sample ID: 620-4157-7 DU
Matrix: Solid
Analysis Batch: 10211

Client Sample ID: TP-4 (0-6)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	10.8			10.1	F3	%				7	5
Percent Solids	89.2			89.9		%				0.8	5

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

GC/MS VOA

Pre Prep Batch: 10176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	Frozen Preserve	
620-4157-2	TP-2 (0-6)	Total/NA	Solid	Frozen Preserve	
620-4157-3	TP-3 (0-6)	Total/NA	Solid	Frozen Preserve	
620-4157-4	TP-3 (6-7)	Total/NA	Solid	Frozen Preserve	
620-4157-5	TP-1 (0-6)	Total/NA	Solid	Frozen Preserve	
620-4157-6	TP-1 (6-7)	Total/NA	Solid	Frozen Preserve	
620-4157-7	TP-4 (0-6)	Total/NA	Solid	Frozen Preserve	
620-4157-8	TP-4 (6-7)	Total/NA	Solid	Frozen Preserve	
620-4157-9	TP-5 (0-6)	Total/NA	Solid	Frozen Preserve	
620-4157-10	TP-5 (6-7)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 10389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	5035	10176
620-4157-2	TP-2 (0-6)	Total/NA	Solid	5035	10176
620-4157-3	TP-3 (0-6)	Total/NA	Solid	5035	10176
620-4157-4	TP-3 (6-7)	Total/NA	Solid	5035	10176
620-4157-5	TP-1 (0-6)	Total/NA	Solid	5035	10176
620-4157-6	TP-1 (6-7)	Total/NA	Solid	5035	10176
620-4157-7	TP-4 (0-6)	Total/NA	Solid	5035	10176
620-4157-8	TP-4 (6-7)	Total/NA	Solid	5035	10176
620-4157-9	TP-5 (0-6)	Total/NA	Solid	5035	10176
620-4157-10	TP-5 (6-7)	Total/NA	Solid	5035	10176
MB 620-10389/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-10389/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-10389/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 10390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	8260C	10389
620-4157-2	TP-2 (0-6)	Total/NA	Solid	8260C	10389
620-4157-3	TP-3 (0-6)	Total/NA	Solid	8260C	10389
620-4157-4	TP-3 (6-7)	Total/NA	Solid	8260C	10389
620-4157-5	TP-1 (0-6)	Total/NA	Solid	8260C	10389
620-4157-6	TP-1 (6-7)	Total/NA	Solid	8260C	10389
620-4157-7	TP-4 (0-6)	Total/NA	Solid	8260C	10389
620-4157-8	TP-4 (6-7)	Total/NA	Solid	8260C	10389
620-4157-9	TP-5 (0-6)	Total/NA	Solid	8260C	10389
620-4157-10	TP-5 (6-7)	Total/NA	Solid	8260C	10389
MB 620-10389/3-A	Method Blank	Total/NA	Solid	8260C	10389
LCS 620-10389/1-A	Lab Control Sample	Total/NA	Solid	8260C	10389
LCSD 620-10389/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	10389

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

GC/MS Semi VOA

Prep Batch: 10219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	3546	
620-4157-2	TP-2 (0-6)	Total/NA	Solid	3546	
620-4157-3	TP-3 (0-6)	Total/NA	Solid	3546	
620-4157-4	TP-3 (6-7)	Total/NA	Solid	3546	
620-4157-5	TP-1 (0-6)	Total/NA	Solid	3546	
620-4157-6	TP-1 (6-7)	Total/NA	Solid	3546	
620-4157-7	TP-4 (0-6)	Total/NA	Solid	3546	
620-4157-8	TP-4 (6-7)	Total/NA	Solid	3546	
620-4157-9	TP-5 (0-6)	Total/NA	Solid	3546	
620-4157-10	TP-5 (6-7)	Total/NA	Solid	3546	
MB 620-10219/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-10219/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-10219/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 10289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-6	TP-1 (6-7)	Total/NA	Solid	8270D	10219
620-4157-7	TP-4 (0-6)	Total/NA	Solid	8270D	10219
620-4157-9	TP-5 (0-6)	Total/NA	Solid	8270D	10219
MB 620-10219/1-A	Method Blank	Total/NA	Solid	8270D	10219
LCS 620-10219/2-A	Lab Control Sample	Total/NA	Solid	8270D	10219
LCSD 620-10219/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	10219

Analysis Batch: 10340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	8270D	10219
620-4157-2	TP-2 (0-6)	Total/NA	Solid	8270D	10219
620-4157-4	TP-3 (6-7)	Total/NA	Solid	8270D	10219
620-4157-8	TP-4 (6-7)	Total/NA	Solid	8270D	10219
620-4157-10	TP-5 (6-7)	Total/NA	Solid	8270D	10219

Analysis Batch: 10462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-3	TP-3 (0-6)	Total/NA	Solid	8270D	10219
620-4157-5	TP-1 (0-6)	Total/NA	Solid	8270D	10219

GC Semi VOA

Prep Batch: 10258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	3546	
620-4157-2	TP-2 (0-6)	Total/NA	Solid	3546	
620-4157-3	TP-3 (0-6)	Total/NA	Solid	3546	
620-4157-4	TP-3 (6-7)	Total/NA	Solid	3546	
620-4157-5	TP-1 (0-6)	Total/NA	Solid	3546	
620-4157-6	TP-1 (6-7)	Total/NA	Solid	3546	
620-4157-7	TP-4 (0-6)	Total/NA	Solid	3546	
620-4157-8	TP-4 (6-7)	Total/NA	Solid	3546	
620-4157-9	TP-5 (0-6)	Total/NA	Solid	3546	
620-4157-10	TP-5 (6-7)	Total/NA	Solid	3546	
MB 620-10258/1-A	Method Blank	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 10258 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 620-10258/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-10258/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 10291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	8100	10258
620-4157-2	TP-2 (0-6)	Total/NA	Solid	8100	10258
620-4157-3	TP-3 (0-6)	Total/NA	Solid	8100	10258
620-4157-4	TP-3 (6-7)	Total/NA	Solid	8100	10258
620-4157-5	TP-1 (0-6)	Total/NA	Solid	8100	10258
620-4157-6	TP-1 (6-7)	Total/NA	Solid	8100	10258
620-4157-7	TP-4 (0-6)	Total/NA	Solid	8100	10258
620-4157-8	TP-4 (6-7)	Total/NA	Solid	8100	10258
620-4157-9	TP-5 (0-6)	Total/NA	Solid	8100	10258
620-4157-10	TP-5 (6-7)	Total/NA	Solid	8100	10258
MB 620-10258/1-A	Method Blank	Total/NA	Solid	8100	10258
LCS 620-10258/2-A	Lab Control Sample	Total/NA	Solid	8100	10258
LCSD 620-10258/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	10258

Prep Batch: 10378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	3546	
620-4157-2	TP-2 (0-6)	Total/NA	Solid	3546	
620-4157-3	TP-3 (0-6)	Total/NA	Solid	3546	
620-4157-4	TP-3 (6-7)	Total/NA	Solid	3546	
620-4157-5	TP-1 (0-6)	Total/NA	Solid	3546	
620-4157-6	TP-1 (6-7)	Total/NA	Solid	3546	
620-4157-7	TP-4 (0-6)	Total/NA	Solid	3546	
620-4157-8	TP-4 (6-7)	Total/NA	Solid	3546	
620-4157-9	TP-5 (0-6)	Total/NA	Solid	3546	
620-4157-10	TP-5 (6-7)	Total/NA	Solid	3546	
MB 620-10378/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-10378/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-10378/4-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-10378/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
LCSD 620-10378/5-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 10445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	8082A	10378
620-4157-2	TP-2 (0-6)	Total/NA	Solid	8082A	10378
620-4157-3	TP-3 (0-6)	Total/NA	Solid	8082A	10378
620-4157-4	TP-3 (6-7)	Total/NA	Solid	8082A	10378
620-4157-5	TP-1 (0-6)	Total/NA	Solid	8082A	10378
620-4157-6	TP-1 (6-7)	Total/NA	Solid	8082A	10378
620-4157-7	TP-4 (0-6)	Total/NA	Solid	8082A	10378
620-4157-8	TP-4 (6-7)	Total/NA	Solid	8082A	10378
620-4157-9	TP-5 (0-6)	Total/NA	Solid	8082A	10378
620-4157-10	TP-5 (6-7)	Total/NA	Solid	8082A	10378
MB 620-10378/1-A	Method Blank	Total/NA	Solid	8082A	10378
LCS 620-10378/2-A	Lab Control Sample	Total/NA	Solid	8082A	10378

GC Semi VOA (Continued)

Analysis Batch: 10445 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 620-10378/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	10378

Analysis Batch: 10451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-10378/1-A	Method Blank	Total/NA	Solid	8081B	10378
LCS 620-10378/4-A	Lab Control Sample	Total/NA	Solid	8081B	10378
LCSD 620-10378/5-A	Lab Control Sample Dup	Total/NA	Solid	8081B	10378

Analysis Batch: 10488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	8081B	10378
620-4157-2	TP-2 (0-6)	Total/NA	Solid	8081B	10378
620-4157-3	TP-3 (0-6)	Total/NA	Solid	8081B	10378
620-4157-4	TP-3 (6-7)	Total/NA	Solid	8081B	10378
620-4157-5	TP-1 (0-6)	Total/NA	Solid	8081B	10378
620-4157-6	TP-1 (6-7)	Total/NA	Solid	8081B	10378
620-4157-7	TP-4 (0-6)	Total/NA	Solid	8081B	10378
620-4157-8	TP-4 (6-7)	Total/NA	Solid	8081B	10378
620-4157-9	TP-5 (0-6)	Total/NA	Solid	8081B	10378
620-4157-10	TP-5 (6-7)	Total/NA	Solid	8081B	10378

Metals

Prep Batch: 10187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	3050B	
620-4157-2	TP-2 (0-6)	Total/NA	Solid	3050B	
620-4157-3	TP-3 (0-6)	Total/NA	Solid	3050B	
620-4157-4	TP-3 (6-7)	Total/NA	Solid	3050B	
620-4157-5	TP-1 (0-6)	Total/NA	Solid	3050B	
620-4157-6	TP-1 (6-7)	Total/NA	Solid	3050B	
620-4157-7	TP-4 (0-6)	Total/NA	Solid	3050B	
620-4157-8	TP-4 (6-7)	Total/NA	Solid	3050B	
620-4157-9	TP-5 (0-6)	Total/NA	Solid	3050B	
620-4157-10	TP-5 (6-7)	Total/NA	Solid	3050B	
MB 620-10187/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 620-10187/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 620-10187/2-A	Lab Control Sample	Total/NA	Solid	3050B	
620-4157-1 MS	TP-2 (6-7)	Total/NA	Solid	3050B	
620-4157-1 MSD	TP-2 (6-7)	Total/NA	Solid	3050B	
620-4157-1 DU	TP-2 (6-7)	Total/NA	Solid	3050B	

Prep Batch: 10191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	7471B	
620-4157-2	TP-2 (0-6)	Total/NA	Solid	7471B	
620-4157-3	TP-3 (0-6)	Total/NA	Solid	7471B	
620-4157-4	TP-3 (6-7)	Total/NA	Solid	7471B	
620-4157-5	TP-1 (0-6)	Total/NA	Solid	7471B	
620-4157-6	TP-1 (6-7)	Total/NA	Solid	7471B	
620-4157-7	TP-4 (0-6)	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 10191 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-8	TP-4 (6-7)	Total/NA	Solid	7471B	
620-4157-9	TP-5 (0-6)	Total/NA	Solid	7471B	
620-4157-10	TP-5 (6-7)	Total/NA	Solid	7471B	
MB 620-10191/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-10191/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	
620-4157-1 MS	TP-2 (6-7)	Total/NA	Solid	7471B	
620-4157-1 MSD	TP-2 (6-7)	Total/NA	Solid	7471B	
620-4157-1 DU	TP-2 (6-7)	Total/NA	Solid	7471B	

Analysis Batch: 10195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	6010D	10187
620-4157-2	TP-2 (0-6)	Total/NA	Solid	6010D	10187
620-4157-3	TP-3 (0-6)	Total/NA	Solid	6010D	10187
620-4157-4	TP-3 (6-7)	Total/NA	Solid	6010D	10187
620-4157-5	TP-1 (0-6)	Total/NA	Solid	6010D	10187
620-4157-6	TP-1 (6-7)	Total/NA	Solid	6010D	10187
620-4157-7	TP-4 (0-6)	Total/NA	Solid	6010D	10187
620-4157-8	TP-4 (6-7)	Total/NA	Solid	6010D	10187
MB 620-10187/1-A	Method Blank	Total/NA	Solid	6010D	10187
LCDSRM 620-10187/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	10187
LCSSRM 620-10187/2-A	Lab Control Sample	Total/NA	Solid	6010D	10187
620-4157-1 MS	TP-2 (6-7)	Total/NA	Solid	6010D	10187
620-4157-1 MSD	TP-2 (6-7)	Total/NA	Solid	6010D	10187
620-4157-1 DU	TP-2 (6-7)	Total/NA	Solid	6010D	10187

Analysis Batch: 10224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	7471B	10191
620-4157-2	TP-2 (0-6)	Total/NA	Solid	7471B	10191
620-4157-3	TP-3 (0-6)	Total/NA	Solid	7471B	10191
620-4157-4	TP-3 (6-7)	Total/NA	Solid	7471B	10191
620-4157-5	TP-1 (0-6)	Total/NA	Solid	7471B	10191
620-4157-6	TP-1 (6-7)	Total/NA	Solid	7471B	10191
620-4157-7	TP-4 (0-6)	Total/NA	Solid	7471B	10191
620-4157-8	TP-4 (6-7)	Total/NA	Solid	7471B	10191
620-4157-9	TP-5 (0-6)	Total/NA	Solid	7471B	10191
620-4157-10	TP-5 (6-7)	Total/NA	Solid	7471B	10191
MB 620-10191/1-A	Method Blank	Total/NA	Solid	7471B	10191
LCSSRM 620-10191/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	10191
620-4157-1 MS	TP-2 (6-7)	Total/NA	Solid	7471B	10191
620-4157-1 MSD	TP-2 (6-7)	Total/NA	Solid	7471B	10191
620-4157-1 DU	TP-2 (6-7)	Total/NA	Solid	7471B	10191

Analysis Batch: 10247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	6010D	10187
620-4157-2	TP-2 (0-6)	Total/NA	Solid	6010D	10187
620-4157-3	TP-3 (0-6)	Total/NA	Solid	6010D	10187
620-4157-4	TP-3 (6-7)	Total/NA	Solid	6010D	10187
620-4157-5	TP-1 (0-6)	Total/NA	Solid	6010D	10187

Metals (Continued)

Analysis Batch: 10247 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-6	TP-1 (6-7)	Total/NA	Solid	6010D	10187
620-4157-7	TP-4 (0-6)	Total/NA	Solid	6010D	10187
620-4157-8	TP-4 (6-7)	Total/NA	Solid	6010D	10187
620-4157-9	TP-5 (0-6)	Total/NA	Solid	6010D	10187
620-4157-9	TP-5 (0-6)	Total/NA	Solid	6010D	10187
620-4157-10	TP-5 (6-7)	Total/NA	Solid	6010D	10187
MB 620-10187/1-A	Method Blank	Total/NA	Solid	6010D	10187
LCDSRM 620-10187/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	10187
LCSSRM 620-10187/2-A	Lab Control Sample	Total/NA	Solid	6010D	10187
620-4157-1 MS	TP-2 (6-7)	Total/NA	Solid	6010D	10187
620-4157-1 MSD	TP-2 (6-7)	Total/NA	Solid	6010D	10187
620-4157-1 DU	TP-2 (6-7)	Total/NA	Solid	6010D	10187

General Chemistry

Analysis Batch: 10211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4157-1	TP-2 (6-7)	Total/NA	Solid	Moisture	
620-4157-2	TP-2 (0-6)	Total/NA	Solid	Moisture	
620-4157-3	TP-3 (0-6)	Total/NA	Solid	Moisture	
620-4157-4	TP-3 (6-7)	Total/NA	Solid	Moisture	
620-4157-5	TP-1 (0-6)	Total/NA	Solid	Moisture	
620-4157-6	TP-1 (6-7)	Total/NA	Solid	Moisture	
620-4157-7	TP-4 (0-6)	Total/NA	Solid	Moisture	
620-4157-8	TP-4 (6-7)	Total/NA	Solid	Moisture	
620-4157-9	TP-5 (0-6)	Total/NA	Solid	Moisture	
620-4157-10	TP-5 (6-7)	Total/NA	Solid	Moisture	
620-4157-7 DU	TP-4 (0-6)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Job ID: 620-4157-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: TP-2 (6-7)
Lab Sample ID: 620-4157-1
Date Collected: 04/25/22 08:00
Matrix: Solid
Date Received: 04/26/22 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-2 (6-7)
Lab Sample ID: 620-4157-1
Date Collected: 04/25/22 08:00
Matrix: Solid
Date Received: 04/26/22 15:45
Percent Solids: 52.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 15:04	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		4	10340	05/02/22 16:56	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 15:02	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 20:00	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/29/22 22:36	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10247	04/28/22 11:50	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10195	04/27/22 21:30	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:13	CEV	ENE

Client Sample ID: TP-2 (0-6)
Lab Sample ID: 620-4157-2
Date Collected: 04/25/22 08:20
Matrix: Solid
Date Received: 04/26/22 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-2 (0-6)
Lab Sample ID: 620-4157-2
Date Collected: 04/25/22 08:20
Matrix: Solid
Date Received: 04/26/22 15:45
Percent Solids: 61.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 15:31	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		4	10340	05/02/22 17:24	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 15:18	JS	ENE

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-2 (0-6)

Date Collected: 04/25/22 08:20
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-2

Matrix: Solid
Percent Solids: 61.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 20:17	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/29/22 23:01	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10247	04/28/22 12:19	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10195	04/27/22 21:59	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:24	CEV	ENE

Client Sample ID: TP-3 (0-6)

Date Collected: 04/25/22 09:30
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-3 (0-6)

Date Collected: 04/25/22 09:30
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-3

Matrix: Solid
Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 15:58	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		1	10462	05/04/22 18:45	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 14:46	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 20:34	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/29/22 23:27	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10247	04/28/22 12:26	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10195	04/27/22 22:06	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:26	CEV	ENE

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-3 (6-7)
Date Collected: 04/25/22 09:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-3 (6-7)
Date Collected: 04/25/22 09:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-4
Matrix: Solid
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 16:25	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		4	10340	05/02/22 17:53	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 14:30	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 20:51	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/29/22 23:52	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10247	04/28/22 12:33	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10195	04/27/22 22:14	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:28	CEV	ENE

Client Sample ID: TP-1 (0-6)
Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-1 (0-6)
Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5
Matrix: Solid
Percent Solids: 76.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 16:53	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		1	10462	05/04/22 19:14	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 13:26	JS	ENE

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-1 (0-6)

Date Collected: 04/25/22 09:45
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-5

Matrix: Solid
Percent Solids: 76.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 21:08	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/30/22 00:17	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10247	04/28/22 12:54	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10195	04/27/22 22:36	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:30	CEV	ENE

Client Sample ID: TP-1 (6-7)

Date Collected: 04/25/22 10:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-1 (6-7)

Date Collected: 04/25/22 10:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-6

Matrix: Solid
Percent Solids: 70.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 17:21	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		1	10289	04/29/22 14:55	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 13:58	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 21:25	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		4	10291	04/30/22 00:42	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10247	04/28/22 13:01	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10195	04/27/22 22:43	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:32	CEV	ENE

Lab Chronicle

Client: AECOM
Job ID: 620-4157-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: TP-4 (0-6)
Lab Sample ID: 620-4157-7
Date Collected: 04/26/22 12:10
Matrix: Solid
Date Received: 04/26/22 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-4 (0-6)
Lab Sample ID: 620-4157-7
Date Collected: 04/26/22 12:10
Matrix: Solid
Date Received: 04/26/22 15:45
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 17:47	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		1	10289	04/29/22 14:26	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 13:42	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 21:41	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/30/22 01:07	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10247	04/28/22 13:08	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10195	04/27/22 22:50	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:34	CEV	ENE

Client Sample ID: TP-4 (6-7)
Lab Sample ID: 620-4157-8
Date Collected: 04/26/22 12:00
Matrix: Solid
Date Received: 04/26/22 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-4 (6-7)
Lab Sample ID: 620-4157-8
Date Collected: 04/26/22 12:00
Matrix: Solid
Date Received: 04/26/22 15:45
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 18:14	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		1	10340	05/02/22 15:02	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 13:10	JS	ENE

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Client Sample ID: TP-4 (6-7)

Date Collected: 04/26/22 12:00
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-8

Matrix: Solid
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 21:58	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/30/22 01:33	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10247	04/28/22 13:15	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		1	10195	04/27/22 22:57	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:36	CEV	ENE

Client Sample ID: TP-5 (0-6)

Date Collected: 04/26/22 13:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-5 (0-6)

Date Collected: 04/26/22 13:15
Date Received: 04/26/22 15:45

Lab Sample ID: 620-4157-9

Matrix: Solid
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 18:41	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		1	10289	04/29/22 13:56	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 14:14	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 22:15	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/30/22 01:58	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		2	10247	04/28/22 13:22	CEV	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		5	10247	04/28/22 17:27	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:38	CEV	ENE

Lab Chronicle

Client: AECOM
Job ID: 620-4157-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: TP-5 (6-7)
Lab Sample ID: 620-4157-10
Date Collected: 04/26/22 13:10
Matrix: Solid
Date Received: 04/26/22 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10211	04/27/22 15:01	PN	ENE

Client Sample ID: TP-5 (6-7)
Lab Sample ID: 620-4157-10
Date Collected: 04/26/22 13:10
Matrix: Solid
Date Received: 04/26/22 15:45
Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10176	04/26/22 19:05	KFS	ENE
Total/NA	Prep	5035			10389	05/03/22 12:41	CLR	ENE
Total/NA	Analysis	8260C		1	10390	05/03/22 19:06	CLR	ENE
Total/NA	Prep	3546			10219	04/27/22 16:35	PRB	ENE
Total/NA	Analysis	8270D		1	10340	05/02/22 15:31	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10488	05/05/22 12:54	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 22:32	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/30/22 02:23	JS	ENE
Total/NA	Prep	3050B			10187	04/27/22 09:16	CAJ	ENE
Total/NA	Analysis	6010D		5	10247	04/28/22 17:41	CEV	ENE
Total/NA	Prep	7471B			10191	04/27/22 09:21	CAJ	ENE
Total/NA	Analysis	7471B		1	10224	04/27/22 18:40	CEV	ENE

Laboratory References:
ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4157-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
6010D	3050B	Solid	Antimony
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Beryllium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Copper
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Manganese
6010D	3050B	Solid	Nickel
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
6010D	3050B	Solid	Thallium
6010D	3050B	Solid	Vanadium
6010D	3050B	Solid	Zinc
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260

Laboratory: Eurofins New England (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
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1,2,4,5-Tetrachlorobenzene
8270D	3546	Solid	1,2,4-Trichlorobenzene
8270D	3546	Solid	1,2-Dichlorobenzene
8270D	3546	Solid	1,3-Dichlorobenzene
8270D	3546	Solid	1,4-Dichlorobenzene
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2,4,5-Trichlorophenol
8270D	3546	Solid	2,4,6-Trichlorophenol
8270D	3546	Solid	2,4-Dichlorophenol
8270D	3546	Solid	2,4-Dimethylphenol
8270D	3546	Solid	2,4-Dinitrophenol
8270D	3546	Solid	2,4-Dinitrotoluene
8270D	3546	Solid	2,6-Dinitrotoluene
8270D	3546	Solid	2-Chloronaphthalene

Laboratory: Eurofins New England (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
8270D	3546	Solid	2-Chlorophenol
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	2-Methylphenol
8270D	3546	Solid	2-Nitroaniline
8270D	3546	Solid	2-Nitrophenol
8270D	3546	Solid	3 & 4 Methylphenol
8270D	3546	Solid	3,3'-Dichlorobenzidine
8270D	3546	Solid	3-Nitroaniline
8270D	3546	Solid	4,6-Dinitro-2-methylphenol
8270D	3546	Solid	4-Bromophenyl phenyl ether
8270D	3546	Solid	4-Chloro-3-methylphenol
8270D	3546	Solid	4-Chloroaniline
8270D	3546	Solid	4-Chlorophenyl phenyl ether
8270D	3546	Solid	4-Nitroaniline
8270D	3546	Solid	4-Nitrophenol
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Aniline
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Azobenzene/Diphenyldiazene
8270D	3546	Solid	Benzidine
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Benzoic acid
8270D	3546	Solid	Benzyl alcohol
8270D	3546	Solid	bis (2-chloroisopropyl) ether
8270D	3546	Solid	Bis(2-chloroethoxy)methane
8270D	3546	Solid	Bis(2-chloroethyl)ether
8270D	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D	3546	Solid	Butyl benzyl phthalate
8270D	3546	Solid	Carbazole
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Dibenzofuran
8270D	3546	Solid	Diethyl phthalate
8270D	3546	Solid	Dimethyl phthalate
8270D	3546	Solid	Di-n-butyl phthalate
8270D	3546	Solid	Di-n-octyl phthalate
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene
8270D	3546	Solid	Hexachlorobenzene
8270D	3546	Solid	Hexachlorobutadiene
8270D	3546	Solid	Hexachlorocyclopentadiene
8270D	3546	Solid	Hexachloroethane

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4157-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England (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
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Isophorone
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Nitrobenzene
8270D	3546	Solid	N-Nitrosodimethylamine
8270D	3546	Solid	N-Nitrosodi-n-propylamine
8270D	3546	Solid	N-Nitrosodiphenylamine
8270D	3546	Solid	Pentachloronitrobenzene
8270D	3546	Solid	Pentachlorophenol
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Phenol
8270D	3546	Solid	Pyrene
8270D	3546	Solid	Pyridine
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Job ID: 620-4157-1
Project/Site: I295/Rt 37 - Johnston, RI

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ENE
8081B	Organochlorine Pesticides (GC)	SW846	ENE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ENE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	ENE
6010D	Metals (ICP)	SW846	ENE
7471B	Mercury (CVAA)	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
3050B	Preparation, Metals	SW846	ENE
3546	Microwave Extraction	SW846	ENE
5035	Closed System Purge and Trap	SW846	ENE
7471B	Preparation, Mercury	SW846	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4157-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4157-1	TP-2 (6-7)	Solid	04/25/22 08:00	04/26/22 15:45
620-4157-2	TP-2 (0-6)	Solid	04/25/22 08:20	04/26/22 15:45
620-4157-3	TP-3 (0-6)	Solid	04/25/22 09:30	04/26/22 15:45
620-4157-4	TP-3 (6-7)	Solid	04/25/22 09:15	04/26/22 15:45
620-4157-5	TP-1 (0-6)	Solid	04/25/22 09:45	04/26/22 15:45
620-4157-6	TP-1 (6-7)	Solid	04/25/22 10:00	04/26/22 15:45
620-4157-7	TP-4 (0-6)	Solid	04/26/22 12:10	04/26/22 15:45
620-4157-8	TP-4 (6-7)	Solid	04/26/22 12:00	04/26/22 15:45
620-4157-9	TP-5 (0-6)	Solid	04/26/22 13:15	04/26/22 15:45
620-4157-10	TP-5 (6-7)	Solid	04/26/22 13:10	04/26/22 15:45

620-4157 Chain of Custody

ment Testing
New England

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

☒ Standard TAT 7 to 10 business days
☐ Rush TAT Date Needed.

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell
AECOM
10 Orms Street
Providence, RI 02904
Telephone #: 401-954-2808
Project Mgr: Bruce Bartel

Invoice To:

P.O No. TBD Quote #:

Project No: ~~295/37~~ 60680132 2.03
Site Name: 295/37
Location: Johnston State: RI
Sampler(s): Courtney Toomey

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= X2= X3=

G= Grab C=Compsite

List Preservative Code below*

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☒ No
CT DPH RCP Report? ☐ Yes ☒ No
☒ Standard ☐ No QC
☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other:
State-specific reporting standards:

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	SVOCs	PP13+Ba,Mn,Sn	TPH DRO	PCBs	Pesticides			Check if chlorinated
01	TP-2 (6-7)	4/25/2022	0800	G/C	SO	3	2			X	X	X	X	X	X			☐
02	TP 2 (0-6)	4-25-22	0820	G/C	SO	3	2			X	X	X	X	X	X			☐
03	TP3 (0-6)	0930	4/25/22	G/C	SO	3	2			X	X	X	X	X	X			☐
04	TP3 (6-7)	0915	4/25/22	G/C	SO	3	2			X	X	X	X	X	X			☐
05	TP1 (0-6)	0945	4/25/22	G/C	SO	3	2			X	X	X	X	X	X			☐
06	TP1 (6-7)	1000	4/25/22	G/C	SO	3	2			X	X	X	X	X	X			☐
07	TP4 (0-6)	1210	4/26/22	G/C	SO	3	2			X	X	X	X	X	X			☐
08	TP4 (6-7)	1200	4/26/22	G/C	SO	3	2			X	X	X	X	X	X			☐
09	TP5 (0-6)	1315	4/26/22	G/C	SO	3	2			X	X	X	X	X	X			☐
10	TP5 (6-7)	1310	4/26/22	G/C	SO	3	2			X	X	X	X	X	X			☐

Relinquished by:	Received by:	Date:	Time:	Temp °C
Courtney Toomey	[signature]	4/26/22	15:45	Observed 3.6
				Correction Factor +0.2
				Corrected 3.8
				IR ID # 6

☐ EDD format:
☒ E-mail to: patrick.haskell@aecom.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4157-1

Login Number: 4157
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4175-1
Client Project/Site: I295/Rt 37 - Johnston, RI
Revision: 1

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
5/23/2022 2:49:54 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-4175-1
Project/Site: I295/Rt 37 - Johnston, RI

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD 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
*1	LCS/LCSD 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.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

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)
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

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Job ID: 620-4175-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4175-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 5/5/2022. The report (revision 1) is being revised due to: Report revised to include Vanadium per request of the client..

Receipt
The samples were received on 4/27/2022 1:06 PM. 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 was 4.4º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The VOC preservative codes are not listed on the CoC.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Methods 8270, 8270D: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. 4-Nitroaniline, Aniline, and Benzidine. Any reportable values should be considered Estimates.

Methods 8270, 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 620-10310 and analytical batch 620-10340 recovered outside control limits for the following analyte(s): Benzoic acid and Pyridine have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Methods 8270, 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 620-10310 and analytical batch 620-10340 recovered outside control limits for the following analytes: Benzidine.

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

GC Semi VOA
Methods 8081, 8081B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 620-10378 and analytical batch 620-10451 recovered outside control limits for the following analytes: Alachlor.

Methods 8081, 8081B: The continuing calibration verification (CCV) associated with batch 620-10451 recovered outside acceptance criteria on the primary column, low biased, for 4,4'-DDT and Methoxychlor. The analytes were within acceptance criteria on the confirmation column, and reported as primary.

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

Metals
Method 6010D: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 620-10264 and analytical batch 620-10304. The associated laboratory control sample (LCS) met acceptance criteria. Spikes for 4094 were not spiked, spikes for 4162 were spiked and recovered.

Method 6010D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-10264 and analytical batch 620-10304 were outside control limits for antimony. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Job ID: 620-4175-1 (Continued)

Laboratory: Eurofins New England (Continued)

Method 6010D: CCV is high for silver, sample is non detect. High bias non detect makes data acceptable.

TP7 (6-7) (620-4175-1), TP7 (0-6) (620-4175-2), TP6 5ft (620-4175-3) and TP6 9.5ft (620-4175-4)

Method 6010D: RPD high between 4094-1 and 4094-1 duplicate for chromium, nickel and lead, data is acceptable based on passing RPD for 4162-1 MS and 4162-1 MSD from the same set.

TP7 (6-7) (620-4175-1), TP7 (0-6) (620-4175-2), TP6 5ft (620-4175-3) and TP6 9.5ft (620-4175-4)

Methods 7471, 7471B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD) for sample 4094-10; therefore, matrix spike recoveries are unavailable for preparation batch 620-10265 and analytical batch 620-10316. The associated laboratory control sample (LCSSRM) met acceptance criteria along with 4162-1 MS.

Method 7471B: The matrix spike duplicate (MSD) recoveries for preparation batch 620-10265 and analytical batch 620-10316 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) and matrix spike (MS) recovery was within acceptance limits.

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

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

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP7 (6-7) — Lab Sample ID: 620-4175-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	10.2		6.27		ug/Kg	1	☼	8260C	Total/NA
TEPH (C9-C36)	15.1		12.2		mg/Kg	1	☼	8100	Total/NA
Beryllium	0.693		0.542		mg/Kg	1	☼	6010D	Total/NA
Barium	18.0		1.08		mg/Kg	1	☼	6010D	Total/NA
Chromium	7.92		1.08		mg/Kg	1	☼	6010D	Total/NA
Copper	4.53		1.08		mg/Kg	1	☼	6010D	Total/NA
Lead	9.62		1.63		mg/Kg	1	☼	6010D	Total/NA
Nickel	5.04		1.08		mg/Kg	1	☼	6010D	Total/NA
Zinc	41.4		3.25		mg/Kg	1	☼	6010D	Total/NA
Manganese	124		1.08		mg/Kg	1	☼	6010D	Total/NA
Vanadium	6.33		1.63		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP7 (0-6) — Lab Sample ID: 620-4175-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Acetone	55.5		33.8		ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	14.5		6.76		ug/Kg	1	☼	8260C	Total/NA
Bis(2-ethylhexyl) phthalate	1390		183		ug/Kg	1	☼	8270D	Total/NA
TEPH (C9-C36)	31.7		14.2		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.30		1.63		mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.777		0.542		mg/Kg	1	☼	6010D	Total/NA
Barium	15.0		1.08		mg/Kg	1	☼	6010D	Total/NA
Chromium	3.86		1.08		mg/Kg	1	☼	6010D	Total/NA
Copper	4.56		1.08		mg/Kg	1	☼	6010D	Total/NA
Lead	13.6		1.63		mg/Kg	1	☼	6010D	Total/NA
Nickel	2.64		1.08		mg/Kg	1	☼	6010D	Total/NA
Zinc	51.0		3.25		mg/Kg	1	☼	6010D	Total/NA
Manganese	126		1.08		mg/Kg	1	☼	6010D	Total/NA
Vanadium	6.49		1.63		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP6 5ft — Lab Sample ID: 620-4175-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	12.4		8.23		ug/Kg	1	☼	8260C	Total/NA
Anthracene	170		73.0		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	436		73.0		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	394		73.0		ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	289		73.0		ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	231		73.0		ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	379		73.0		ug/Kg	1	☼	8270D	Total/NA
Chrysene	379		73.0		ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	80.1		73.0		ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	778		73.0		ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	220		73.0		ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	382		73.0		ug/Kg	1	☼	8270D	Total/NA
Pyrene	634		73.0		ug/Kg	1	☼	8270D	Total/NA
TEPH (C9-C36)	78.2		12.9		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.04		1.54		mg/Kg	1	☼	6010D	Total/NA
Beryllium	1.03		0.513		mg/Kg	1	☼	6010D	Total/NA
Barium	13.0		1.03		mg/Kg	1	☼	6010D	Total/NA
Chromium	4.34		1.03		mg/Kg	1	☼	6010D	Total/NA
Copper	3.86		1.03		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP6 5ft (Continued) — Lab Sample ID: 620-4175-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Lead	10.7		1.54		mg/Kg	1	☼	6010D	Total/NA
Nickel	2.70		1.03		mg/Kg	1	☼	6010D	Total/NA
Zinc	39.6		3.08		mg/Kg	1	☼	6010D	Total/NA
Manganese	109		1.03		mg/Kg	1	☼	6010D	Total/NA
Vanadium	7.96		1.54		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: TP6 9.5ft — Lab Sample ID: 620-4175-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	7.20		6.91		ug/Kg	1	☼	8260C	Total/NA
Fluoranthene	99.3		83.4		ug/Kg	1	☼	8270D	Total/NA
Pyrene	87.4		83.4		ug/Kg	1	☼	8270D	Total/NA
TEPH (C9-C36)	36.3		16.1		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.21		1.74		mg/Kg	1	☼	6010D	Total/NA
Beryllium	2.10		0.580		mg/Kg	1	☼	6010D	Total/NA
Barium	16.3		1.16		mg/Kg	1	☼	6010D	Total/NA
Chromium	4.74		1.16		mg/Kg	1	☼	6010D	Total/NA
Copper	2.31		1.16		mg/Kg	1	☼	6010D	Total/NA
Lead	17.9		1.74		mg/Kg	1	☼	6010D	Total/NA
Nickel	2.20		1.16		mg/Kg	1	☼	6010D	Total/NA
Zinc	57.0		3.48		mg/Kg	1	☼	6010D	Total/NA
Manganese	110		1.16		mg/Kg	1	☼	6010D	Total/NA
Vanadium	10.2		1.74		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP7 (6-7)
Date Collected: 04/27/22 08:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-1
Matrix: Solid
Percent Solids: 92.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	*-	3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Acetone	ND		31.4		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Acrylonitrile	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Benzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Bromobenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Bromochloromethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Bromodichloromethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Bromoform	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Bromomethane	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
2-Butanone (MEK)	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
n-Butylbenzene	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
sec-Butylbenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
tert-Butylbenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Carbon disulfide	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Carbon tetrachloride	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Chlorobenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Chloroethane	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Chloroform	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Chloromethane	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
2-Chlorotoluene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
4-Chlorotoluene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2-Dibromo-3-Chloropropane	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Dibromochloromethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2-Dibromoethane (EDB)	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Dibromomethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2-Dichlorobenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,3-Dichlorobenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,4-Dichlorobenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Dichlorodifluoromethane (Freon 12)	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,1-Dichloroethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2-Dichloroethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,1-Dichloroethene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
cis-1,2-Dichloroethene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
trans-1,2-Dichloroethene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2-Dichloropropane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,3-Dichloropropane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
2,2-Dichloropropane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,1-Dichloropropene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
cis-1,3-Dichloropropene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
trans-1,3-Dichloropropene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Ethylbenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Hexachlorobutadiene	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
2-Hexanone (MBK)	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Isopropylbenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
4-Isopropyltoluene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Methyl tert-butyl ether	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
4-Methyl-2-pentanone (MIBK)	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Methylene Chloride	**10.2**		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Naphthalene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1

Client Sample ID: TP7 (6-7)
Date Collected: 04/27/22 08:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-1
Matrix: Solid
Percent Solids: 92.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Styrene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,1,1,2-Tetrachloroethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,1,2,2-Tetrachloroethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Tetrachloroethene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Toluene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2,3-Trichlorobenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2,4-Trichlorobenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,3,5-Trichlorobenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,1,1-Trichloroethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,1,2-Trichloroethane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Trichloroethene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Trichlorofluoromethane (Freon 11)	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2,3-Trichloropropane	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,2,4-Trimethylbenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,3,5-Trimethylbenzene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Vinyl chloride	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
m,p-Xylene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
o-Xylene	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Tetrahydrofuran	ND		6.27		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Ethyl ether	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Tert-amyl methyl ether	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Ethyl tert-butyl ether	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
di-Isopropyl ether	ND		3.14		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
tert-Butanol	ND		62.7		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
1,4-Dioxane	ND		62.7		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
trans-1,4-Dichloro-2-butene	ND		15.7		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1
Ethanol	ND		627		ug/Kg	☼	05/02/22 08:45	05/02/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:01*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:01*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:01*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
1,2,4-Trichlorobenzene	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
1,2-Dichlorobenzene	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
1,3-Dichlorobenzene	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
1,4-Dichlorobenzene	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
1-Methylnaphthalene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2,4,5-Trichlorophenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2,4,6-Trichlorophenol	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2,4-Dichlorophenol	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2,4-Dimethylphenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2,4-Dinitrophenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2,4-Dinitrotoluene	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2,6-Dinitrotoluene	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP7 (6-7)
Date Collected: 04/27/22 08:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-1
Matrix: Solid
Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2-Chlorophenol	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2-Methylnaphthalene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2-Methylphenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2-Nitroaniline	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
2-Nitrophenol	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
3 & 4 Methylphenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
3,3'-Dichlorobenzidine	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
3-Nitroaniline	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
4,6-Dinitro-2-methylphenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
4-Bromophenyl phenyl ether	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
4-Chloro-3-methylphenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
4-Chloroaniline	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
4-Chlorophenyl phenyl ether	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
4-Nitroaniline	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
4-Nitrophenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Acenaphthene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Acenaphthylene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Aniline	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Anthracene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Azobenzene/Diphenyldiazene	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Benzidine	ND	*1	703		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Benzo[a]anthracene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Benzo[a]pyrene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Benzo[b]fluoranthene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Benzo[g,h,i]perylene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Benzo[k]fluoranthene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Benzoic acid	ND	*-	351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Benzyl alcohol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Bis(2-chloroethoxy)methane	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Bis(2-chloroethyl)ether	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
bis (2-chloroisopropyl) ether	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Bis(2-ethylhexyl) phthalate	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Butyl benzyl phthalate	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Carbazole	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Chrysene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Dibenz(a,h)anthracene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Dibenzofuran	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Diethyl phthalate	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Dimethyl phthalate	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Di-n-butyl phthalate	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Di-n-octyl phthalate	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Fluoranthene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Fluorene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Hexachlorobenzene	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Hexachlorobutadiene	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Hexachlorocyclopentadiene	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Hexachloroethane	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Indeno[1,2,3-cd]pyrene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1

Client Sample ID: TP7 (6-7)
Date Collected: 04/27/22 08:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-1
Matrix: Solid
Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Naphthalene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Nitrobenzene	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
N-Nitrosodimethylamine	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
N-Nitrosodi-n-propylamine	ND		178		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
N-Nitrosodiphenylamine	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Pentachloronitrobenzene	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Pentachlorophenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Phenanthrene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Phenol	ND		351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Pyrene	ND		71.0		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1
Pyridine	ND	*-	351		ug/Kg	☼	04/29/22 12:03	05/02/22 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*30 - 130*	*04/29/22 12:03*	*05/02/22 19:18*	*1*
2-Fluorophenol (Surr)	*50*		*15 - 110*	*04/29/22 12:03*	*05/02/22 19:18*	*1*
Nitrobenzene-d5 (Surr)	*37*		*30 - 130*	*04/29/22 12:03*	*05/02/22 19:18*	*1*
Phenol-d5 (Surr)	*48*		*15 - 110*	*04/29/22 12:03*	*05/02/22 19:18*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*15 - 110*	*04/29/22 12:03*	*05/02/22 19:18*	*1*
Terphenyl-d14 (Surr)	*74*		*30 - 130*	*04/29/22 12:03*	*05/02/22 19:18*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
beta-BHC	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
delta-BHC	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
gamma-BHC (Lindane)	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Heptachlor	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Aldrin	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Heptachlor epoxide	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Endosulfan I	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Dieldrin	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
4,4'-DDE	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Endrin	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Endosulfan II	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
4,4'-DDD	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Endosulfan sulfate	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
4,4'-DDT	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Methoxychlor	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Endrin ketone	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Endrin aldehyde	ND		8.60		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
cis-Chlordane	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
trans-Chlordane	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Toxaphene	ND		108		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1
Alachlor	ND		5.38		ug/Kg	☼	05/02/22 16:01	05/04/22 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*53*		*30 - 150*	*05/02/22 16:01*	*05/04/22 14:47*	*1*
DCB Decachlorobiphenyl (Surr)	*72*		*30 - 150*	*05/02/22 16:01*	*05/04/22 14:47*	*1*

Client Sample ID: TP7 (6-7)
Date Collected: 04/27/22 08:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-1
Matrix: Solid
Percent Solids: 92.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1
PCB-1221	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1
PCB-1232	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1
PCB-1242	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1
PCB-1248	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1
PCB-1254	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1
PCB-1260	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1
PCB-1262	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1
PCB-1268	ND		21.5		ug/Kg	☼	05/02/22 16:01	05/04/22 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:27*	*1*
Tetrachloro-m-xylene	*74*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:27*	*1*
DCB Decachlorobiphenyl (Surr)	*67*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:27*	*1*
DCB Decachlorobiphenyl (Surr)	*67*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:27*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**15.1**		12.2		mg/Kg	☼	04/28/22 14:01	04/29/22 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*94*		*40 - 140*	*04/28/22 14:01*	*04/29/22 19:54*	*1*
o-Terphenyl (Surr)	*82*		*40 - 140*	*04/28/22 14:01*	*04/29/22 19:54*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.42		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Arsenic	ND		1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Beryllium	**0.693**		0.542		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Barium	**18.0**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Cadmium	ND		0.542		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Chromium	**7.92**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Copper	**4.53**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Lead	**9.62**		1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Nickel	**5.04**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Selenium	ND		1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Silver	ND	^+	1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Thallium	ND		3.25		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Zinc	**41.4**		3.25		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Manganese	**124**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1
Vanadium	**6.33**		1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0472		mg/Kg	☼	04/28/22 15:17	04/29/22 14:07	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.8**		0.1		%			05/03/22 15:30	1
Percent Solids	**92.2**		0.1		%			05/03/22 15:30	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP7 (0-6)
Date Collected: 04/27/22 08:15
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-2
Matrix: Solid
Percent Solids: 89.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	*-	3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Acetone	**55.5**		33.8		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Acrylonitrile	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Benzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Bromobenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Bromochloromethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Bromodichloromethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Bromoform	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Bromomethane	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
2-Butanone (MEK)	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
n-Butylbenzene	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
sec-Butylbenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
tert-Butylbenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Carbon disulfide	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Carbon tetrachloride	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Chlorobenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Chloroethane	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Chloroform	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Chloromethane	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
2-Chlorotoluene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
4-Chlorotoluene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2-Dibromo-3-Chloropropane	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Dibromochloromethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2-Dibromoethane (EDB)	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Dibromomethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2-Dichlorobenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,3-Dichlorobenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,4-Dichlorobenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Dichlorodifluoromethane (Freon 12)	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,1-Dichloroethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2-Dichloroethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,1-Dichloroethene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
cis-1,2-Dichloroethene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
trans-1,2-Dichloroethene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2-Dichloropropane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,3-Dichloropropane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
2,2-Dichloropropane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,1-Dichloropropene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
cis-1,3-Dichloropropene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
trans-1,3-Dichloropropene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Ethylbenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Hexachlorobutadiene	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
2-Hexanone (MBK)	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Isopropylbenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
4-Isopropyltoluene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Methyl tert-butyl ether	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
4-Methyl-2-pentanone (MIBK)	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Methylene Chloride	**14.5**		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Naphthalene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP7 (0-6)
Date Collected: 04/27/22 08:15
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-2
Matrix: Solid
Percent Solids: 89.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Styrene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,1,1,2-Tetrachloroethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,1,2,2-Tetrachloroethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Tetrachloroethene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Toluene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2,3-Trichlorobenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2,4-Trichlorobenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,3,5-Trichlorobenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,1,1-Trichloroethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,1,2-Trichloroethane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Trichloroethene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Trichlorofluoromethane (Freon 11)	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2,3-Trichloropropane	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,2,4-Trimethylbenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,3,5-Trimethylbenzene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Vinyl chloride	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
m,p-Xylene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
o-Xylene	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Tetrahydrofuran	ND		6.76		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Ethyl ether	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Tert-amyl methyl ether	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Ethyl tert-butyl ether	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
di-Isopropyl ether	ND		3.38		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
tert-Butanol	ND		67.6		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
1,4-Dioxane	ND		67.6		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
trans-1,4-Dichloro-2-butene	ND		16.9		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1
Ethanol	ND		676		ug/Kg	☼	05/02/22 08:45	05/02/22 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:28*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:28*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:28*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
1,2,4-Trichlorobenzene	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
1,2-Dichlorobenzene	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
1,3-Dichlorobenzene	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
1,4-Dichlorobenzene	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
1-Methylnaphthalene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2,4,5-Trichlorophenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2,4,6-Trichlorophenol	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2,4-Dichlorophenol	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2,4-Dimethylphenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2,4-Dinitrophenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2,4-Dinitrotoluene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2,6-Dinitrotoluene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1

Client Sample ID: TP7 (0-6)
Date Collected: 04/27/22 08:15
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-2
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2-Chlorophenol	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2-Methylnaphthalene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2-Methylphenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2-Nitroaniline	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
2-Nitrophenol	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
3 & 4 Methylphenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
3,3'-Dichlorobenzidine	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
3-Nitroaniline	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
4,6-Dinitro-2-methylphenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
4-Bromophenyl phenyl ether	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
4-Chloro-3-methylphenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
4-Chloroaniline	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
4-Chlorophenyl phenyl ether	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
4-Nitroaniline	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
4-Nitrophenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Acenaphthene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Acenaphthylene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Aniline	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Anthracene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Azobenzene/Diphenyldiazene	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Benzidine	ND	*1	725		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Benzo[a]anthracene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Benzo[a]pyrene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Benzo[b]fluoranthene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Benzo[g,h,i]perylene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Benzo[k]fluoranthene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Benzoic acid	ND	*-	363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Benzyl alcohol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Bis(2-chloroethoxy)methane	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Bis(2-chloroethyl)ether	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
bis (2-chloroisopropyl) ether	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Bis(2-ethylhexyl) phthalate	**1390**		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Butyl benzyl phthalate	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Carbazole	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Chrysene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Dibenz(a,h)anthracene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Dibenzofuran	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Diethyl phthalate	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Dimethyl phthalate	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Di-n-butyl phthalate	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Di-n-octyl phthalate	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Fluoranthene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Fluorene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Hexachlorobenzene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Hexachlorobutadiene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Hexachlorocyclopentadiene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Hexachloroethane	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Indeno[1,2,3-cd]pyrene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1

Client Sample ID: TP7 (0-6)
Date Collected: 04/27/22 08:15
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-2
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Naphthalene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Nitrobenzene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
N-Nitrosodimethylamine	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
N-Nitrosodi-n-propylamine	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
N-Nitrosodiphenylamine	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Pentachloronitrobenzene	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Pentachlorophenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Phenanthrene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Phenol	ND		363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Pyrene	ND		73.3		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1
Pyridine	ND	*-	363		ug/Kg	☼	04/29/22 12:03	05/02/22 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*30 - 130*	*04/29/22 12:03*	*05/02/22 20:15*	*1*
2-Fluorophenol (Surr)	*58*		*15 - 110*	*04/29/22 12:03*	*05/02/22 20:15*	*1*
Nitrobenzene-d5 (Surr)	*41*		*30 - 130*	*04/29/22 12:03*	*05/02/22 20:15*	*1*
Phenol-d5 (Surr)	*59*		*15 - 110*	*04/29/22 12:03*	*05/02/22 20:15*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*15 - 110*	*04/29/22 12:03*	*05/02/22 20:15*	*1*
Terphenyl-d14 (Surr)	*73*		*30 - 130*	*04/29/22 12:03*	*05/02/22 20:15*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
beta-BHC	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
delta-BHC	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
gamma-BHC (Lindane)	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Heptachlor	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Aldrin	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Heptachlor epoxide	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Endosulfan I	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Dieldrin	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
4,4'-DDE	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Endrin	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Endosulfan II	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
4,4'-DDD	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Endosulfan sulfate	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
4,4'-DDT	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Methoxychlor	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Endrin ketone	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Endrin aldehyde	ND		8.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
cis-Chlordane	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
trans-Chlordane	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Toxaphene	ND		109		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1
Alachlor	ND		5.47		ug/Kg	☼	05/02/22 16:01	05/04/22 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*50*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:03*	*1*
DCB Decachlorobiphenyl (Surr)	*53*	*p*	*30 - 150*	*05/02/22 16:01*	*05/04/22 15:03*	*1*

Client Sample ID: TP7 (0-6)
Date Collected: 04/27/22 08:15
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-2
Matrix: Solid
Percent Solids: 89.4

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1
PCB-1221	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1
PCB-1232	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1
PCB-1242	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1
PCB-1248	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1
PCB-1254	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1
PCB-1260	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1
PCB-1262	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1
PCB-1268	ND		21.9		ug/Kg	☼	05/02/22 16:01	05/04/22 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:44*	*1*
Tetrachloro-m-xylene	*71*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:44*	*1*
DCB Decachlorobiphenyl (Surr)	*75*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:44*	*1*
DCB Decachlorobiphenyl (Surr)	*73*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:44*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**31.7**		14.2		mg/Kg	☼	04/28/22 14:01	04/29/22 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*88*		*40 - 140*	*04/28/22 14:01*	*04/29/22 20:19*	*1*
o-Terphenyl (Surr)	*75*		*40 - 140*	*04/28/22 14:01*	*04/29/22 20:19*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.42		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Arsenic	**2.30**		1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Beryllium	**0.777**		0.542		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Barium	**15.0**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Cadmium	ND		0.542		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Chromium	**3.86**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Copper	**4.56**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Lead	**13.6**		1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Nickel	**2.64**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Selenium	ND		1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Silver	ND	^+	1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Thallium	ND		3.25		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Zinc	**51.0**		3.25		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Manganese	**126**		1.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1
Vanadium	**6.49**		1.63		mg/Kg	☼	04/28/22 15:13	04/29/22 19:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0542		mg/Kg	☼	04/28/22 15:17	04/29/22 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**10.6**		0.1		%			05/03/22 15:30	1
Percent Solids	**89.4**		0.1		%			05/03/22 15:30	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP6 5ft
Date Collected: 04/27/22 12:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-3
Matrix: Solid
Percent Solids: 90.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	*-	4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Acetone	ND		41.2		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Acrylonitrile	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Benzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Bromobenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Bromochloromethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Bromodichloromethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Bromoform	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Bromomethane	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
2-Butanone (MEK)	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
n-Butylbenzene	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
sec-Butylbenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
tert-Butylbenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Carbon disulfide	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Carbon tetrachloride	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Chlorobenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Chloroethane	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Chloroform	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Chloromethane	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
2-Chlorotoluene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
4-Chlorotoluene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2-Dibromo-3-Chloropropane	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Dibromochloromethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2-Dibromoethane (EDB)	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Dibromomethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2-Dichlorobenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,3-Dichlorobenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,4-Dichlorobenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Dichlorodifluoromethane (Freon 12)	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,1-Dichloroethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2-Dichloroethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,1-Dichloroethene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
cis-1,2-Dichloroethene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
trans-1,2-Dichloroethene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2-Dichloropropane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,3-Dichloropropane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
2,2-Dichloropropane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,1-Dichloropropene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
cis-1,3-Dichloropropene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
trans-1,3-Dichloropropene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Ethylbenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Hexachlorobutadiene	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
2-Hexanone (MBK)	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Isopropylbenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
4-Isopropyltoluene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Methyl tert-butyl ether	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
4-Methyl-2-pentanone (MIBK)	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Methylene Chloride	**12.4**		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Naphthalene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP6 5ft
Date Collected: 04/27/22 12:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-3
Matrix: Solid
Percent Solids: 90.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Styrene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,1,1,2-Tetrachloroethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,1,2,2-Tetrachloroethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Tetrachloroethene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Toluene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2,3-Trichlorobenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2,4-Trichlorobenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,3,5-Trichlorobenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,1,1-Trichloroethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,1,2-Trichloroethane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Trichloroethene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Trichlorofluoromethane (Freon 11)	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2,3-Trichloropropane	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,2,4-Trimethylbenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,3,5-Trimethylbenzene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Vinyl chloride	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
m,p-Xylene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
o-Xylene	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Tetrahydrofuran	ND		8.23		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Ethyl ether	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Tert-amyl methyl ether	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Ethyl tert-butyl ether	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
di-Isopropyl ether	ND		4.12		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
tert-Butanol	ND		82.3		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
1,4-Dioxane	ND		82.3		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
trans-1,4-Dichloro-2-butene	ND		20.6		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1
Ethanol	ND		823		ug/Kg	☼	05/02/22 08:45	05/02/22 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:54*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:54*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*05/02/22 08:45*	*05/02/22 19:54*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
1,2,4-Trichlorobenzene	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
1,2-Dichlorobenzene	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
1,3-Dichlorobenzene	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
1,4-Dichlorobenzene	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
1-Methylnaphthalene	ND		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2,4,5-Trichlorophenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2,4,6-Trichlorophenol	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2,4-Dichlorophenol	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2,4-Dimethylphenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2,4-Dinitrophenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2,4-Dinitrotoluene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2,6-Dinitrotoluene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP6 5ft
Date Collected: 04/27/22 12:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-3
Matrix: Solid
Percent Solids: 90.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2-Chlorophenol	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2-Methylnaphthalene	ND		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2-Methylphenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2-Nitroaniline	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
2-Nitrophenol	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
3 & 4 Methylphenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
3,3'-Dichlorobenzidine	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
3-Nitroaniline	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
4,6-Dinitro-2-methylphenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
4-Bromophenyl phenyl ether	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
4-Chloro-3-methylphenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
4-Chloroaniline	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
4-Chlorophenyl phenyl ether	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
4-Nitroaniline	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
4-Nitrophenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Acenaphthene	ND		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Acenaphthylene	ND		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Aniline	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Anthracene	**170**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Azobenzene/Diphenyldiazene	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Benzidine	ND	*1	722		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Benzo[a]anthracene	**436**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Benzo[a]pyrene	**394**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Benzo[b]fluoranthene	**289**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Benzo[g,h,i]perylene	**231**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Benzo[k]fluoranthene	**379**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Benzoic acid	ND	*-	361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Benzyl alcohol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Bis(2-chloroethoxy)methane	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Bis(2-chloroethyl)ether	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
bis (2-chloroisopropyl) ether	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Bis(2-ethylhexyl) phthalate	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Butyl benzyl phthalate	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Carbazole	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Chrysene	**379**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Dibenz(a,h)anthracene	**80.1**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Dibenzofuran	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Diethyl phthalate	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Dimethyl phthalate	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Di-n-butyl phthalate	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Di-n-octyl phthalate	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Fluoranthene	**778**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Fluorene	ND		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Hexachlorobenzene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Hexachlorobutadiene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Hexachlorocyclopentadiene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Hexachloroethane	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Indeno[1,2,3-cd]pyrene	**220**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1

Client Sample ID: TP6 5ft
Date Collected: 04/27/22 12:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-3
Matrix: Solid
Percent Solids: 90.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Naphthalene	ND		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Nitrobenzene	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
N-Nitrosodimethylamine	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
N-Nitrosodi-n-propylamine	ND		183		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
N-Nitrosodiphenylamine	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Pentachloronitrobenzene	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Pentachlorophenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Phenanthrene	**382**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Phenol	ND		361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Pyrene	**634**		73.0		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1
Pyridine	ND	*-	361		ug/Kg	☼	04/29/22 12:03	05/02/22 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*51*		*30 - 130*	*04/29/22 12:03*	*05/02/22 20:43*	*1*
2-Fluorophenol (Surr)	*61*		*15 - 110*	*04/29/22 12:03*	*05/02/22 20:43*	*1*
Nitrobenzene-d5 (Surr)	*44*		*30 - 130*	*04/29/22 12:03*	*05/02/22 20:43*	*1*
Phenol-d5 (Surr)	*55*		*15 - 110*	*04/29/22 12:03*	*05/02/22 20:43*	*1*
2,4,6-Tribromophenol (Surr)	*78*		*15 - 110*	*04/29/22 12:03*	*05/02/22 20:43*	*1*
Terphenyl-d14 (Surr)	*70*		*30 - 130*	*04/29/22 12:03*	*05/02/22 20:43*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
beta-BHC	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
delta-BHC	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
gamma-BHC (Lindane)	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Heptachlor	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Aldrin	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Heptachlor epoxide	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Endosulfan I	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Dieldrin	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
4,4'-DDE	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Endrin	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Endosulfan II	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
4,4'-DDD	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Endosulfan sulfate	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
4,4'-DDT	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Methoxychlor	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Endrin ketone	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Endrin aldehyde	ND		8.72		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
cis-Chlordane	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
trans-Chlordane	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Toxaphene	ND		109		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1
Alachlor	ND		5.45		ug/Kg	☼	05/02/22 16:01	05/04/22 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:34*	*1*
DCB Decachlorobiphenyl (Surr)	*54*	*p*	*30 - 150*	*05/02/22 16:01*	*05/04/22 15:34*	*1*

Client Sample ID: TP6 5ft
Date Collected: 04/27/22 12:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-3
Matrix: Solid
Percent Solids: 90.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1
PCB-1221	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1
PCB-1232	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1
PCB-1242	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1
PCB-1248	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1
PCB-1254	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1
PCB-1260	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1
PCB-1262	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1
PCB-1268	ND		21.8		ug/Kg	☼	05/02/22 16:01	05/04/22 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:01*	*1*
Tetrachloro-m-xylene	*73*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:01*	*1*
DCB Decachlorobiphenyl (Surr)	*74*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:01*	*1*
DCB Decachlorobiphenyl (Surr)	*71*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:01*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**78.2**		12.9		mg/Kg	☼	04/28/22 14:01	04/29/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*107*		*40 - 140*	*04/28/22 14:01*	*04/29/22 20:45*	*1*
o-Terphenyl (Surr)	*81*		*40 - 140*	*04/28/22 14:01*	*04/29/22 20:45*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.13		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Arsenic	**2.04**		1.54		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Beryllium	**1.03**		0.513		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Barium	**13.0**		1.03		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Cadmium	ND		0.513		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Chromium	**4.34**		1.03		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Copper	**3.86**		1.03		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Lead	**10.7**		1.54		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Nickel	**2.70**		1.03		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Selenium	ND		1.54		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Silver	ND	^+	1.54		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Thallium	ND		3.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Zinc	**39.6**		3.08		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Manganese	**109**		1.03		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1
Vanadium	**7.96**		1.54		mg/Kg	☼	04/28/22 15:13	04/29/22 19:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0486		mg/Kg	☼	04/28/22 15:17	04/29/22 14:15	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.1**		0.1		%			05/03/22 15:30	1
Percent Solids	**90.9**		0.1		%			05/03/22 15:30	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP6 9.5ft
Date Collected: 04/27/22 12:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-4
Matrix: Solid
Percent Solids: 78.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	*-	3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Acetone	ND		34.6		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Acrylonitrile	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Benzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Bromobenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Bromochloromethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Bromodichloromethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Bromoform	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Bromomethane	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
2-Butanone (MEK)	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
n-Butylbenzene	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
sec-Butylbenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
tert-Butylbenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Carbon disulfide	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Carbon tetrachloride	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Chlorobenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Chloroethane	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Chloroform	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Chloromethane	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
2-Chlorotoluene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
4-Chlorotoluene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2-Dibromo-3-Chloropropane	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Dibromochloromethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2-Dibromoethane (EDB)	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Dibromomethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2-Dichlorobenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,3-Dichlorobenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,4-Dichlorobenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Dichlorodifluoromethane (Freon 12)	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,1-Dichloroethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2-Dichloroethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,1-Dichloroethene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
cis-1,2-Dichloroethene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
trans-1,2-Dichloroethene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2-Dichloropropane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,3-Dichloropropane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
2,2-Dichloropropane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,1-Dichloropropene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
cis-1,3-Dichloropropene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
trans-1,3-Dichloropropene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Ethylbenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Hexachlorobutadiene	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
2-Hexanone (MBK)	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Isopropylbenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
4-Isopropyltoluene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Methyl tert-butyl ether	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
4-Methyl-2-pentanone (MIBK)	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Methylene Chloride	**7.20**		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Naphthalene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP6 9.5ft
Date Collected: 04/27/22 12:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-4
Matrix: Solid
Percent Solids: 78.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Styrene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,1,1,2-Tetrachloroethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,1,2,2-Tetrachloroethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Tetrachloroethene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Toluene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2,3-Trichlorobenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2,4-Trichlorobenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,3,5-Trichlorobenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,1,1-Trichloroethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,1,2-Trichloroethane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Trichloroethene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Trichlorofluoromethane (Freon 11)	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2,3-Trichloropropane	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,2,4-Trimethylbenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,3,5-Trimethylbenzene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Vinyl chloride	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
m,p-Xylene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
o-Xylene	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Tetrahydrofuran	ND		6.91		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Ethyl ether	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Tert-amyl methyl ether	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Ethyl tert-butyl ether	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
di-Isopropyl ether	ND		3.46		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
tert-Butanol	ND		69.1		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
1,4-Dioxane	ND		69.1		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
trans-1,4-Dichloro-2-butene	ND		17.3		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1
Ethanol	ND		691		ug/Kg	☼	05/02/22 08:45	05/02/22 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*05/02/22 08:45*	*05/02/22 20:21*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*05/02/22 08:45*	*05/02/22 20:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*	*05/02/22 08:45*	*05/02/22 20:21*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*05/02/22 08:45*	*05/02/22 20:21*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
1,2,4-Trichlorobenzene	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
1,2-Dichlorobenzene	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
1,3-Dichlorobenzene	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
1,4-Dichlorobenzene	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
1-Methylnaphthalene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2,4,5-Trichlorophenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2,4,6-Trichlorophenol	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2,4-Dichlorophenol	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2,4-Dimethylphenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2,4-Dinitrophenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2,4-Dinitrotoluene	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2,6-Dinitrotoluene	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1

Client Sample ID: TP6 9.5ft
Date Collected: 04/27/22 12:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-4
Matrix: Solid
Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2-Chlorophenol	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2-Methylnaphthalene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2-Methylphenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2-Nitroaniline	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
2-Nitrophenol	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
3 & 4 Methylphenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
3,3'-Dichlorobenzidine	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
3-Nitroaniline	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
4,6-Dinitro-2-methylphenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
4-Bromophenyl phenyl ether	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
4-Chloro-3-methylphenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
4-Chloroaniline	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
4-Chlorophenyl phenyl ether	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
4-Nitroaniline	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
4-Nitrophenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Acenaphthene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Acenaphthylene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Aniline	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Anthracene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Azobenzene/Diphenyldiazene	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Benzidine	ND	*1	826		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Benzo[a]anthracene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Benzo[a]pyrene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Benzo[b]fluoranthene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Benzo[g,h,i]perylene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Benzo[k]fluoranthene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Benzoic acid	ND	*-	413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Benzyl alcohol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Bis(2-chloroethoxy)methane	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Bis(2-chloroethyl)ether	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
bis (2-chloroisopropyl) ether	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Bis(2-ethylhexyl) phthalate	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Butyl benzyl phthalate	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Carbazole	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Chrysene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Dibenz(a,h)anthracene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Dibenzofuran	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Diethyl phthalate	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Dimethyl phthalate	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Di-n-butyl phthalate	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Di-n-octyl phthalate	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Fluoranthene	**99.3**		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Fluorene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Hexachlorobenzene	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Hexachlorobutadiene	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Hexachlorocyclopentadiene	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Hexachloroethane	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Indeno[1,2,3-cd]pyrene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1

Client Sample ID: TP6 9.5ft
Lab Sample ID: 620-4175-4

Date Collected: 04/27/22 12:10
Matrix: Solid

Date Received: 04/27/22 13:06
Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Naphthalene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Nitrobenzene	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
N-Nitrosodimethylamine	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
N-Nitrosodi-n-propylamine	ND		209		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
N-Nitrosodiphenylamine	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Pentachloronitrobenzene	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Pentachlorophenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Phenanthrene	ND		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Phenol	ND		413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Pyrene	**87.4**		83.4		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1
Pyridine	ND	*-	413		ug/Kg	☼	04/29/22 12:03	05/02/22 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*30 - 130*	*04/29/22 12:03*	*05/02/22 19:46*	*1*
2-Fluorophenol (Surr)	*76*		*15 - 110*	*04/29/22 12:03*	*05/02/22 19:46*	*1*
Nitrobenzene-d5 (Surr)	*53*		*30 - 130*	*04/29/22 12:03*	*05/02/22 19:46*	*1*
Phenol-d5 (Surr)	*69*		*15 - 110*	*04/29/22 12:03*	*05/02/22 19:46*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*15 - 110*	*04/29/22 12:03*	*05/02/22 19:46*	*1*
Terphenyl-d14 (Surr)	*72*		*30 - 130*	*04/29/22 12:03*	*05/02/22 19:46*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
beta-BHC	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
delta-BHC	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
gamma-BHC (Lindane)	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Heptachlor	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Aldrin	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Heptachlor epoxide	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Endosulfan I	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Dieldrin	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
4,4'-DDE	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Endrin	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Endosulfan II	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
4,4'-DDD	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Endosulfan sulfate	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
4,4'-DDT	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Methoxychlor	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Endrin ketone	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Endrin aldehyde	ND		9.76		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
cis-Chlordane	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
trans-Chlordane	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Toxaphene	ND		122		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1
Alachlor	ND		6.10		ug/Kg	☼	05/02/22 16:01	05/04/22 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*30 - 150*	*05/02/22 16:01*	*05/04/22 15:50*	*1*
DCB Decachlorobiphenyl (Surr)	*42*	*p*	*30 - 150*	*05/02/22 16:01*	*05/04/22 15:50*	*1*

Client Sample ID: TP6 9.5ft

Date Collected: 04/27/22 12:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-4

Matrix: Solid
Percent Solids: 78.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1
PCB-1221	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1
PCB-1232	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1
PCB-1242	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1
PCB-1248	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1
PCB-1254	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1
PCB-1260	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1
PCB-1262	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1
PCB-1268	ND		24.4		ug/Kg	☼	05/02/22 16:01	05/04/22 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:18*	*1*
Tetrachloro-m-xylene	*71*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:18*	*1*
DCB Decachlorobiphenyl (Surr)	*66*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:18*	*1*
DCB Decachlorobiphenyl (Surr)	*61*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:18*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**36.3**		16.1		mg/Kg	☼	04/28/22 14:01	04/29/22 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*112*		*40 - 140*	*04/28/22 14:01*	*04/29/22 21:10*	*1*
o-Terphenyl (Surr)	*92*		*40 - 140*	*04/28/22 14:01*	*04/29/22 21:10*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.80		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Arsenic	**2.21**		1.74		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Beryllium	**2.10**		0.580		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Barium	**16.3**		1.16		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Cadmium	ND		0.580		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Chromium	**4.74**		1.16		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Copper	**2.31**		1.16		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Lead	**17.9**		1.74		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Nickel	**2.20**		1.16		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Selenium	ND		1.74		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Silver	ND	^+	1.74		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Thallium	ND		3.48		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Zinc	**57.0**		3.48		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Manganese	**110**		1.16		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1
Vanadium	**10.2**		1.74		mg/Kg	☼	04/28/22 15:13	04/29/22 20:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0576		mg/Kg	☼	04/28/22 15:17	04/29/22 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**21.7**		0.1		%			05/03/22 15:30	1
Percent Solids	**78.3**		0.1		%			05/03/22 15:30	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4175-1	TP7 (6-7)	100	99	109	101
620-4175-2	TP7 (0-6)	96	98	116	103
620-4175-3	TP6 5ft	100	100	112	101
620-4175-4	TP6 9.5ft	97	99	111	102
LCS 620-10337/1-A	Lab Control Sample	101	101	104	101
LCSD 620-10337/2-A	Lab Control Sample Dup	102	101	108	102
MB 620-10337/3-A	Method Blank	102	101	108	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
620-4175-1	TP7 (6-7)	49	50	37	48	73	74
620-4175-2	TP7 (0-6)	60	58	41	59	76	73
620-4175-3	TP6 5ft	51	61	44	55	78	70
620-4175-4	TP6 9.5ft	62	76	53	69	77	72
LCS 620-10310/2-A	Lab Control Sample	52	62	49	56	67	63
LCSD 620-10310/3-A	Lab Control Sample Dup	50	60	49	56	66	62
MB 620-10310/1-A	Method Blank	44	60	41	53	46	57

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(30-150)	(30-150)
620-4175-1	TP7 (6-7)	53	72
LCS 620-10378/4-A	Lab Control Sample	59	49
LCSD 620-10378/5-A	Lab Control Sample Dup	61	62
MB 620-10378/1-A	Method Blank	59	48

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Surrogate Summary

Client: AECOM
Job ID: 620-4175-1
Project/Site: I295/Rt 37 - Johnston, RI

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)
620-4175-2	TP7 (0-6)	50	53 p
620-4175-3	TP6 5ft	58	54 p
620-4175-4	TP6 9.5ft	51	42 p

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4175-1	TP7 (6-7)	74	74	67	67
620-4175-2	TP7 (0-6)	72	71	75	73
620-4175-3	TP6 5ft	74	73	74	71
620-4175-4	TP6 9.5ft	78	71	66	61
LCS 620-10378/2-A	Lab Control Sample	77	84	69	74
LCSD 620-10378/3-A	Lab Control Sample Dup	91	93	80	85
MB 620-10378/1-A	Method Blank	83	83	76	76

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	OTPH
Lab Sample ID	Client Sample ID	(40-140)	(40-140)
620-4175-1	TP7 (6-7)	94	82
620-4175-2	TP7 (0-6)	88	75
620-4175-3	TP6 5ft	107	81
620-4175-4	TP6 9.5ft	112	92
LCS 620-10258/2-A	Lab Control Sample	94	77
LCSD 620-10258/3-A	Lab Control Sample Dup	96	80
MB 620-10258/1-A	Method Blank	103	95

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)
OTPH = o-Terphenyl (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-10337/3-A
Matrix: Solid
Analysis Batch: 10338

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10337

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Acetone	ND		50.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Acrylonitrile	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Benzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Bromobenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Bromochloromethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Bromodichloromethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Bromoform	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Bromomethane	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
2-Butanone (MEK)	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
n-Butylbenzene	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
sec-Butylbenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
tert-Butylbenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Carbon disulfide	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Carbon tetrachloride	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Chlorobenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Chloroethane	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Chloroform	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Chloromethane	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
2-Chlorotoluene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
4-Chlorotoluene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Dibromochloromethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Dibromomethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,1-Dichloroethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2-Dichloroethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,1-Dichloroethene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2-Dichloropropane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,3-Dichloropropane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
2,2-Dichloropropane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,1-Dichloropropene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Ethylbenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Hexachlorobutadiene	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Isopropylbenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
4-Isopropyltoluene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Methylene Chloride	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-10337/3-A
Matrix: Solid
Analysis Batch: 10338

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10337

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
N-Propylbenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Styrene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Tetrachloroethene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Toluene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Trichloroethene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Vinyl chloride	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
m,p-Xylene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
o-Xylene	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Tetrahydrofuran	ND		10.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Ethyl ether	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
di-Isopropyl ether	ND		5.00		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
tert-Butanol	ND		100		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
1,4-Dioxane	ND		100		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		05/02/22 08:45	05/02/22 11:33	1
Ethanol	ND		1000		ug/Kg		05/02/22 08:45	05/02/22 11:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*05/02/22 08:45*	*05/02/22 11:33*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*05/02/22 08:45*	*05/02/22 11:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*	*05/02/22 08:45*	*05/02/22 11:33*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*05/02/22 08:45*	*05/02/22 11:33*	*1*

Lab Sample ID: LCS 620-10337/1-A
Matrix: Solid
Analysis Batch: 10338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	20.62		ug/Kg		103	91 - 125
Acetone	20.0	23.56	J	ug/Kg		118	47 - 157
Acrylonitrile	20.0	21.70		ug/Kg		108	79 - 129
Benzene	20.0	20.46		ug/Kg		102	88 - 130
Bromobenzene	20.0	19.68		ug/Kg		98	81 - 125
Bromochloromethane	20.0	19.18		ug/Kg		96	85 - 139
Bromodichloromethane	20.0	20.61		ug/Kg		103	84 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-10337/1-A
Matrix: Solid
Analysis Batch: 10338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	19.52		ug/Kg		98	83 - 131
Bromomethane	20.0	20.85		ug/Kg		104	63 - 157
2-Butanone (MEK)	20.0	22.55		ug/Kg		113	58 - 161
n-Butylbenzene	20.0	21.47		ug/Kg		107	83 - 137
sec-Butylbenzene	20.0	21.10		ug/Kg		106	79 - 131
tert-Butylbenzene	20.0	20.68		ug/Kg		103	82 - 131
Carbon disulfide	20.0	21.26		ug/Kg		106	82 - 135
Carbon tetrachloride	20.0	20.11		ug/Kg		101	77 - 139
Chlorobenzene	20.0	20.72		ug/Kg		104	85 - 121
Chloroethane	20.0	23.09		ug/Kg		115	61 - 156
Chloroform	20.0	20.69		ug/Kg		103	89 - 123
Chloromethane	20.0	18.67		ug/Kg		93	81 - 130
2-Chlorotoluene	20.0	21.46		ug/Kg		107	90 - 117
4-Chlorotoluene	20.0	21.67		ug/Kg		108	88 - 121
1,2-Dibromo-3-Chloropropane	20.0	19.87		ug/Kg		99	75 - 142
Dibromochloromethane	20.0	19.94		ug/Kg		100	85 - 131
1,2-Dibromoethane (EDB)	20.0	19.66		ug/Kg		98	85 - 133
Dibromomethane	20.0	20.00		ug/Kg		100	90 - 128
1,2-Dichlorobenzene	20.0	19.96		ug/Kg		100	88 - 128
1,3-Dichlorobenzene	20.0	20.45		ug/Kg		102	78 - 133
1,4-Dichlorobenzene	20.0	20.69		ug/Kg		103	88 - 121
Dichlorodifluoromethane (Freon 12)	20.0	14.74		ug/Kg		74	55 - 159
1,1-Dichloroethane	20.0	21.02		ug/Kg		105	89 - 129
1,2-Dichloroethane	20.0	20.82		ug/Kg		104	82 - 137
1,1-Dichloroethene	20.0	20.27		ug/Kg		101	82 - 138
cis-1,2-Dichloroethene	20.0	19.82		ug/Kg		99	79 - 133
trans-1,2-Dichloroethene	20.0	20.06		ug/Kg		100	81 - 137
1,2-Dichloropropane	20.0	20.54		ug/Kg		103	89 - 128
1,3-Dichloropropane	20.0	20.56		ug/Kg		103	86 - 133
2,2-Dichloropropane	20.0	20.40		ug/Kg		102	91 - 131
1,1-Dichloropropene	20.0	20.42		ug/Kg		102	75 - 137
cis-1,3-Dichloropropene	20.0	20.30		ug/Kg		102	84 - 122
trans-1,3-Dichloropropene	20.0	20.98		ug/Kg		105	90 - 121
Ethylbenzene	20.0	21.26		ug/Kg		106	89 - 126
Hexachlorobutadiene	20.0	18.29		ug/Kg		91	74 - 131
2-Hexanone (MBK)	20.0	22.08		ug/Kg		110	41 - 167
Isopropylbenzene	20.0	20.97		ug/Kg		105	88 - 125
4-Isopropyltoluene	20.0	20.85		ug/Kg		104	86 - 128
Methyl tert-butyl ether	20.0	20.55		ug/Kg		103	74 - 144
4-Methyl-2-pentanone (MIBK)	20.0	22.01		ug/Kg		110	80 - 135
Methylene Chloride	20.0	19.89		ug/Kg		99	87 - 119
Naphthalene	20.0	20.42		ug/Kg		102	60 - 145
N-Propylbenzene	20.0	21.41		ug/Kg		107	87 - 120
Styrene	20.0	20.59		ug/Kg		103	88 - 125
1,1,1,2-Tetrachloroethane	20.0	20.39		ug/Kg		102	81 - 128
1,1,2,2-Tetrachloroethane	20.0	21.06		ug/Kg		105	88 - 126
Tetrachloroethene	20.0	19.37		ug/Kg		97	81 - 124
Toluene	20.0	20.68		ug/Kg		103	84 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-10337/1-A
Matrix: Solid
Analysis Batch: 10338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	20.0	19.75		ug/Kg		99	68 - 145
1,2,4-Trichlorobenzene	20.0	19.79		ug/Kg		99	57 - 141
1,3,5-Trichlorobenzene	20.0	19.74		ug/Kg		99	70 - 137
1,1,1-Trichloroethane	20.0	20.51		ug/Kg		103	88 - 131
1,1,2-Trichloroethane	20.0	20.72		ug/Kg		104	91 - 129
Trichloroethene	20.0	20.59		ug/Kg		103	88 - 131
Trichlorofluoromethane (Freon 11)	20.0	20.24		ug/Kg		101	86 - 130
1,2,3-Trichloropropane	20.0	21.33		ug/Kg		107	92 - 126
1,2,4-Trimethylbenzene	20.0	21.09		ug/Kg		105	87 - 126
1,3,5-Trimethylbenzene	20.0	21.30		ug/Kg		106	90 - 125
Vinyl chloride	20.0	19.03		ug/Kg		95	73 - 145
m,p-Xylene	20.0	21.19		ug/Kg		106	83 - 122
o-Xylene	20.0	20.91		ug/Kg		105	87 - 122
Tetrahydrofuran	20.0	23.22		ug/Kg		116	81 - 134
Ethyl ether	20.0	21.45		ug/Kg		107	84 - 144
Tert-amyl methyl ether	20.0	20.53		ug/Kg		103	69 - 151
Ethyl tert-butyl ether	20.0	21.18		ug/Kg		106	75 - 128
di-Isopropyl ether	20.0	21.66		ug/Kg		108	82 - 131
tert-Butanol	200	222.2		ug/Kg		111	85 - 148
1,4-Dioxane	200	208.0		ug/Kg		104	10 - 178
trans-1,4-Dichloro-2-butene	20.0	21.96	J	ug/Kg		110	74 - 151
Ethanol	400	467.5	J	ug/Kg		117	83 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 620-10337/2-A
Matrix: Solid
Analysis Batch: 10338

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10337

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	18.10	*-	ug/Kg		90	91 - 125	13	30
Acetone	20.0	22.03	J	ug/Kg		110	47 - 157	7	30
Acrylonitrile	20.0	20.54		ug/Kg		103	79 - 129	5	30
Benzene	20.0	18.97		ug/Kg		95	88 - 130	8	30
Bromobenzene	20.0	18.16		ug/Kg		91	81 - 125	8	30
Bromochloromethane	20.0	17.91		ug/Kg		90	85 - 139	7	30
Bromodichloromethane	20.0	19.23		ug/Kg		96	84 - 134	7	30
Bromoform	20.0	18.53		ug/Kg		93	83 - 131	5	30
Bromomethane	20.0	18.65		ug/Kg		93	63 - 157	11	30
2-Butanone (MEK)	20.0	21.85		ug/Kg		109	58 - 161	3	30
n-Butylbenzene	20.0	19.68		ug/Kg		98	83 - 137	9	30
sec-Butylbenzene	20.0	19.34		ug/Kg		97	79 - 131	9	30
tert-Butylbenzene	20.0	18.76		ug/Kg		94	82 - 131	10	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-10337/2-A
Matrix: Solid
Analysis Batch: 10338

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10337

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	18.84		ug/Kg		94	82 - 135	12	30
Carbon tetrachloride			20.0	18.22		ug/Kg		91	77 - 139	10	30
Chlorobenzene			20.0	18.90		ug/Kg		94	85 - 121	9	30
Chloroethane			20.0	20.78		ug/Kg		104	61 - 156	11	30
Chloroform			20.0	19.11		ug/Kg		96	89 - 123	8	30
Chloromethane			20.0	16.71		ug/Kg		84	81 - 130	11	30
2-Chlorotoluene			20.0	19.55		ug/Kg		98	90 - 117	9	30
4-Chlorotoluene			20.0	19.80		ug/Kg		99	88 - 121	9	30
1,2-Dibromo-3-Chloropropane			20.0	19.13		ug/Kg		96	75 - 142	4	30
Dibromochloromethane			20.0	18.32		ug/Kg		92	85 - 131	8	30
1,2-Dibromoethane (EDB)			20.0	18.56		ug/Kg		93	85 - 133	6	30
Dibromomethane			20.0	18.86		ug/Kg		94	90 - 128	6	30
1,2-Dichlorobenzene			20.0	18.71		ug/Kg		94	88 - 128	6	30
1,3-Dichlorobenzene			20.0	18.80		ug/Kg		94	78 - 133	8	30
1,4-Dichlorobenzene			20.0	19.24		ug/Kg		96	88 - 121	7	30
Dichlorodifluoromethane (Freon 12)			20.0	12.80		ug/Kg		64	55 - 159	14	30
1,1-Dichloroethane			20.0	18.73		ug/Kg		94	89 - 129	12	30
1,2-Dichloroethane			20.0	19.84		ug/Kg		99	82 - 137	5	30
1,1-Dichloroethene			20.0	17.83		ug/Kg		89	82 - 138	13	30
cis-1,2-Dichloroethene			20.0	18.15		ug/Kg		91	79 - 133	9	30
trans-1,2-Dichloroethene			20.0	17.87		ug/Kg		89	81 - 137	12	30
1,2-Dichloropropane			20.0	18.91		ug/Kg		95	89 - 128	8	30
1,3-Dichloropropane			20.0	19.26		ug/Kg		96	86 - 133	7	30
2,2-Dichloropropane			20.0	18.54		ug/Kg		93	91 - 131	10	30
1,1-Dichloropropene			20.0	18.63		ug/Kg		93	75 - 137	9	30
cis-1,3-Dichloropropene			20.0	18.68		ug/Kg		93	84 - 122	8	30
trans-1,3-Dichloropropene			20.0	19.00		ug/Kg		95	90 - 121	10	30
Ethylbenzene			20.0	19.43		ug/Kg		97	89 - 126	9	30
Hexachlorobutadiene			20.0	17.19		ug/Kg		86	74 - 131	6	30
2-Hexanone (MBK)			20.0	20.92		ug/Kg		105	41 - 167	5	30
Isopropylbenzene			20.0	19.24		ug/Kg		96	88 - 125	9	30
4-Isopropyltoluene			20.0	19.03		ug/Kg		95	86 - 128	9	30
Methyl tert-butyl ether			20.0	19.14		ug/Kg		96	74 - 144	7	30
4-Methyl-2-pentanone (MIBK)			20.0	20.96		ug/Kg		105	80 - 135	5	30
Methylene Chloride			20.0	18.01		ug/Kg		90	87 - 119	10	30
Naphthalene			20.0	19.67		ug/Kg		98	60 - 145	4	30
N-Propylbenzene			20.0	19.76		ug/Kg		99	87 - 120	8	30
Styrene			20.0	18.92		ug/Kg		95	88 - 125	8	30
1,1,1,2-Tetrachloroethane			20.0	18.72		ug/Kg		94	81 - 128	9	30
1,1,2,2-Tetrachloroethane			20.0	20.13		ug/Kg		101	88 - 126	5	30
Tetrachloroethene			20.0	17.31		ug/Kg		87	81 - 124	11	30
Toluene			20.0	19.00		ug/Kg		95	84 - 124	8	30
1,2,3-Trichlorobenzene			20.0	18.47		ug/Kg		92	68 - 145	7	30
1,2,4-Trichlorobenzene			20.0	18.29		ug/Kg		91	57 - 141	8	30
1,3,5-Trichlorobenzene			20.0	18.04		ug/Kg		90	70 - 137	9	30
1,1,1-Trichloroethane			20.0	18.64		ug/Kg		93	88 - 131	10	30
1,1,2-Trichloroethane			20.0	19.10		ug/Kg		96	91 - 129	8	30
Trichloroethene			20.0	18.70		ug/Kg		94	88 - 131	10	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-10337/2-A
Matrix: Solid
Analysis Batch: 10338

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10337

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	17.88		ug/Kg		89	86 - 130	12	30
1,2,3-Trichloropropane			20.0	20.11		ug/Kg		101	92 - 126	6	30
1,2,4-Trimethylbenzene			20.0	19.47		ug/Kg		97	87 - 126	8	30
1,3,5-Trimethylbenzene			20.0	19.35		ug/Kg		97	90 - 125	10	30
Vinyl chloride			20.0	17.03		ug/Kg		85	73 - 145	11	30
m,p-Xylene			20.0	19.39		ug/Kg		97	83 - 122	9	30
o-Xylene			20.0	19.27		ug/Kg		96	87 - 122	8	30
Tetrahydrofuran			20.0	22.22		ug/Kg		111	81 - 134	4	30
Ethyl ether			20.0	19.75		ug/Kg		99	84 - 144	8	30
Tert-amyl methyl ether			20.0	19.29		ug/Kg		96	69 - 151	6	30
Ethyl tert-butyl ether			20.0	19.33		ug/Kg		97	75 - 128	9	30
di-Isopropyl ether			20.0	19.77		ug/Kg		99	82 - 131	9	30
tert-Butanol			200	215.8		ug/Kg		108	85 - 148	3	30
1,4-Dioxane			200	195.6		ug/Kg		98	10 - 178	6	30
trans-1,4-Dichloro-2-butene			20.0	20.84	J	ug/Kg		104	74 - 151	5	30
Ethanol			400	420.7	J	ug/Kg		105	83 - 135	11	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 620-10310/1-A
Matrix: Solid
Analysis Batch: 10340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10310

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
1,2,4-Trichlorobenzene	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
1,2-Dichlorobenzene	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
1,3-Dichlorobenzene	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
1,4-Dichlorobenzene	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
1-Methylnaphthalene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2,4,6-Trichlorophenol	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2,4-Dichlorophenol	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2,4-Dimethylphenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2,4-Dinitrophenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2,4-Dinitrotoluene	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2,6-Dinitrotoluene	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2-Chloronaphthalene	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2-Chlorophenol	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2-Methylnaphthalene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2-Methylphenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
2-Nitroaniline	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1

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

Lab Sample ID: MB 620-10310/1-A
Matrix: Solid
Analysis Batch: 10340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10310

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
3 & 4 Methylphenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
3,3'-Dichlorobenzidine	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
3-Nitroaniline	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
4,6-Dinitro-2-methylphenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
4-Chloroaniline	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
4-Nitroaniline	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
4-Nitrophenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Acenaphthene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Acenaphthylene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Aniline	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Anthracene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Azobenzene/Diphenyldiazene	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Benzidine	ND		660		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Benzo[a]anthracene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Benzo[a]pyrene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Benzo[b]fluoranthene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Benzo[g,h,i]perylene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Benzo[k]fluoranthene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Benzoic acid	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Benzyl alcohol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Bis(2-chloroethyl)ether	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
bis (2-chloroisopropyl) ether	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Bis(2-ethylhexyl) phthalate	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Butyl benzyl phthalate	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Carbazole	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Chrysene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Dibenz(a,h)anthracene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Dibenzofuran	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Diethyl phthalate	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Dimethyl phthalate	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Di-n-butyl phthalate	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Di-n-octyl phthalate	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Fluoranthene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Fluorene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Hexachlorobenzene	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Hexachlorobutadiene	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Hexachlorocyclopentadiene	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Hexachloroethane	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Indeno[1,2,3-cd]pyrene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Isophorone	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Naphthalene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Nitrobenzene	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
N-Nitrosodimethylamine	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
N-Nitrosodi-n-propylamine	ND		167		ug/Kg		04/29/22 12:03	05/02/22 13:07	1

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

Lab Sample ID: MB 620-10310/1-A
Matrix: Solid
Analysis Batch: 10340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10310

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Pentachloronitrobenzene	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Pentachlorophenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Phenanthrene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Phenol	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Pyrene	ND		66.7		ug/Kg		04/29/22 12:03	05/02/22 13:07	1
Pyridine	ND		330		ug/Kg		04/29/22 12:03	05/02/22 13:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*44*		*30 - 130*	*04/29/22 12:03*	*05/02/22 13:07*	*1*
2-Fluorophenol (Surr)	*60*		*15 - 110*	*04/29/22 12:03*	*05/02/22 13:07*	*1*
Nitrobenzene-d5 (Surr)	*41*		*30 - 130*	*04/29/22 12:03*	*05/02/22 13:07*	*1*
Phenol-d5 (Surr)	*53*		*15 - 110*	*04/29/22 12:03*	*05/02/22 13:07*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*15 - 110*	*04/29/22 12:03*	*05/02/22 13:07*	*1*
Terphenyl-d14 (Surr)	*57*		*30 - 130*	*04/29/22 12:03*	*05/02/22 13:07*	*1*

Lab Sample ID: LCS 620-10310/2-A
Matrix: Solid
Analysis Batch: 10340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10310

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,4,5-Tetrachlorobenzene			1670	846.9		ug/Kg		51	40 - 140		
1,2,4-Trichlorobenzene			1670	818.5		ug/Kg		49	40 - 140		
1,2-Dichlorobenzene			1670	819.0		ug/Kg		49	40 - 140		
1,3-Dichlorobenzene			1670	820.8		ug/Kg		49	40 - 140		
1,4-Dichlorobenzene			1670	809.1		ug/Kg		49	40 - 140		
1-Methylnaphthalene			1670	843.2		ug/Kg		51	40 - 140		
2,4,5-Trichlorophenol			1670	883.7		ug/Kg		53	30 - 130		
2,4,6-Trichlorophenol			1670	912.5		ug/Kg		55	30 - 130		
2,4-Dichlorophenol			1670	811.7		ug/Kg		49	30 - 130		
2,4-Dimethylphenol			1670	807.9		ug/Kg		48	30 - 130		
2,4-Dinitrophenol			1670	972.4		ug/Kg		58	30 - 130		
2,4-Dinitrotoluene			1670	1084		ug/Kg		65	40 - 140		
2,6-Dinitrotoluene			1670	1028		ug/Kg		62	40 - 140		
2-Chloronaphthalene			1670	899.7		ug/Kg		54	40 - 140		
2-Chlorophenol			1670	838.2		ug/Kg		50	30 - 130		
2-Methylnaphthalene			1670	933.4		ug/Kg		56	40 - 140		
2-Methylphenol			1670	852.5		ug/Kg		51	30 - 130		
2-Nitroaniline			1670	968.3		ug/Kg		58	40 - 140		
2-Nitrophenol			1670	789.1		ug/Kg		47	30 - 130		
3 & 4 Methylphenol			1670	908.8		ug/Kg		55	30 - 130		
3,3'-Dichlorobenzidine			1670	1463		ug/Kg		88	40 - 140		
3-Nitroaniline			1670	735.9		ug/Kg		44	40 - 140		
4,6-Dinitro-2-methylphenol			1670	1006		ug/Kg		60	30 - 130		
4-Bromophenyl phenyl ether			1670	1110		ug/Kg		67	40 - 140		
4-Chloro-3-methylphenol			1670	953.4		ug/Kg		57	30 - 130		
4-Chloroaniline			1670	669.3		ug/Kg		40	40 - 140		
4-Chlorophenyl phenyl ether			1670	1073		ug/Kg		64	40 - 140		

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

Lab Sample ID: LCS 620-10310/2-A
Matrix: Solid
Analysis Batch: 10340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitroaniline	1670	1037		ug/Kg		62	40 - 140
4-Nitrophenol	1670	900.0		ug/Kg		54	30 - 130
Acenaphthene	1670	916.6		ug/Kg		55	40 - 140
Acenaphthylene	1670	914.0		ug/Kg		55	40 - 140
Aniline	1670	674.0		ug/Kg		40	40 - 140
Anthracene	1670	1078		ug/Kg		65	40 - 140
Azobenzene/Diphenyldiazene	1670	1001		ug/Kg		60	40 - 140
Benzidine	1670	698.6		ug/Kg		42	40 - 140
Benzo[a]anthracene	1670	1185		ug/Kg		71	40 - 140
Benzo[a]pyrene	1670	1159		ug/Kg		70	40 - 140
Benzo[b]fluoranthene	1670	1193		ug/Kg		72	40 - 140
Benzo[g,h,i]perylene	1670	1228		ug/Kg		74	40 - 140
Benzo[k]fluoranthene	1670	1085		ug/Kg		65	40 - 140
Benzoic acid	1670	331.8	*-	ug/Kg		20	30 - 130
Benzyl alcohol	1670	842.3		ug/Kg		51	40 - 140
Bis(2-chloroethoxy)methane	1670	808.8		ug/Kg		49	40 - 140
Bis(2-chloroethyl)ether	1670	748.3		ug/Kg		45	40 - 140
bis (2-chloroisopropyl) ether	1670	751.3		ug/Kg		45	40 - 140
Bis(2-ethylhexyl) phthalate	1670	1168		ug/Kg		70	40 - 140
Butyl benzyl phthalate	1670	1096		ug/Kg		66	40 - 140
Carbazole	1670	1062		ug/Kg		64	40 - 140
Chrysene	1670	1152		ug/Kg		69	40 - 140
Dibenz(a,h)anthracene	1670	1197		ug/Kg		72	40 - 140
Dibenzofuran	1670	942.4		ug/Kg		57	40 - 140
Diethyl phthalate	1670	1072		ug/Kg		64	40 - 140
Dimethyl phthalate	1670	938.9		ug/Kg		56	40 - 140
Di-n-butyl phthalate	1670	1083		ug/Kg		65	40 - 140
Di-n-octyl phthalate	1670	1151		ug/Kg		69	40 - 140
Fluoranthene	1670	1140		ug/Kg		68	40 - 140
Fluorene	1670	1030		ug/Kg		62	40 - 140
Hexachlorobenzene	1670	1063		ug/Kg		64	40 - 140
Hexachlorobutadiene	1670	744.5		ug/Kg		45	40 - 140
Hexachlorocyclopentadiene	1670	859.0		ug/Kg		52	40 - 140
Hexachloroethane	1670	801.9		ug/Kg		48	40 - 140
Indeno[1,2,3-cd]pyrene	1670	1187		ug/Kg		71	40 - 140
Isophorone	1670	736.6		ug/Kg		44	40 - 140
Naphthalene	1670	821.8		ug/Kg		49	40 - 140
Nitrobenzene	1670	814.3		ug/Kg		49	40 - 140
N-Nitrosodimethylamine	1670	874.5		ug/Kg		52	40 - 140
N-Nitrosodi-n-propylamine	1670	855.5		ug/Kg		51	40 - 140
N-Nitrosodiphenylamine	1670	1134		ug/Kg		68	40 - 140
Pentachloronitrobenzene	1670	1147		ug/Kg		69	40 - 140
Pentachlorophenol	1670	1001		ug/Kg		60	30 - 130
Phenanthrene	1670	1081		ug/Kg		65	40 - 140
Phenol	1670	835.7		ug/Kg		50	40 - 140
Pyrene	1670	1103		ug/Kg		66	40 - 140
Pyridine	1670	560.2	*-	ug/Kg		34	40 - 140

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

Lab Sample ID: LCS 620-10310/2-A
Matrix: Solid
Analysis Batch: 10340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10310

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	52		30 - 130
2-Fluorophenol (Surr)	62		15 - 110
Nitrobenzene-d5 (Surr)	49		30 - 130
Phenol-d5 (Surr)	56		15 - 110
2,4,6-Tribromophenol (Surr)	67		15 - 110
Terphenyl-d14 (Surr)	63		30 - 130

Lab Sample ID: LCSD 620-10310/3-A
Matrix: Solid
Analysis Batch: 10340

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10310

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene			1670	836.1		ug/Kg		50	40 - 140	1	30
1,2,4-Trichlorobenzene			1670	813.0		ug/Kg		49	40 - 140	1	30
1,2-Dichlorobenzene			1670	825.7		ug/Kg		50	40 - 140	1	30
1,3-Dichlorobenzene			1670	848.0		ug/Kg		51	40 - 140	3	30
1,4-Dichlorobenzene			1670	810.6		ug/Kg		49	40 - 140	0	30
1-Methylnaphthalene			1670	829.0		ug/Kg		50	40 - 140	2	30
2,4,5-Trichlorophenol			1670	936.4		ug/Kg		56	30 - 130	6	30
2,4,6-Trichlorophenol			1670	901.1		ug/Kg		54	30 - 130	1	30
2,4-Dichlorophenol			1670	816.1		ug/Kg		49	30 - 130	1	30
2,4-Dimethylphenol			1670	765.1		ug/Kg		46	30 - 130	5	30
2,4-Dinitrophenol			1670	937.2		ug/Kg		56	30 - 130	4	30
2,4-Dinitrotoluene			1670	1089		ug/Kg		65	40 - 140	0	30
2,6-Dinitrotoluene			1670	1006		ug/Kg		60	40 - 140	2	30
2-Chloronaphthalene			1670	888.3		ug/Kg		53	40 - 140	1	30
2-Chlorophenol			1670	829.5		ug/Kg		50	30 - 130	1	30
2-Methylnaphthalene			1670	881.9		ug/Kg		53	40 - 140	6	30
2-Methylphenol			1670	833.6		ug/Kg		50	30 - 130	2	30
2-Nitroaniline			1670	977.0		ug/Kg		59	40 - 140	1	30
2-Nitrophenol			1670	781.7		ug/Kg		47	30 - 130	1	30
3 & 4 Methylphenol			1670	886.4		ug/Kg		53	30 - 130	2	30
3,3'-Dichlorobenzidine			1670	1558		ug/Kg		93	40 - 140	6	30
3-Nitroaniline			1670	797.9		ug/Kg		48	40 - 140	8	30
4,6-Dinitro-2-methylphenol			1670	1022		ug/Kg		61	30 - 130	2	30
4-Bromophenyl phenyl ether			1670	1094		ug/Kg		66	40 - 140	2	30
4-Chloro-3-methylphenol			1670	924.3		ug/Kg		55	30 - 130	3	30
4-Chloroaniline			1670	690.1		ug/Kg		41	40 - 140	3	30
4-Chlorophenyl phenyl ether			1670	1058		ug/Kg		63	40 - 140	1	30
4-Nitroaniline			1670	1060		ug/Kg		64	40 - 140	2	30
4-Nitrophenol			1670	923.0		ug/Kg		55	30 - 130	3	30
Acenaphthene			1670	899.2		ug/Kg		54	40 - 140	2	30
Acenaphthylene			1670	876.6		ug/Kg		53	40 - 140	4	30
Aniline			1670	671.7		ug/Kg		40	40 - 140	0	30
Anthracene			1670	1085		ug/Kg		65	40 - 140	1	30
Azobenzene/Diphenyldiazene			1670	986.4		ug/Kg		59	40 - 140	2	30
Benzidine			1670	955.8	*1	ug/Kg		57	40 - 140	31	30
Benzo[a]anthracene			1670	1171		ug/Kg		70	40 - 140	1	30

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

Lab Sample ID: LCSD 620-10310/3-A
Matrix: Solid
Analysis Batch: 10340

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10310

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene			1670	1145		ug/Kg		69	40 - 140	1	30
Benzo[b]fluoranthene			1670	1158		ug/Kg		69	40 - 140	3	30
Benzo[g,h,i]perylene			1670	1216		ug/Kg		73	40 - 140	1	30
Benzo[k]fluoranthene			1670	1088		ug/Kg		65	40 - 140	0	30
Benzoic acid			1670	318.0	J *-	ug/Kg		19	30 - 130	4	30
Benzyl alcohol			1670	825.6		ug/Kg		50	40 - 140	2	30
Bis(2-chloroethoxy)methane			1670	791.1		ug/Kg		47	40 - 140	2	30
Bis(2-chloroethyl)ether			1670	744.1		ug/Kg		45	40 - 140	1	30
bis (2-chloroisopropyl) ether			1670	753.2		ug/Kg		45	40 - 140	0	30
Bis(2-ethylhexyl) phthalate			1670	1155		ug/Kg		69	40 - 140	1	30
Butyl benzyl phthalate			1670	1075		ug/Kg		65	40 - 140	2	30
Carbazole			1670	1042		ug/Kg		62	40 - 140	2	30
Chrysene			1670	1132		ug/Kg		68	40 - 140	2	30
Dibenz(a,h)anthracene			1670	1165		ug/Kg		70	40 - 140	3	30
Dibenzofuran			1670	937.2		ug/Kg		56	40 - 140	1	30
Diethyl phthalate			1670	1061		ug/Kg		64	40 - 140	1	30
Dimethyl phthalate			1670	930.0		ug/Kg		56	40 - 140	1	30
Di-n-butyl phthalate			1670	1054		ug/Kg		63	40 - 140	3	30
Di-n-octyl phthalate			1670	1127		ug/Kg		68	40 - 140	2	30
Fluoranthene			1670	1124		ug/Kg		67	40 - 140	1	30
Fluorene			1670	1022		ug/Kg		61	40 - 140	1	30
Hexachlorobenzene			1670	1043		ug/Kg		63	40 - 140	2	30
Hexachlorobutadiene			1670	740.0		ug/Kg		44	40 - 140	1	30
Hexachlorocyclopentadiene			1670	935.0		ug/Kg		56	40 - 140	8	30
Hexachloroethane			1670	803.1		ug/Kg		48	40 - 140	0	30
Indeno[1,2,3-cd]pyrene			1670	1170		ug/Kg		70	40 - 140	1	30
Isophorone			1670	705.4		ug/Kg		42	40 - 140	4	30
Naphthalene			1670	820.3		ug/Kg		49	40 - 140	0	30
Nitrobenzene			1670	846.1		ug/Kg		51	40 - 140	4	30
N-Nitrosodimethylamine			1670	726.4		ug/Kg		44	40 - 140	19	30
N-Nitrosodi-n-propylamine			1670	841.6		ug/Kg		50	40 - 140	2	30
N-Nitrosodiphenylamine			1670	1120		ug/Kg		67	40 - 140	1	30
Pentachloronitrobenzene			1670	1136		ug/Kg		68	40 - 140	1	30
Pentachlorophenol			1670	991.7		ug/Kg		60	30 - 130	1	30
Phenanthrene			1670	1077		ug/Kg		65	40 - 140	0	30
Phenol			1670	841.3		ug/Kg		50	40 - 140	1	30
Pyrene			1670	1098		ug/Kg		66	40 - 140	0	30
Pyridine			1670	621.6	*-	ug/Kg		37	40 - 140	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*50*		*30 - 130*
2-Fluorophenol (Surr)	*60*		*15 - 110*
Nitrobenzene-d5 (Surr)	*49*		*30 - 130*
Phenol-d5 (Surr)	*56*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*66*		*15 - 110*
Terphenyl-d14 (Surr)	*62*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-10378/1-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10378

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
beta-BHC	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
delta-BHC	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
gamma-BHC (Lindane)	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Heptachlor	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Aldrin	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Heptachlor epoxide	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endosulfan I	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Dieldrin	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
4,4'-DDE	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endrin	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endosulfan II	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
4,4'-DDD	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endosulfan sulfate	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
4,4'-DDT	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Methoxychlor	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endrin ketone	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Endrin aldehyde	ND		8.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
cis-Chlordane	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
trans-Chlordane	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Toxaphene	ND		100		ug/Kg		05/02/22 16:01	05/04/22 16:41	1
Alachlor	ND		5.00		ug/Kg		05/02/22 16:01	05/04/22 16:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:41*	*1*
DCB Decachlorobiphenyl (Surr)	*48*		*30 - 150*	*05/02/22 16:01*	*05/04/22 16:41*	*1*

Lab Sample ID: LCS 620-10378/4-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	13.4	8.305		ug/Kg		62	40 - 140
alpha-BHC	13.4	8.780		ug/Kg		66	40 - 140
beta-BHC	13.3	8.606		ug/Kg		65	40 - 140
beta-BHC	13.3	8.357		ug/Kg		63	40 - 140
delta-BHC	13.4	7.922		ug/Kg		59	40 - 140
delta-BHC	13.4	9.487		ug/Kg		71	40 - 140
gamma-BHC (Lindane)	13.5	8.530		ug/Kg		63	40 - 140
gamma-BHC (Lindane)	13.5	8.953		ug/Kg		67	40 - 140
Heptachlor	13.4	7.630		ug/Kg		57	40 - 140
Heptachlor	13.4	9.161		ug/Kg		69	40 - 140
Aldrin	13.4	8.191		ug/Kg		61	40 - 140
Aldrin	13.4	9.462		ug/Kg		71	40 - 140
Heptachlor epoxide	13.3	7.889		ug/Kg		59	40 - 140
Heptachlor epoxide	13.3	9.454		ug/Kg		71	40 - 140
Endosulfan I	13.3	8.088		ug/Kg		61	40 - 140
Endosulfan I	13.3	9.277		ug/Kg		70	40 - 140

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

Lab Sample ID: LCS 620-10378/4-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dieldrin			13.4	8.119		ug/Kg		61	40 - 140		
Dieldrin			13.4	9.114		ug/Kg		68	40 - 140		
4,4'-DDE			13.4	8.039		ug/Kg		60	40 - 140		
4,4'-DDE			13.4	9.021		ug/Kg		67	40 - 140		
Endrin			13.4	9.664		ug/Kg		72	40 - 140		
Endrin			13.4	11.19		ug/Kg		84	40 - 140		
Endosulfan II			13.3	7.965	J	ug/Kg		60	40 - 140		
Endosulfan II			13.3	8.807		ug/Kg		66	40 - 140		
4,4'-DDD			13.4	8.877		ug/Kg		66	40 - 140		
4,4'-DDD			13.4	10.28		ug/Kg		77	40 - 140		
Endosulfan sulfate			13.4	7.874	J	ug/Kg		59	40 - 140		
Endosulfan sulfate			13.4	9.006		ug/Kg		67	40 - 140		
4,4'-DDT			13.5	6.665	J	ug/Kg		50	40 - 140		
4,4'-DDT			13.5	7.173	J	ug/Kg		53	40 - 140		
Methoxychlor			13.3	7.504	J	ug/Kg		56	40 - 140		
Methoxychlor			13.3	7.885	J	ug/Kg		59	40 - 140		
Endrin ketone			13.4	6.988	J	ug/Kg		52	40 - 140		
Endrin ketone			13.4	7.070	J	ug/Kg		53	40 - 140		
Endrin aldehyde			13.4	7.750	J	ug/Kg		58	40 - 140		
Endrin aldehyde			13.4	9.129		ug/Kg		68	40 - 140		
cis-Chlordane			13.4	7.853		ug/Kg		58	40 - 140		
cis-Chlordane			13.4	8.843		ug/Kg		66	40 - 140		
trans-Chlordane			13.4	8.446		ug/Kg		63	40 - 140		
trans-Chlordane			13.4	9.165		ug/Kg		68	40 - 140		
Alachlor			13.4	8.351	p	ug/Kg		63	40 - 140		
Alachlor			13.4	13.95		ug/Kg		104	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*59*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*49*		*30 - 150*

Lab Sample ID: LCSD 620-10378/5-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	8.583		ug/Kg		64	40 - 140	3	30
alpha-BHC			13.4	8.950		ug/Kg		67	40 - 140	2	30
beta-BHC			13.3	9.215		ug/Kg		69	40 - 140	7	30
beta-BHC			13.3	8.738		ug/Kg		66	40 - 140	4	30
delta-BHC			13.4	9.103		ug/Kg		68	40 - 140	14	30
delta-BHC			13.4	9.498		ug/Kg		71	40 - 140	0	30
gamma-BHC (Lindane)			13.5	8.974		ug/Kg		67	40 - 140	5	30
gamma-BHC (Lindane)			13.5	9.045		ug/Kg		67	40 - 140	1	30
Heptachlor			13.4	8.419		ug/Kg		63	40 - 140	10	30
Heptachlor			13.4	8.733		ug/Kg		65	40 - 140	5	30
Aldrin			13.4	8.586		ug/Kg		64	40 - 140	5	30
Aldrin			13.4	9.140		ug/Kg		68	40 - 140	3	30

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

Lab Sample ID: LCSD 620-10378/5-A
Matrix: Solid
Analysis Batch: 10451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Heptachlor epoxide			13.3	8.427		ug/Kg		63	40 - 140	7	30
Heptachlor epoxide			13.3	9.701		ug/Kg		73	40 - 140	3	30
Endosulfan I			13.3	8.779		ug/Kg		66	40 - 140	8	30
Endosulfan I			13.3	9.806		ug/Kg		74	40 - 140	6	30
Dieldrin			13.4	8.753		ug/Kg		66	40 - 140	8	30
Dieldrin			13.4	9.641		ug/Kg		72	40 - 140	6	30
4,4'-DDE			13.4	8.686		ug/Kg		65	40 - 140	8	30
4,4'-DDE			13.4	9.614		ug/Kg		72	40 - 140	6	30
Endrin			13.4	10.54		ug/Kg		79	40 - 140	9	30
Endrin			13.4	11.72		ug/Kg		88	40 - 140	5	30
Endosulfan II			13.3	8.574		ug/Kg		64	40 - 140	7	30
Endosulfan II			13.3	9.370		ug/Kg		70	40 - 140	6	30
4,4'-DDD			13.4	9.250		ug/Kg		69	40 - 140	4	30
4,4'-DDD			13.4	10.31		ug/Kg		77	40 - 140	0	30
Endosulfan sulfate			13.4	8.555		ug/Kg		64	40 - 140	8	30
Endosulfan sulfate			13.4	9.475		ug/Kg		71	40 - 140	5	30
4,4'-DDT			13.5	7.234	J	ug/Kg		54	40 - 140	8	30
4,4'-DDT			13.5	8.212		ug/Kg		61	40 - 140	14	30
Methoxychlor			13.3	7.903	J	ug/Kg		59	40 - 140	5	30
Methoxychlor			13.3	8.862		ug/Kg		66	40 - 140	12	30
Endrin ketone			13.4	7.553	J	ug/Kg		56	40 - 140	8	30
Endrin ketone			13.4	7.592	J	ug/Kg		57	40 - 140	7	30
Endrin aldehyde			13.4	8.210		ug/Kg		61	40 - 140	6	30
Endrin aldehyde			13.4	8.803		ug/Kg		66	40 - 140	4	30
cis-Chlordane			13.4	8.541		ug/Kg		64	40 - 140	8	30
cis-Chlordane			13.4	9.466		ug/Kg		70	40 - 140	7	30
trans-Chlordane			13.4	8.778		ug/Kg		66	40 - 140	4	30
trans-Chlordane			13.4	9.678		ug/Kg		72	40 - 140	5	30
Alachlor			13.4	9.580		ug/Kg		72	40 - 140	14	30
Alachlor			13.4	9.782	*1	ug/Kg		73	40 - 140	35	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*61*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*62*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-10378/1-A
Matrix: Solid
Analysis Batch: 10445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10378

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1221	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1232	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1242	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1248	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1254	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1260	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 620-10378/1-A
Matrix: Solid
Analysis Batch: 10445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10378

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1
PCB-1268	ND		20.0		ug/Kg		05/02/22 16:01	05/04/22 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*05/02/22 16:01*	*05/04/22 13:01*	*1*
Tetrachloro-m-xylene	*83*		*30 - 150*	*05/02/22 16:01*	*05/04/22 13:01*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*30 - 150*	*05/02/22 16:01*	*05/04/22 13:01*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*30 - 150*	*05/02/22 16:01*	*05/04/22 13:01*	*1*

Lab Sample ID: LCS 620-10378/2-A
Matrix: Solid
Analysis Batch: 10445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	136.8		ug/Kg		82	61 - 112		
PCB-1016			167	148.7		ug/Kg		89	61 - 112		
PCB-1260			167	138.5		ug/Kg		83	63 - 105		
PCB-1260			167	137.3		ug/Kg		82	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*30 - 150*
Tetrachloro-m-xylene	*84*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*69*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*74*		*30 - 150*

Lab Sample ID: LCSD 620-10378/3-A
Matrix: Solid
Analysis Batch: 10445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10378

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	154.9		ug/Kg		93	61 - 112	12	30
PCB-1016			167	167.7		ug/Kg		101	61 - 112	12	30
PCB-1260			167	160.0		ug/Kg		96	63 - 105	14	30
PCB-1260			167	158.5		ug/Kg		95	63 - 105	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*91*		*30 - 150*
Tetrachloro-m-xylene	*93*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*80*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*85*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-10258/1-A
Matrix: Solid
Analysis Batch: 10291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10258

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		04/28/22 14:01	04/29/22 14:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*103*		*40 - 140*	*04/28/22 14:01*	*04/29/22 14:13*	*1*
o-Terphenyl (Surr)	*95*		*40 - 140*	*04/28/22 14:01*	*04/29/22 14:13*	*1*

Lab Sample ID: LCS 620-10258/2-A
Matrix: Solid
Analysis Batch: 10291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10258

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	216.1		mg/Kg		65	22 - 93		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*94*		*40 - 140*
o-Terphenyl (Surr)	*77*		*40 - 140*

Lab Sample ID: LCSD 620-10258/3-A
Matrix: Solid
Analysis Batch: 10291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10258

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	234.8		mg/Kg		70	22 - 93	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*96*		*40 - 140*
o-Terphenyl (Surr)	*80*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-10264/1-A
Matrix: Solid
Analysis Batch: 10304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10264

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.92		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Arsenic	ND		1.48		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Beryllium	ND		0.492		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Barium	ND		0.984		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Cadmium	ND		0.492		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Chromium	ND		0.984		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Copper	ND		0.984		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Lead	ND		1.48		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Nickel	ND		0.984		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Selenium	ND		1.48		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Silver	ND	^+	1.48		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Thallium	ND		2.95		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Zinc	ND		2.95		mg/Kg		04/28/22 15:13	04/29/22 17:40	1

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

Lab Sample ID: MB 620-10264/1-A
Matrix: Solid
Analysis Batch: 10304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10264

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.984		mg/Kg		04/28/22 15:13	04/29/22 17:40	1
Vanadium	ND		1.48		mg/Kg		04/28/22 15:13	04/29/22 17:40	1

Lab Sample ID: LCDSRM 620-10264/3-A
Matrix: Solid
Analysis Batch: 10304

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10264

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			244	74.56		mg/Kg		30.6	10.0 - 123.0	2	20
Arsenic			109	88.50		mg/Kg		81.2	75.1 - 106.4	3	20
Beryllium			57.0	53.07		mg/Kg		93.1	76.5 - 108.1	3	20
Barium			364	323.2		mg/Kg		88.8	76.9 - 110.2	3	20
Cadmium			48.7	40.82		mg/Kg		83.8	74.7 - 106.0	3	20
Chromium			173	150.8		mg/Kg		87.1	76.3 - 109.8	3	20
Copper			179	163.1		mg/Kg		91.1	79.3 - 110.1	1	20
Lead			101	84.59		mg/Kg		83.7	81.3 - 114.9	4	20
Nickel			52.2	43.56		mg/Kg		83.4	74.7 - 106.7	2	20
Selenium			104	82.37		mg/Kg		79.2	71.4 - 109.6	3	20
Silver			29.9	23.80	^+	mg/Kg		79.6	74.6 - 112.7	4	20
Thallium			101	84.53		mg/Kg		83.7	72.6 - 107.9	1	20
Zinc			431	370.7		mg/Kg		86.0	74.9 - 111.4	3	20
Manganese			370	335.6		mg/Kg		90.7	78.4 - 113.0	5	20
Vanadium			194	175.3		mg/Kg		90.4	73.2 - 112.4	3	20

Lab Sample ID: LCSSRM 620-10264/2-A
Matrix: Solid
Analysis Batch: 10304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10264

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Antimony			244	75.77		mg/Kg		31.1	10.0 - 123.0
Arsenic			109	91.03		mg/Kg		83.5	75.1 - 106.4
Beryllium			57.0	54.85		mg/Kg		96.2	76.5 - 108.1
Barium			364	332.1		mg/Kg		91.2	76.9 - 110.2
Cadmium			48.7	42.02		mg/Kg		86.3	74.7 - 106.0

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

Lab Sample ID: LCSSRM 620-10264/2-A
Matrix: Solid
Analysis Batch: 10304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10264

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	173	155.8		mg/Kg		90.0	76.3 - 109.8
Copper	179	165.3		mg/Kg		92.4	79.3 - 110.1
Lead	101	87.83		mg/Kg		87.0	81.3 - 114.9
Nickel	52.2	44.40		mg/Kg		85.1	74.7 - 106.7
Selenium	104	84.54		mg/Kg		81.3	71.4 - 109.6
Silver	29.9	24.89	^+	mg/Kg		83.2	74.6 - 112.7
Thallium	101	85.32		mg/Kg		84.5	72.6 - 107.9
Zinc	431	381.0		mg/Kg		88.4	74.9 - 111.4
Manganese	370	353.6		mg/Kg		95.6	78.4 - 113.0
Vanadium	194	180.3		mg/Kg		92.9	73.2 - 112.4

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-10265/1-A
Matrix: Solid
Analysis Batch: 10316

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10265

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0449	mg/Kg		04/28/22 15:17	04/29/22 13:37	1

Lab Sample ID: LCSSRM 620-10265/2-A
Matrix: Solid
Analysis Batch: 10316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10265

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	11.0	10.80		mg/Kg		98.2	64.3 - 118.2

Method: Moisture - Percent Moisture

Lab Sample ID: 620-4175-2 DU
Matrix: Solid
Analysis Batch: 10426

Client Sample ID: TP7 (0-6)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	10.6		10.7		%		0.9	5
Percent Solids	89.4		89.3		%		0.1	5

GC/MS VOA

Pre Prep Batch: 10223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	Frozen Preserve	
620-4175-2	TP7 (0-6)	Total/NA	Solid	Frozen Preserve	
620-4175-3	TP6 5ft	Total/NA	Solid	Frozen Preserve	
620-4175-4	TP6 9.5ft	Total/NA	Solid	Frozen Preserve	

Prep Batch: 10337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	5035	10223
620-4175-2	TP7 (0-6)	Total/NA	Solid	5035	10223
620-4175-3	TP6 5ft	Total/NA	Solid	5035	10223
620-4175-4	TP6 9.5ft	Total/NA	Solid	5035	10223
MB 620-10337/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-10337/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-10337/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 10338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	8260C	10337
620-4175-2	TP7 (0-6)	Total/NA	Solid	8260C	10337
620-4175-3	TP6 5ft	Total/NA	Solid	8260C	10337
620-4175-4	TP6 9.5ft	Total/NA	Solid	8260C	10337
MB 620-10337/3-A	Method Blank	Total/NA	Solid	8260C	10337
LCS 620-10337/1-A	Lab Control Sample	Total/NA	Solid	8260C	10337
LCSD 620-10337/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	10337

GC/MS Semi VOA

Prep Batch: 10310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	3546	
620-4175-2	TP7 (0-6)	Total/NA	Solid	3546	
620-4175-3	TP6 5ft	Total/NA	Solid	3546	
620-4175-4	TP6 9.5ft	Total/NA	Solid	3546	
MB 620-10310/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-10310/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-10310/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 10340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	8270D	10310
620-4175-2	TP7 (0-6)	Total/NA	Solid	8270D	10310
620-4175-3	TP6 5ft	Total/NA	Solid	8270D	10310
620-4175-4	TP6 9.5ft	Total/NA	Solid	8270D	10310
MB 620-10310/1-A	Method Blank	Total/NA	Solid	8270D	10310
LCS 620-10310/2-A	Lab Control Sample	Total/NA	Solid	8270D	10310
LCSD 620-10310/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	10310

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

GC Semi VOA

Prep Batch: 10258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	3546	
620-4175-2	TP7 (0-6)	Total/NA	Solid	3546	
620-4175-3	TP6 5ft	Total/NA	Solid	3546	
620-4175-4	TP6 9.5ft	Total/NA	Solid	3546	
MB 620-10258/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-10258/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-10258/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 10291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	8100	10258
620-4175-2	TP7 (0-6)	Total/NA	Solid	8100	10258
620-4175-3	TP6 5ft	Total/NA	Solid	8100	10258
620-4175-4	TP6 9.5ft	Total/NA	Solid	8100	10258
MB 620-10258/1-A	Method Blank	Total/NA	Solid	8100	10258
LCS 620-10258/2-A	Lab Control Sample	Total/NA	Solid	8100	10258
LCSD 620-10258/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	10258

Prep Batch: 10378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	3546	
620-4175-2	TP7 (0-6)	Total/NA	Solid	3546	
620-4175-3	TP6 5ft	Total/NA	Solid	3546	
620-4175-4	TP6 9.5ft	Total/NA	Solid	3546	
MB 620-10378/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-10378/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-10378/4-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-10378/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
LCSD 620-10378/5-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 10445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	8082A	10378
620-4175-2	TP7 (0-6)	Total/NA	Solid	8082A	10378
620-4175-3	TP6 5ft	Total/NA	Solid	8082A	10378
620-4175-4	TP6 9.5ft	Total/NA	Solid	8082A	10378
MB 620-10378/1-A	Method Blank	Total/NA	Solid	8082A	10378
LCS 620-10378/2-A	Lab Control Sample	Total/NA	Solid	8082A	10378
LCSD 620-10378/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	10378

Analysis Batch: 10451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	8081B	10378
620-4175-2	TP7 (0-6)	Total/NA	Solid	8081B	10378
620-4175-3	TP6 5ft	Total/NA	Solid	8081B	10378
620-4175-4	TP6 9.5ft	Total/NA	Solid	8081B	10378
MB 620-10378/1-A	Method Blank	Total/NA	Solid	8081B	10378
LCS 620-10378/4-A	Lab Control Sample	Total/NA	Solid	8081B	10378
LCSD 620-10378/5-A	Lab Control Sample Dup	Total/NA	Solid	8081B	10378

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Metals

Prep Batch: 10264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	3050B	
620-4175-2	TP7 (0-6)	Total/NA	Solid	3050B	
620-4175-3	TP6 5ft	Total/NA	Solid	3050B	
620-4175-4	TP6 9.5ft	Total/NA	Solid	3050B	
MB 620-10264/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 620-10264/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 620-10264/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 10265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	7471B	
620-4175-2	TP7 (0-6)	Total/NA	Solid	7471B	
620-4175-3	TP6 5ft	Total/NA	Solid	7471B	
620-4175-4	TP6 9.5ft	Total/NA	Solid	7471B	
MB 620-10265/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-10265/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 10304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	6010D	10264
620-4175-2	TP7 (0-6)	Total/NA	Solid	6010D	10264
620-4175-3	TP6 5ft	Total/NA	Solid	6010D	10264
620-4175-4	TP6 9.5ft	Total/NA	Solid	6010D	10264
MB 620-10264/1-A	Method Blank	Total/NA	Solid	6010D	10264
LCDSRM 620-10264/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	10264
LCSSRM 620-10264/2-A	Lab Control Sample	Total/NA	Solid	6010D	10264

Analysis Batch: 10316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	7471B	10265
620-4175-2	TP7 (0-6)	Total/NA	Solid	7471B	10265
620-4175-3	TP6 5ft	Total/NA	Solid	7471B	10265
620-4175-4	TP6 9.5ft	Total/NA	Solid	7471B	10265
MB 620-10265/1-A	Method Blank	Total/NA	Solid	7471B	10265
LCSSRM 620-10265/2-A	Lab Control Sample	Total/NA	Solid	7471B	10265

General Chemistry

Analysis Batch: 10426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-1	TP7 (6-7)	Total/NA	Solid	Moisture	
620-4175-2	TP7 (0-6)	Total/NA	Solid	Moisture	
620-4175-3	TP6 5ft	Total/NA	Solid	Moisture	
620-4175-4	TP6 9.5ft	Total/NA	Solid	Moisture	
620-4175-2 DU	TP7 (0-6)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Job ID: 620-4175-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: TP7 (6-7)
Lab Sample ID: 620-4175-1
Date Collected: 04/27/22 08:00
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10426	05/03/22 15:30	PN	ENE

Client Sample ID: TP7 (6-7)
Lab Sample ID: 620-4175-1
Date Collected: 04/27/22 08:00
Matrix: Solid
Date Received: 04/27/22 13:06
Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10223	04/27/22 19:33	KFS	ENE
Total/NA	Prep	5035			10337	05/02/22 08:45	CLR	ENE
Total/NA	Analysis	8260C		1	10338	05/02/22 19:01	CLR	ENE
Total/NA	Prep	3546			10310	04/29/22 12:03	PRB	ENE
Total/NA	Analysis	8270D		1	10340	05/02/22 19:18	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10451	05/04/22 14:47	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 15:27	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/29/22 19:54	JS	ENE
Total/NA	Prep	3050B			10264	04/28/22 15:13	CEV	ENE
Total/NA	Analysis	6010D		1	10304	04/29/22 19:45	ZLH	ENE
Total/NA	Prep	7471B			10265	04/28/22 15:17	CEV	ENE
Total/NA	Analysis	7471B		1	10316	04/29/22 14:07	CAJ	ENE

Client Sample ID: TP7 (0-6)
Lab Sample ID: 620-4175-2
Date Collected: 04/27/22 08:15
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10426	05/03/22 15:30	PN	ENE

Client Sample ID: TP7 (0-6)
Lab Sample ID: 620-4175-2
Date Collected: 04/27/22 08:15
Matrix: Solid
Date Received: 04/27/22 13:06
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10223	04/27/22 19:33	KFS	ENE
Total/NA	Prep	5035			10337	05/02/22 08:45	CLR	ENE
Total/NA	Analysis	8260C		1	10338	05/02/22 19:28	CLR	ENE
Total/NA	Prep	3546			10310	04/29/22 12:03	PRB	ENE
Total/NA	Analysis	8270D		1	10340	05/02/22 20:15	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10451	05/04/22 15:03	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 15:44	SFL	ENE

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP7 (0-6)

Lab Sample ID: 620-4175-2
Matrix: Solid
Percent Solids: 89.4

Date Collected: 04/27/22 08:15
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/29/22 20:19	JS	ENE
Total/NA	Prep	3050B			10264	04/28/22 15:13	CEV	ENE
Total/NA	Analysis	6010D		1	10304	04/29/22 19:52	ZLH	ENE
Total/NA	Prep	7471B			10265	04/28/22 15:17	CEV	ENE
Total/NA	Analysis	7471B		1	10316	04/29/22 14:13	CAJ	ENE

Client Sample ID: TP6 5ft

Lab Sample ID: 620-4175-3
Matrix: Solid

Date Collected: 04/27/22 12:00
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10426	05/03/22 15:30	PN	ENE

Client Sample ID: TP6 5ft

Lab Sample ID: 620-4175-3
Matrix: Solid
Percent Solids: 90.9

Date Collected: 04/27/22 12:00
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10223	04/27/22 19:33	KFS	ENE
Total/NA	Prep	5035			10337	05/02/22 08:45	CLR	ENE
Total/NA	Analysis	8260C		1	10338	05/02/22 19:54	CLR	ENE
Total/NA	Prep	3546			10310	04/29/22 12:03	PRB	ENE
Total/NA	Analysis	8270D		1	10340	05/02/22 20:43	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10451	05/04/22 15:34	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 16:01	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/29/22 20:45	JS	ENE
Total/NA	Prep	3050B			10264	04/28/22 15:13	CEV	ENE
Total/NA	Analysis	6010D		1	10304	04/29/22 19:59	ZLH	ENE
Total/NA	Prep	7471B			10265	04/28/22 15:17	CEV	ENE
Total/NA	Analysis	7471B		1	10316	04/29/22 14:15	CAJ	ENE

Client Sample ID: TP6 9.5ft

Lab Sample ID: 620-4175-4
Matrix: Solid

Date Collected: 04/27/22 12:10
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	10426	05/03/22 15:30	PN	ENE

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Client Sample ID: TP6 9.5ft

Date Collected: 04/27/22 12:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-4

Matrix: Solid
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			10223	04/27/22 19:33	KFS	ENE
Total/NA	Prep	5035			10337	05/02/22 08:45	CLR	ENE
Total/NA	Analysis	8260C		1	10338	05/02/22 20:21	CLR	ENE
Total/NA	Prep	3546			10310	04/29/22 12:03	PRB	ENE
Total/NA	Analysis	8270D		1	10340	05/02/22 19:46	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8081B		1	10451	05/04/22 15:50	JS	ENE
Total/NA	Prep	3546			10378	05/02/22 16:01	PRB	ENE
Total/NA	Analysis	8082A		1	10445	05/04/22 16:18	SFL	ENE
Total/NA	Prep	3546			10258	04/28/22 14:01	PRB	ENE
Total/NA	Analysis	8100		1	10291	04/29/22 21:10	JS	ENE
Total/NA	Prep	3050B			10264	04/28/22 15:13	CEV	ENE
Total/NA	Analysis	6010D		1	10304	04/29/22 20:06	ZLH	ENE
Total/NA	Prep	7471B			10265	04/28/22 15:17	CEV	ENE
Total/NA	Analysis	7471B		1	10316	04/29/22 14:16	CAJ	ENE

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4175-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
6010D	3050B	Solid	Antimony
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Beryllium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Copper
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Manganese
6010D	3050B	Solid	Nickel
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
6010D	3050B	Solid	Thallium
6010D	3050B	Solid	Vanadium
6010D	3050B	Solid	Zinc
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260

Laboratory: Eurofins New England (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
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1,2,4,5-Tetrachlorobenzene
8270D	3546	Solid	1,2,4-Trichlorobenzene
8270D	3546	Solid	1,2-Dichlorobenzene
8270D	3546	Solid	1,3-Dichlorobenzene
8270D	3546	Solid	1,4-Dichlorobenzene
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2,4,5-Trichlorophenol
8270D	3546	Solid	2,4,6-Trichlorophenol
8270D	3546	Solid	2,4-Dichlorophenol
8270D	3546	Solid	2,4-Dimethylphenol
8270D	3546	Solid	2,4-Dinitrophenol
8270D	3546	Solid	2,4-Dinitrotoluene
8270D	3546	Solid	2,6-Dinitrotoluene
8270D	3546	Solid	2-Chloronaphthalene

Laboratory: Eurofins New England (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
8270D	3546	Solid	2-Chlorophenol
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	2-Methylphenol
8270D	3546	Solid	2-Nitroaniline
8270D	3546	Solid	2-Nitrophenol
8270D	3546	Solid	3 & 4 Methylphenol
8270D	3546	Solid	3,3'-Dichlorobenzidine
8270D	3546	Solid	3-Nitroaniline
8270D	3546	Solid	4,6-Dinitro-2-methylphenol
8270D	3546	Solid	4-Bromophenyl phenyl ether
8270D	3546	Solid	4-Chloro-3-methylphenol
8270D	3546	Solid	4-Chloroaniline
8270D	3546	Solid	4-Chlorophenyl phenyl ether
8270D	3546	Solid	4-Nitroaniline
8270D	3546	Solid	4-Nitrophenol
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Aniline
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Azobenzene/Diphenyldiazene
8270D	3546	Solid	Benzidine
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Benzoic acid
8270D	3546	Solid	Benzyl alcohol
8270D	3546	Solid	bis (2-chloroisopropyl) ether
8270D	3546	Solid	Bis(2-chloroethoxy)methane
8270D	3546	Solid	Bis(2-chloroethyl)ether
8270D	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D	3546	Solid	Butyl benzyl phthalate
8270D	3546	Solid	Carbazole
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Dibenzofuran
8270D	3546	Solid	Diethyl phthalate
8270D	3546	Solid	Dimethyl phthalate
8270D	3546	Solid	Di-n-butyl phthalate
8270D	3546	Solid	Di-n-octyl phthalate
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene
8270D	3546	Solid	Hexachlorobenzene
8270D	3546	Solid	Hexachlorobutadiene
8270D	3546	Solid	Hexachlorocyclopentadiene
8270D	3546	Solid	Hexachloroethane

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4175-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England (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
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Isophorone
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Nitrobenzene
8270D	3546	Solid	N-Nitrosodimethylamine
8270D	3546	Solid	N-Nitrosodi-n-propylamine
8270D	3546	Solid	N-Nitrosodiphenylamine
8270D	3546	Solid	Pentachloronitrobenzene
8270D	3546	Solid	Pentachlorophenol
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Phenol
8270D	3546	Solid	Pyrene
8270D	3546	Solid	Pyridine
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ENE
8081B	Organochlorine Pesticides (GC)	SW846	ENE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ENE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	ENE
6010D	Metals (ICP)	SW846	ENE
7471B	Mercury (CVAA)	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
3050B	Preparation, Metals	SW846	ENE
3546	Microwave Extraction	SW846	ENE
5035	Closed System Purge and Trap	SW846	ENE
7471B	Preparation, Mercury	SW846	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4175-1	TP7 (6-7)	Solid	04/27/22 08:00	04/27/22 13:06
620-4175-2	TP7 (0-6)	Solid	04/27/22 08:15	04/27/22 13:06
620-4175-3	TP6 5ft	Solid	04/27/22 12:00	04/27/22 13:06
620-4175-4	TP6 9.5ft	Solid	04/27/22 12:10	04/27/22 13:06

620-4175 Chain of Custody

ment Testing
New England

CHAIN OF CUSTODY RECORD

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Special Handling:
- [x] Standard TAT 7 to 10 business days
- [ ] Rush TAT Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell
AECOM
10 Orms St
Providence, RI 02904
Telephone #: 401-854-2808
Project Mgr: Bruce Bartel

Invoice To:

P.O No. TBD Quote #:

Project No: 60680132 203
Site Name: 295137
Location: Johnston, RI State:
Sampler(s): Courtney Toomey

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic Bags	Analysis: VOC's	SVOC's	PCB's	TPH DRO	Pesticides	PP13 + BaMnZn	Sieve Grain size	Hydrometer	Check if chlorinated
01	TP7 (6-7)	4/27/22	0800	G/C	SO	3	2			x	x	x	x	x	x			
02	TP7 (0-6)	4/27/22	0815	G/C	SO	3	2			x	x	x	x	x	x			
03	TP6 ~~(6-7)~~ 5ft (C)	4/27/22	1200	G/C	SO	3	2			x	x	x	x	x	x			
04	TP6 ~~(0-6)~~ 9.5ft (G)	4/27/22	1210	G/C	SO	3	2			x	x	x	x	x	x			
05	TP1 (0-7)	4/26/22	0950	G/C	SO				1							x	x	
06	TP2 (0-6)	4/26/22	0810	G/C	SO				1							x	x	
07	TP2 (8-10)	4/26/22	0825	G/C	SO				1							x	x	
08	TP2 (11ft)	4/26/22	0830	G/C	SO				1							x	x	
09	TP3 (0-7ft)	4/26/22	0925	G/C	SO				1							x	x	
10	TP4 (0-6)	4/26/22	1215	G/C	SO				1							x	x	

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? Yes No
CT DPH RCP Report? Yes No
Standard No QC DQA*
ASP A* ASP B*
NJ Reduced* NJ Full*
Tier II* Tier IV*
Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Courtney Toomey		4/27/22	13 06

Temp °C: Observed 4.2; Correction Factor .2; Corrected 4.4; IR ID # 6

- [ ] EDD format:
- [x] E-mail to: patrick.haskell@aecom.com

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [x] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

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CHAIN OF CUSTODY RECORD

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Special Handling:

- [x] Standard TAT 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To:	Patrick Haskell AECOM 10 Orms St Providence RI 02904
Telephone #:	401 854 2808
Project Mgr:	Bruce Bartel
Invoice To:	
P.O No.	TBD
Quote #:	
Project No:	60680132 203
Site Name:	295/37
Location:	Johnston
State:	RI
Sampler(s):	Courtney Toomey

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic Bags	Sieve Grain Size by Hydrometer	Analysis	Check if chlorinated
11	TP3 (10 ft)	4/26/22	1000	G/C	So				1	X	X	
12	TP4 (6-7)		1210		So				2	X	X	
13	TP5 (0-6)		1320		So				1	X	X	
14	TP5 (6-7)		1312		So				1	X	X	
15	TP6 ~~(0-6)~~ 7.5ft	4/27/22	1210		So				1	X	X	
16	TP6 (~~7-10~~ 5ft		1200		So				1	X	X	
17	TP7 (0-6)		0820		So				2	X	X	
~~18~~	~~TP7 (7ft)~~ (DT)				So					X	X	
18	TP7 (6-7ft)		0825		So				1	X	X	
19	TP7 (10 ft)		0830		So				1	X	X	

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may apply

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[ ] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[ ] Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Courtney Toomey		4/27/22	13:06

Temp °C: Observed 4.2; Correction Factor 0.2; Corrected 4.4; IR ID # 6

[ ] EDD format:
[x] E-mail to: patrick.haskell@aecom.com

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Lab Address: 646 Camp Ave • North Kingstown, RI 02852
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5/23/2022 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4175-1

Login Number: 4175
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4175-2
Client Project/Site: I295/Rt 37 - Johnston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
6/6/2022 5:36:53 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-4175-2
Project/Site: I295/Rt 37 - Johnston, RI

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)
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 ID: 620-4175-2

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4175-2

Comments
No additional comments.

Receipt
The samples were received on 4/27/2022 1:06 PM. 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 was 4.4º C.

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-1 (0-7) — Lab Sample ID: 620-4175-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	0.0				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	51.6				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	3.5				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	14.8				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	33.3				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Silt	27.4				%	1		D422	Total/NA
Clay	21.0				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	96.5				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	88.5				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	81.7				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	75.8				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	73.4				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	66.1				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	48.4				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	33.8				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	29.5				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	27.4				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	23.1				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	21.0				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	14.6				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	12.5				% Passing	1		D422	Total/NA

Client Sample ID: TP-2 (0-6) — Lab Sample ID: 620-4175-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	16.3				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	46.4				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	4.1				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	14.6				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	27.7				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Silt	27.0				%	1		D422	Total/NA
Clay	10.3				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	83.7				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	79.6				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	71.4				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	65.0				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	59.8				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	56.3				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-2 (0-6) (Continued) — Lab Sample ID: 620-4175-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sieve Size #100 - Percent Finer	53.1				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	37.3				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	26.3				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	17.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	15.7				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	12.1				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	10.3				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	8.6				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	6.8				% Passing	1		D422	Total/NA

Client Sample ID: TP-2 (8-10) — Lab Sample ID: 620-4175-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	1.9				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	21.5				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	1.5				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	13.0				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	7.0				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Silt	71.4				%	1		D422	Total/NA
Clay	5.2				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	98.1				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	96.6				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	88.5				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	83.6				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	80.3				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	79.8				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	78.3				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	76.6				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	13.9				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	7.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	7.4				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	6.3				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	5.2				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	4.1				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	4.1				% Passing	1		D422	Total/NA

Client Sample ID: TP-2 (11ft) — Lab Sample ID: 620-4175-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	4.3				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	38.2				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	2.5				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	23.1				%	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-2 (11ft) (Continued)

Lab Sample ID: 620-4175-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	12.6				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Silt	47.3				%	1		D422	Total/NA
Clay	10.2				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	95.7				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	93.2				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	78.2				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	70.1				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	65.3				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	63.0				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	61.5				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	57.5				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	36.4				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	29.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	15.4				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	11.9				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	10.2				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	6.7				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	6.7				% Passing	1		D422	Total/NA

Client Sample ID: TP-3 (0-7ft)

Lab Sample ID: 620-4175-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	11.1				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	70.9				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	5.0				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	14.3				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	51.6				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	91.3				% Passing	1		D422	Total/NA
Silt	14.3				%	1		D422	Total/NA
Clay	3.7				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	88.9				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	83.9				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	77.9				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	69.6				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	56.4				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	47.7				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	37.2				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	18.0				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	11.8				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	8.1				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	5.5				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	4.3				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	3.7				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-3 (0-7ft) (Continued) — Lab Sample ID: 620-4175-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Hydrometer Reading 6 - Percent Finer	3.0				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	2.4				% Passing	1		D422	Total/NA

Client Sample ID: TP-4 (0-6) — Lab Sample ID: 620-4175-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	21.9				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	52.5				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	14.5				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	19.5				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	18.5				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	91.3				% Passing	1		D422	Total/NA
Silt	21.3				%	1		D422	Total/NA
Clay	4.3				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	78.1				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	63.6				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	51.8				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	44.1				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	38.5				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	35.2				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	33.0				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	25.6				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	13.0				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	8.1				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	5.7				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	4.8				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	4.3				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	2.8				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	2.3				% Passing	1		D422	Total/NA

Client Sample ID: TP-3 (10ft) — Lab Sample ID: 620-4175-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	6.6				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	68.3				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	3.7				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	8.5				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	56.1				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	97.3				% Passing	1		D422	Total/NA
Silt	20.7				%	1		D422	Total/NA
Clay	4.4				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	93.4				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-3 (10ft) (Continued) — Lab Sample ID: 620-4175-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sieve Size #10 - Percent Finer	89.7				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	85.9				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	81.2				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	69.0				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	58.9				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	46.7				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	25.1				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	11.8				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	8.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	6.1				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	5.0				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	4.4				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	3.3				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	2.2				% Passing	1		D422	Total/NA

Client Sample ID: TP-4 (6-7) — Lab Sample ID: 620-4175-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	34.7				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	50.9				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	13.2				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	19.5				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	18.2				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	75.2				% Passing	1		D422	Total/NA
Silt	10.4				%	1		D422	Total/NA
Clay	4.0				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	65.3				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	52.1				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	40.5				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	32.6				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	27.0				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	23.7				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	21.5				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	14.4				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	11.6				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	8.0				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	5.8				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	4.4				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	4.0				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	3.1				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	2.2				% Passing	1		D422	Total/NA

Client Sample ID: TP-5 (0-6) — Lab Sample ID: 620-4175-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	63.3				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-5 (0-6) (Continued)

Lab Sample ID: 620-4175-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sand	28.9				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	7.7				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	11.3				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	77.0				% Passing	1		D422	Total/NA
Fine Sand	9.9				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	56.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	47.8				% Passing	1		D422	Total/NA
Silt	5.5				%	1		D422	Total/NA
Clay	2.3				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	36.7				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	29.0				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	22.0				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	17.7				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	14.5				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	13.3				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	11.4				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	7.8				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	5.9				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	4.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	3.2				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	2.9				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	2.3				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	1.7				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	1.4				% Passing	1		D422	Total/NA

Client Sample ID: TP-5 (6-7)

Lab Sample ID: 620-4175-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	52.6				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	35.3				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	11.0				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	13.9				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	79.0				% Passing	1		D422	Total/NA
Fine Sand	10.4				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	73.4				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	62.0				% Passing	1		D422	Total/NA
Silt	9.5				%	1		D422	Total/NA
Clay	2.6				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	47.4				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	36.4				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	27.7				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	22.5				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	18.9				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	16.9				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	15.7				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	12.1				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-5 (6-7) (Continued) — Lab Sample ID: 620-4175-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Hydrometer Reading 1 - Percent Finer	7.3				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	5.6				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	3.8				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	3.5				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	2.6				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	2.0				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	1.7				% Passing	1		D422	Total/NA

Client Sample ID: TP-6 (9.5ft) — Lab Sample ID: 620-4175-15

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	32.1				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	45.8				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	16.3				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	17.2				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	12.3				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	90.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	80.6				% Passing	1		D422	Total/NA
Silt	17.7				%	1		D422	Total/NA
Clay	4.4				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	67.9				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	51.6				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	40.5				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	34.4				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	30.3				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	28.7				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	26.7				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	22.1				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	11.6				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	8.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	6.0				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	5.2				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	4.4				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	3.6				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	2.7				% Passing	1		D422	Total/NA

Client Sample ID: TP-6 (5ft) — Lab Sample ID: 620-4175-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	35.4				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	39.0				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	9.6				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	14.8				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	84.9				% Passing	1		D422	Total/NA
Fine Sand	14.6				%	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-6 (5ft) (Continued)

Lab Sample ID: 620-4175-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sieve Size 0.75 inch - Percent Finer	84.9				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	73.0				% Passing	1		D422	Total/NA
Silt	20.4				%	1		D422	Total/NA
Clay	5.2				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	64.6				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	55.0				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	46.2				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	40.2				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	35.7				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	33.1				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	31.4				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	25.6				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	14.8				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	10.7				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	7.4				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	6.3				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	5.2				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	4.1				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	3.6				% Passing	1		D422	Total/NA

Client Sample ID: TP-7 (0-6)

Lab Sample ID: 620-4175-17

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	28.5				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	52.9				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	11.3				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	20.9				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	20.7				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	87.4				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	81.3				% Passing	1		D422	Total/NA
Silt	14.7				%	1		D422	Total/NA
Clay	4.0				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	71.5				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	60.2				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	48.6				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	39.3				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	32.4				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	29.8				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	26.0				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	18.6				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	11.8				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	8.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	6.0				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	5.0				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	4.0				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	2.8				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	2.0				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-7 (6-7ft) — Lab Sample ID: 620-4175-18

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	28.6				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	57.8				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	13.8				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	24.4				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	19.6				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	92.3				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	83.1				% Passing	1		D422	Total/NA
Silt	10.7				%	1		D422	Total/NA
Clay	3.0				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	71.4				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	57.6				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	44.2				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	33.2				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	25.9				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	22.1				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	19.9				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	13.6				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	8.4				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	5.9				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	4.3				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	3.4				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	3.0				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	2.0				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	1.3				% Passing	1		D422	Total/NA

Client Sample ID: TP-7 (10ft) — Lab Sample ID: 620-4175-19

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gravel	34.3				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	45.7				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	9.7				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	18.0				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	18.0				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	84.5				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	76.4				% Passing	1		D422	Total/NA
Silt	16.0				%	1		D422	Total/NA
Clay	4.0				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	65.7				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	56.0				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	46.0				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	38.0				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	32.6				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	30.4				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-7 (10ft) (Continued)

Lab Sample ID: 620-4175-19

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sieve Size #100 - Percent Finer	27.4				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	20.0				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	12.2				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	8.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	6.2				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	4.9				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	4.0				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	3.0				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	1.7				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-1 (0-7)

Date Collected: 04/26/22 09:50
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-5

Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			05/26/22 19:06	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:06	1
Sand	51.6				%			05/26/22 19:06	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:06	1
Coarse Sand	3.5				%			05/26/22 19:06	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:06	1
Medium Sand	14.8				%			05/26/22 19:06	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:06	1
Fine Sand	33.3				%			05/26/22 19:06	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/26/22 19:06	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			05/26/22 19:06	1
Silt	27.4				%			05/26/22 19:06	1
Clay	21.0				%			05/26/22 19:06	1
Sieve Size #4 - Percent Finer	100.0				% Passing			05/26/22 19:06	1
Sieve Size #10 - Percent Finer	96.5				% Passing			05/26/22 19:06	1
Sieve Size #20 - Percent Finer	88.5				% Passing			05/26/22 19:06	1
Sieve Size #40 - Percent Finer	81.7				% Passing			05/26/22 19:06	1
Sieve Size #60 - Percent Finer	75.8				% Passing			05/26/22 19:06	1
Sieve Size #80 - Percent Finer	73.4				% Passing			05/26/22 19:06	1
Sieve Size #100 - Percent Finer	66.1				% Passing			05/26/22 19:06	1
Sieve Size #200 - Percent Finer	48.4				% Passing			05/26/22 19:06	1
Hydrometer Reading 1 - Percent Finer	33.8				% Passing			05/26/22 19:06	1
Hydrometer Reading 2 - Percent Finer	29.5				% Passing			05/26/22 19:06	1
Hydrometer Reading 3 - Percent Finer	27.4				% Passing			05/26/22 19:06	1
Hydrometer Reading 4 - Percent Finer	23.1				% Passing			05/26/22 19:06	1
Hydrometer Reading 5 - Percent Finer	21.0				% Passing			05/26/22 19:06	1
Hydrometer Reading 6 - Percent Finer	14.6				% Passing			05/26/22 19:06	1
Hydrometer Reading 7 - Percent Finer	12.5				% Passing			05/26/22 19:06	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-2 (0-6)

Date Collected: 04/26/22 08:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-6

Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	16.3				%			05/26/22 19:09	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:09	1
Sand	46.4				%			05/26/22 19:09	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:09	1
Coarse Sand	4.1				%			05/26/22 19:09	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:09	1
Medium Sand	14.6				%			05/26/22 19:09	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:09	1
Fine Sand	27.7				%			05/26/22 19:09	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/26/22 19:09	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			05/26/22 19:09	1
Silt	27.0				%			05/26/22 19:09	1
Clay	10.3				%			05/26/22 19:09	1
Sieve Size #4 - Percent Finer	83.7				% Passing			05/26/22 19:09	1
Sieve Size #10 - Percent Finer	79.6				% Passing			05/26/22 19:09	1
Sieve Size #20 - Percent Finer	71.4				% Passing			05/26/22 19:09	1
Sieve Size #40 - Percent Finer	65.0				% Passing			05/26/22 19:09	1
Sieve Size #60 - Percent Finer	59.8				% Passing			05/26/22 19:09	1
Sieve Size #80 - Percent Finer	56.3				% Passing			05/26/22 19:09	1
Sieve Size #100 - Percent Finer	53.1				% Passing			05/26/22 19:09	1
Sieve Size #200 - Percent Finer	37.3				% Passing			05/26/22 19:09	1
Hydrometer Reading 1 - Percent Finer	26.3				% Passing			05/26/22 19:09	1
Hydrometer Reading 2 - Percent Finer	17.4				% Passing			05/26/22 19:09	1
Hydrometer Reading 3 - Percent Finer	15.7				% Passing			05/26/22 19:09	1
Hydrometer Reading 4 - Percent Finer	12.1				% Passing			05/26/22 19:09	1
Hydrometer Reading 5 - Percent Finer	10.3				% Passing			05/26/22 19:09	1
Hydrometer Reading 6 - Percent Finer	8.6				% Passing			05/26/22 19:09	1
Hydrometer Reading 7 - Percent Finer	6.8				% Passing			05/26/22 19:09	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-2 (8-10)

Date Collected: 04/26/22 08:25
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-7

Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	1.9				%			05/26/22 19:12	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:12	1
Sand	21.5				%			05/26/22 19:12	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:12	1
Coarse Sand	1.5				%			05/26/22 19:12	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:12	1
Medium Sand	13.0				%			05/26/22 19:12	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:12	1
Fine Sand	7.0				%			05/26/22 19:12	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/26/22 19:12	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			05/26/22 19:12	1
Silt	71.4				%			05/26/22 19:12	1
Clay	5.2				%			05/26/22 19:12	1
Sieve Size #4 - Percent Finer	98.1				% Passing			05/26/22 19:12	1
Sieve Size #10 - Percent Finer	96.6				% Passing			05/26/22 19:12	1
Sieve Size #20 - Percent Finer	88.5				% Passing			05/26/22 19:12	1
Sieve Size #40 - Percent Finer	83.6				% Passing			05/26/22 19:12	1
Sieve Size #60 - Percent Finer	80.3				% Passing			05/26/22 19:12	1
Sieve Size #80 - Percent Finer	79.8				% Passing			05/26/22 19:12	1
Sieve Size #100 - Percent Finer	78.3				% Passing			05/26/22 19:12	1
Sieve Size #200 - Percent Finer	76.6				% Passing			05/26/22 19:12	1
Hydrometer Reading 1 - Percent Finer	13.9				% Passing			05/26/22 19:12	1
Hydrometer Reading 2 - Percent Finer	7.4				% Passing			05/26/22 19:12	1
Hydrometer Reading 3 - Percent Finer	7.4				% Passing			05/26/22 19:12	1
Hydrometer Reading 4 - Percent Finer	6.3				% Passing			05/26/22 19:12	1
Hydrometer Reading 5 - Percent Finer	5.2				% Passing			05/26/22 19:12	1
Hydrometer Reading 6 - Percent Finer	4.1				% Passing			05/26/22 19:12	1
Hydrometer Reading 7 - Percent Finer	4.1				% Passing			05/26/22 19:12	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-2 (11ft)

Date Collected: 04/26/22 08:30
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-8

Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	4.3				%			05/26/22 19:24	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:24	1
Sand	38.2				%			05/26/22 19:24	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:24	1
Coarse Sand	2.5				%			05/26/22 19:24	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:24	1
Medium Sand	23.1				%			05/26/22 19:24	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:24	1
Fine Sand	12.6				%			05/26/22 19:24	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/26/22 19:24	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			05/26/22 19:24	1
Silt	47.3				%			05/26/22 19:24	1
Clay	10.2				%			05/26/22 19:24	1
Sieve Size #4 - Percent Finer	95.7				% Passing			05/26/22 19:24	1
Sieve Size #10 - Percent Finer	93.2				% Passing			05/26/22 19:24	1
Sieve Size #20 - Percent Finer	78.2				% Passing			05/26/22 19:24	1
Sieve Size #40 - Percent Finer	70.1				% Passing			05/26/22 19:24	1
Sieve Size #60 - Percent Finer	65.3				% Passing			05/26/22 19:24	1
Sieve Size #80 - Percent Finer	63.0				% Passing			05/26/22 19:24	1
Sieve Size #100 - Percent Finer	61.5				% Passing			05/26/22 19:24	1
Sieve Size #200 - Percent Finer	57.5				% Passing			05/26/22 19:24	1
Hydrometer Reading 1 - Percent Finer	36.4				% Passing			05/26/22 19:24	1
Hydrometer Reading 2 - Percent Finer	29.4				% Passing			05/26/22 19:24	1
Hydrometer Reading 3 - Percent Finer	15.4				% Passing			05/26/22 19:24	1
Hydrometer Reading 4 - Percent Finer	11.9				% Passing			05/26/22 19:24	1
Hydrometer Reading 5 - Percent Finer	10.2				% Passing			05/26/22 19:24	1
Hydrometer Reading 6 - Percent Finer	6.7				% Passing			05/26/22 19:24	1
Hydrometer Reading 7 - Percent Finer	6.7				% Passing			05/26/22 19:24	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-3 (0-7ft)
Date Collected: 04/26/22 09:25
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-9
Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	11.1				%			05/26/22 19:27	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:27	1
Sand	70.9				%			05/26/22 19:27	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:27	1
Coarse Sand	5.0				%			05/26/22 19:27	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:27	1
Medium Sand	14.3				%			05/26/22 19:27	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:27	1
Fine Sand	51.6				%			05/26/22 19:27	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/26/22 19:27	1
Sieve Size 0.375 inch - Percent Finer	91.3				% Passing			05/26/22 19:27	1
Silt	14.3				%			05/26/22 19:27	1
Clay	3.7				%			05/26/22 19:27	1
Sieve Size #4 - Percent Finer	88.9				% Passing			05/26/22 19:27	1
Sieve Size #10 - Percent Finer	83.9				% Passing			05/26/22 19:27	1
Sieve Size #20 - Percent Finer	77.9				% Passing			05/26/22 19:27	1
Sieve Size #40 - Percent Finer	69.6				% Passing			05/26/22 19:27	1
Sieve Size #60 - Percent Finer	56.4				% Passing			05/26/22 19:27	1
Sieve Size #80 - Percent Finer	47.7				% Passing			05/26/22 19:27	1
Sieve Size #100 - Percent Finer	37.2				% Passing			05/26/22 19:27	1
Sieve Size #200 - Percent Finer	18.0				% Passing			05/26/22 19:27	1
Hydrometer Reading 1 - Percent Finer	11.8				% Passing			05/26/22 19:27	1
Hydrometer Reading 2 - Percent Finer	8.1				% Passing			05/26/22 19:27	1
Hydrometer Reading 3 - Percent Finer	5.5				% Passing			05/26/22 19:27	1
Hydrometer Reading 4 - Percent Finer	4.3				% Passing			05/26/22 19:27	1
Hydrometer Reading 5 - Percent Finer	3.7				% Passing			05/26/22 19:27	1
Hydrometer Reading 6 - Percent Finer	3.0				% Passing			05/26/22 19:27	1
Hydrometer Reading 7 - Percent Finer	2.4				% Passing			05/26/22 19:27	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-4 (0-6)

Date Collected: 04/26/22 12:15
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-10

Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	21.9				%			05/26/22 19:29	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:29	1
Sand	52.5				%			05/26/22 19:29	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:29	1
Coarse Sand	14.5				%			05/26/22 19:29	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:29	1
Medium Sand	19.5				%			05/26/22 19:29	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:29	1
Fine Sand	18.5				%			05/26/22 19:29	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/26/22 19:29	1
Sieve Size 0.375 inch - Percent Finer	91.3				% Passing			05/26/22 19:29	1
Silt	21.3				%			05/26/22 19:29	1
Clay	4.3				%			05/26/22 19:29	1
Sieve Size #4 - Percent Finer	78.1				% Passing			05/26/22 19:29	1
Sieve Size #10 - Percent Finer	63.6				% Passing			05/26/22 19:29	1
Sieve Size #20 - Percent Finer	51.8				% Passing			05/26/22 19:29	1
Sieve Size #40 - Percent Finer	44.1				% Passing			05/26/22 19:29	1
Sieve Size #60 - Percent Finer	38.5				% Passing			05/26/22 19:29	1
Sieve Size #80 - Percent Finer	35.2				% Passing			05/26/22 19:29	1
Sieve Size #100 - Percent Finer	33.0				% Passing			05/26/22 19:29	1
Sieve Size #200 - Percent Finer	25.6				% Passing			05/26/22 19:29	1
Hydrometer Reading 1 - Percent Finer	13.0				% Passing			05/26/22 19:29	1
Hydrometer Reading 2 - Percent Finer	8.1				% Passing			05/26/22 19:29	1
Hydrometer Reading 3 - Percent Finer	5.7				% Passing			05/26/22 19:29	1
Hydrometer Reading 4 - Percent Finer	4.8				% Passing			05/26/22 19:29	1
Hydrometer Reading 5 - Percent Finer	4.3				% Passing			05/26/22 19:29	1
Hydrometer Reading 6 - Percent Finer	2.8				% Passing			05/26/22 19:29	1
Hydrometer Reading 7 - Percent Finer	2.3				% Passing			05/26/22 19:29	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-3 (10ft)

Date Collected: 04/26/22 10:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-11

Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	6.6				%			05/26/22 19:37	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:37	1
Sand	68.3				%			05/26/22 19:37	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:37	1
Coarse Sand	3.7				%			05/26/22 19:37	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:37	1
Medium Sand	8.5				%			05/26/22 19:37	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:37	1
Fine Sand	56.1				%			05/26/22 19:37	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/26/22 19:37	1
Sieve Size 0.375 inch - Percent Finer	97.3				% Passing			05/26/22 19:37	1
Silt	20.7				%			05/26/22 19:37	1
Clay	4.4				%			05/26/22 19:37	1
Sieve Size #4 - Percent Finer	93.4				% Passing			05/26/22 19:37	1
Sieve Size #10 - Percent Finer	89.7				% Passing			05/26/22 19:37	1
Sieve Size #20 - Percent Finer	85.9				% Passing			05/26/22 19:37	1
Sieve Size #40 - Percent Finer	81.2				% Passing			05/26/22 19:37	1
Sieve Size #60 - Percent Finer	69.0				% Passing			05/26/22 19:37	1
Sieve Size #80 - Percent Finer	58.9				% Passing			05/26/22 19:37	1
Sieve Size #100 - Percent Finer	46.7				% Passing			05/26/22 19:37	1
Sieve Size #200 - Percent Finer	25.1				% Passing			05/26/22 19:37	1
Hydrometer Reading 1 - Percent Finer	11.8				% Passing			05/26/22 19:37	1
Hydrometer Reading 2 - Percent Finer	8.4				% Passing			05/26/22 19:37	1
Hydrometer Reading 3 - Percent Finer	6.1				% Passing			05/26/22 19:37	1
Hydrometer Reading 4 - Percent Finer	5.0				% Passing			05/26/22 19:37	1
Hydrometer Reading 5 - Percent Finer	4.4				% Passing			05/26/22 19:37	1
Hydrometer Reading 6 - Percent Finer	3.3				% Passing			05/26/22 19:37	1
Hydrometer Reading 7 - Percent Finer	2.2				% Passing			05/26/22 19:37	1

Client: AECOM
Job ID: 620-4175-2
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: TP-4 (6-7)
Date Collected: 04/26/22 12:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-12
Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	34.7				%			05/26/22 19:39	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:39	1
Sand	50.9				%			05/26/22 19:39	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:39	1
Coarse Sand	13.2				%			05/26/22 19:39	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:39	1
Medium Sand	19.5				%			05/26/22 19:39	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:39	1
Fine Sand	18.2				%			05/26/22 19:39	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			05/26/22 19:39	1
Sieve Size 0.375 inch - Percent Finer	75.2				% Passing			05/26/22 19:39	1
Silt	10.4				%			05/26/22 19:39	1
Clay	4.0				%			05/26/22 19:39	1
Sieve Size #4 - Percent Finer	65.3				% Passing			05/26/22 19:39	1
Sieve Size #10 - Percent Finer	52.1				% Passing			05/26/22 19:39	1
Sieve Size #20 - Percent Finer	40.5				% Passing			05/26/22 19:39	1
Sieve Size #40 - Percent Finer	32.6				% Passing			05/26/22 19:39	1
Sieve Size #60 - Percent Finer	27.0				% Passing			05/26/22 19:39	1
Sieve Size #80 - Percent Finer	23.7				% Passing			05/26/22 19:39	1
Sieve Size #100 - Percent Finer	21.5				% Passing			05/26/22 19:39	1
Sieve Size #200 - Percent Finer	14.4				% Passing			05/26/22 19:39	1
Hydrometer Reading 1 - Percent Finer	11.6				% Passing			05/26/22 19:39	1
Hydrometer Reading 2 - Percent Finer	8.0				% Passing			05/26/22 19:39	1
Hydrometer Reading 3 - Percent Finer	5.8				% Passing			05/26/22 19:39	1
Hydrometer Reading 4 - Percent Finer	4.4				% Passing			05/26/22 19:39	1
Hydrometer Reading 5 - Percent Finer	4.0				% Passing			05/26/22 19:39	1
Hydrometer Reading 6 - Percent Finer	3.1				% Passing			05/26/22 19:39	1
Hydrometer Reading 7 - Percent Finer	2.2				% Passing			05/26/22 19:39	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-5 (0-6)
Date Collected: 04/26/22 13:20
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-13
Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	63.3				%			05/26/22 19:42	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:42	1
Sand	28.9				%			05/26/22 19:42	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:42	1
Coarse Sand	7.7				%			05/26/22 19:42	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:42	1
Medium Sand	11.3				%			05/26/22 19:42	1
Sieve Size 1 inch - Percent Finer	77.0				% Passing			05/26/22 19:42	1
Fine Sand	9.9				%			05/26/22 19:42	1
Sieve Size 0.75 inch - Percent Finer	56.0				% Passing			05/26/22 19:42	1
Sieve Size 0.375 inch - Percent Finer	47.8				% Passing			05/26/22 19:42	1
Silt	5.5				%			05/26/22 19:42	1
Clay	2.3				%			05/26/22 19:42	1
Sieve Size #4 - Percent Finer	36.7				% Passing			05/26/22 19:42	1
Sieve Size #10 - Percent Finer	29.0				% Passing			05/26/22 19:42	1
Sieve Size #20 - Percent Finer	22.0				% Passing			05/26/22 19:42	1
Sieve Size #40 - Percent Finer	17.7				% Passing			05/26/22 19:42	1
Sieve Size #60 - Percent Finer	14.5				% Passing			05/26/22 19:42	1
Sieve Size #80 - Percent Finer	13.3				% Passing			05/26/22 19:42	1
Sieve Size #100 - Percent Finer	11.4				% Passing			05/26/22 19:42	1
Sieve Size #200 - Percent Finer	7.8				% Passing			05/26/22 19:42	1
Hydrometer Reading 1 - Percent Finer	5.9				% Passing			05/26/22 19:42	1
Hydrometer Reading 2 - Percent Finer	4.4				% Passing			05/26/22 19:42	1
Hydrometer Reading 3 - Percent Finer	3.2				% Passing			05/26/22 19:42	1
Hydrometer Reading 4 - Percent Finer	2.9				% Passing			05/26/22 19:42	1
Hydrometer Reading 5 - Percent Finer	2.3				% Passing			05/26/22 19:42	1
Hydrometer Reading 6 - Percent Finer	1.7				% Passing			05/26/22 19:42	1
Hydrometer Reading 7 - Percent Finer	1.4				% Passing			05/26/22 19:42	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-5 (6-7)

Date Collected: 04/26/22 13:12
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-14

Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	52.6				%			05/26/22 19:45	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:45	1
Sand	35.3				%			05/26/22 19:45	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:45	1
Coarse Sand	11.0				%			05/26/22 19:45	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:45	1
Medium Sand	13.9				%			05/26/22 19:45	1
Sieve Size 1 inch - Percent Finer	79.0				% Passing			05/26/22 19:45	1
Fine Sand	10.4				%			05/26/22 19:45	1
Sieve Size 0.75 inch - Percent Finer	73.4				% Passing			05/26/22 19:45	1
Sieve Size 0.375 inch - Percent Finer	62.0				% Passing			05/26/22 19:45	1
Silt	9.5				%			05/26/22 19:45	1
Clay	2.6				%			05/26/22 19:45	1
Sieve Size #4 - Percent Finer	47.4				% Passing			05/26/22 19:45	1
Sieve Size #10 - Percent Finer	36.4				% Passing			05/26/22 19:45	1
Sieve Size #20 - Percent Finer	27.7				% Passing			05/26/22 19:45	1
Sieve Size #40 - Percent Finer	22.5				% Passing			05/26/22 19:45	1
Sieve Size #60 - Percent Finer	18.9				% Passing			05/26/22 19:45	1
Sieve Size #80 - Percent Finer	16.9				% Passing			05/26/22 19:45	1
Sieve Size #100 - Percent Finer	15.7				% Passing			05/26/22 19:45	1
Sieve Size #200 - Percent Finer	12.1				% Passing			05/26/22 19:45	1
Hydrometer Reading 1 - Percent Finer	7.3				% Passing			05/26/22 19:45	1
Hydrometer Reading 2 - Percent Finer	5.6				% Passing			05/26/22 19:45	1
Hydrometer Reading 3 - Percent Finer	3.8				% Passing			05/26/22 19:45	1
Hydrometer Reading 4 - Percent Finer	3.5				% Passing			05/26/22 19:45	1
Hydrometer Reading 5 - Percent Finer	2.6				% Passing			05/26/22 19:45	1
Hydrometer Reading 6 - Percent Finer	2.0				% Passing			05/26/22 19:45	1
Hydrometer Reading 7 - Percent Finer	1.7				% Passing			05/26/22 19:45	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-6 (9.5ft)
Date Collected: 04/27/22 12:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-15
Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	32.1				%			05/26/22 19:48	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:48	1
Sand	45.8				%			05/26/22 19:48	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:48	1
Coarse Sand	16.3				%			05/26/22 19:48	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:48	1
Medium Sand	17.2				%			05/26/22 19:48	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/26/22 19:48	1
Fine Sand	12.3				%			05/26/22 19:48	1
Sieve Size 0.75 inch - Percent Finer	90.0				% Passing			05/26/22 19:48	1
Sieve Size 0.375 inch - Percent Finer	80.6				% Passing			05/26/22 19:48	1
Silt	17.7				%			05/26/22 19:48	1
Clay	4.4				%			05/26/22 19:48	1
Sieve Size #4 - Percent Finer	67.9				% Passing			05/26/22 19:48	1
Sieve Size #10 - Percent Finer	51.6				% Passing			05/26/22 19:48	1
Sieve Size #20 - Percent Finer	40.5				% Passing			05/26/22 19:48	1
Sieve Size #40 - Percent Finer	34.4				% Passing			05/26/22 19:48	1
Sieve Size #60 - Percent Finer	30.3				% Passing			05/26/22 19:48	1
Sieve Size #80 - Percent Finer	28.7				% Passing			05/26/22 19:48	1
Sieve Size #100 - Percent Finer	26.7				% Passing			05/26/22 19:48	1
Sieve Size #200 - Percent Finer	22.1				% Passing			05/26/22 19:48	1
Hydrometer Reading 1 - Percent Finer	11.6				% Passing			05/26/22 19:48	1
Hydrometer Reading 2 - Percent Finer	8.4				% Passing			05/26/22 19:48	1
Hydrometer Reading 3 - Percent Finer	6.0				% Passing			05/26/22 19:48	1
Hydrometer Reading 4 - Percent Finer	5.2				% Passing			05/26/22 19:48	1
Hydrometer Reading 5 - Percent Finer	4.4				% Passing			05/26/22 19:48	1
Hydrometer Reading 6 - Percent Finer	3.6				% Passing			05/26/22 19:48	1
Hydrometer Reading 7 - Percent Finer	2.7				% Passing			05/26/22 19:48	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-6 (5ft)

Date Collected: 04/27/22 12:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-16

Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	35.4				%			05/26/22 19:51	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/26/22 19:51	1
Sand	39.0				%			05/26/22 19:51	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/26/22 19:51	1
Coarse Sand	9.6				%			05/26/22 19:51	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/26/22 19:51	1
Medium Sand	14.8				%			05/26/22 19:51	1
Sieve Size 1 inch - Percent Finer	84.9				% Passing			05/26/22 19:51	1
Fine Sand	14.6				%			05/26/22 19:51	1
Sieve Size 0.75 inch - Percent Finer	84.9				% Passing			05/26/22 19:51	1
Sieve Size 0.375 inch - Percent Finer	73.0				% Passing			05/26/22 19:51	1
Silt	20.4				%			05/26/22 19:51	1
Clay	5.2				%			05/26/22 19:51	1
Sieve Size #4 - Percent Finer	64.6				% Passing			05/26/22 19:51	1
Sieve Size #10 - Percent Finer	55.0				% Passing			05/26/22 19:51	1
Sieve Size #20 - Percent Finer	46.2				% Passing			05/26/22 19:51	1
Sieve Size #40 - Percent Finer	40.2				% Passing			05/26/22 19:51	1
Sieve Size #60 - Percent Finer	35.7				% Passing			05/26/22 19:51	1
Sieve Size #80 - Percent Finer	33.1				% Passing			05/26/22 19:51	1
Sieve Size #100 - Percent Finer	31.4				% Passing			05/26/22 19:51	1
Sieve Size #200 - Percent Finer	25.6				% Passing			05/26/22 19:51	1
Hydrometer Reading 1 - Percent Finer	14.8				% Passing			05/26/22 19:51	1
Hydrometer Reading 2 - Percent Finer	10.7				% Passing			05/26/22 19:51	1
Hydrometer Reading 3 - Percent Finer	7.4				% Passing			05/26/22 19:51	1
Hydrometer Reading 4 - Percent Finer	6.3				% Passing			05/26/22 19:51	1
Hydrometer Reading 5 - Percent Finer	5.2				% Passing			05/26/22 19:51	1
Hydrometer Reading 6 - Percent Finer	4.1				% Passing			05/26/22 19:51	1
Hydrometer Reading 7 - Percent Finer	3.6				% Passing			05/26/22 19:51	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-7 (0-6)
Date Collected: 04/27/22 08:20
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-17
Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	28.5				%			05/27/22 17:08	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/27/22 17:08	1
Sand	52.9				%			05/27/22 17:08	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/27/22 17:08	1
Coarse Sand	11.3				%			05/27/22 17:08	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/27/22 17:08	1
Medium Sand	20.9				%			05/27/22 17:08	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/27/22 17:08	1
Fine Sand	20.7				%			05/27/22 17:08	1
Sieve Size 0.75 inch - Percent Finer	87.4				% Passing			05/27/22 17:08	1
Sieve Size 0.375 inch - Percent Finer	81.3				% Passing			05/27/22 17:08	1
Silt	14.7				%			05/27/22 17:08	1
Clay	4.0				%			05/27/22 17:08	1
Sieve Size #4 - Percent Finer	71.5				% Passing			05/27/22 17:08	1
Sieve Size #10 - Percent Finer	60.2				% Passing			05/27/22 17:08	1
Sieve Size #20 - Percent Finer	48.6				% Passing			05/27/22 17:08	1
Sieve Size #40 - Percent Finer	39.3				% Passing			05/27/22 17:08	1
Sieve Size #60 - Percent Finer	32.4				% Passing			05/27/22 17:08	1
Sieve Size #80 - Percent Finer	29.8				% Passing			05/27/22 17:08	1
Sieve Size #100 - Percent Finer	26.0				% Passing			05/27/22 17:08	1
Sieve Size #200 - Percent Finer	18.6				% Passing			05/27/22 17:08	1
Hydrometer Reading 1 - Percent Finer	11.8				% Passing			05/27/22 17:08	1
Hydrometer Reading 2 - Percent Finer	8.4				% Passing			05/27/22 17:08	1
Hydrometer Reading 3 - Percent Finer	6.0				% Passing			05/27/22 17:08	1
Hydrometer Reading 4 - Percent Finer	5.0				% Passing			05/27/22 17:08	1
Hydrometer Reading 5 - Percent Finer	4.0				% Passing			05/27/22 17:08	1
Hydrometer Reading 6 - Percent Finer	2.8				% Passing			05/27/22 17:08	1
Hydrometer Reading 7 - Percent Finer	2.0				% Passing			05/27/22 17:08	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-7 (6-7ft)
Date Collected: 04/27/22 08:25
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-18
Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	28.6				%			05/27/22 17:11	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/27/22 17:11	1
Sand	57.8				%			05/27/22 17:11	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/27/22 17:11	1
Coarse Sand	13.8				%			05/27/22 17:11	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/27/22 17:11	1
Medium Sand	24.4				%			05/27/22 17:11	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/27/22 17:11	1
Fine Sand	19.6				%			05/27/22 17:11	1
Sieve Size 0.75 inch - Percent Finer	92.3				% Passing			05/27/22 17:11	1
Sieve Size 0.375 inch - Percent Finer	83.1				% Passing			05/27/22 17:11	1
Silt	10.7				%			05/27/22 17:11	1
Clay	3.0				%			05/27/22 17:11	1
Sieve Size #4 - Percent Finer	71.4				% Passing			05/27/22 17:11	1
Sieve Size #10 - Percent Finer	57.6				% Passing			05/27/22 17:11	1
Sieve Size #20 - Percent Finer	44.2				% Passing			05/27/22 17:11	1
Sieve Size #40 - Percent Finer	33.2				% Passing			05/27/22 17:11	1
Sieve Size #60 - Percent Finer	25.9				% Passing			05/27/22 17:11	1
Sieve Size #80 - Percent Finer	22.1				% Passing			05/27/22 17:11	1
Sieve Size #100 - Percent Finer	19.9				% Passing			05/27/22 17:11	1
Sieve Size #200 - Percent Finer	13.6				% Passing			05/27/22 17:11	1
Hydrometer Reading 1 - Percent Finer	8.4				% Passing			05/27/22 17:11	1
Hydrometer Reading 2 - Percent Finer	5.9				% Passing			05/27/22 17:11	1
Hydrometer Reading 3 - Percent Finer	4.3				% Passing			05/27/22 17:11	1
Hydrometer Reading 4 - Percent Finer	3.4				% Passing			05/27/22 17:11	1
Hydrometer Reading 5 - Percent Finer	3.0				% Passing			05/27/22 17:11	1
Hydrometer Reading 6 - Percent Finer	2.0				% Passing			05/27/22 17:11	1
Hydrometer Reading 7 - Percent Finer	1.3				% Passing			05/27/22 17:11	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-7 (10ft)
Date Collected: 04/27/22 08:30
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-19
Matrix: Solid

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gravel	34.3				%			05/27/22 17:13	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			05/27/22 17:13	1
Sand	45.7				%			05/27/22 17:13	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			05/27/22 17:13	1
Coarse Sand	9.7				%			05/27/22 17:13	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			05/27/22 17:13	1
Medium Sand	18.0				%			05/27/22 17:13	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			05/27/22 17:13	1
Fine Sand	18.0				%			05/27/22 17:13	1
Sieve Size 0.75 inch - Percent Finer	84.5				% Passing			05/27/22 17:13	1
Sieve Size 0.375 inch - Percent Finer	76.4				% Passing			05/27/22 17:13	1
Silt	16.0				%			05/27/22 17:13	1
Clay	4.0				%			05/27/22 17:13	1
Sieve Size #4 - Percent Finer	65.7				% Passing			05/27/22 17:13	1
Sieve Size #10 - Percent Finer	56.0				% Passing			05/27/22 17:13	1
Sieve Size #20 - Percent Finer	46.0				% Passing			05/27/22 17:13	1
Sieve Size #40 - Percent Finer	38.0				% Passing			05/27/22 17:13	1
Sieve Size #60 - Percent Finer	32.6				% Passing			05/27/22 17:13	1
Sieve Size #80 - Percent Finer	30.4				% Passing			05/27/22 17:13	1
Sieve Size #100 - Percent Finer	27.4				% Passing			05/27/22 17:13	1
Sieve Size #200 - Percent Finer	20.0				% Passing			05/27/22 17:13	1
Hydrometer Reading 1 - Percent Finer	12.2				% Passing			05/27/22 17:13	1
Hydrometer Reading 2 - Percent Finer	8.4				% Passing			05/27/22 17:13	1
Hydrometer Reading 3 - Percent Finer	6.2				% Passing			05/27/22 17:13	1
Hydrometer Reading 4 - Percent Finer	4.9				% Passing			05/27/22 17:13	1
Hydrometer Reading 5 - Percent Finer	4.0				% Passing			05/27/22 17:13	1
Hydrometer Reading 6 - Percent Finer	3.0				% Passing			05/27/22 17:13	1
Hydrometer Reading 7 - Percent Finer	1.7				% Passing			05/27/22 17:13	1

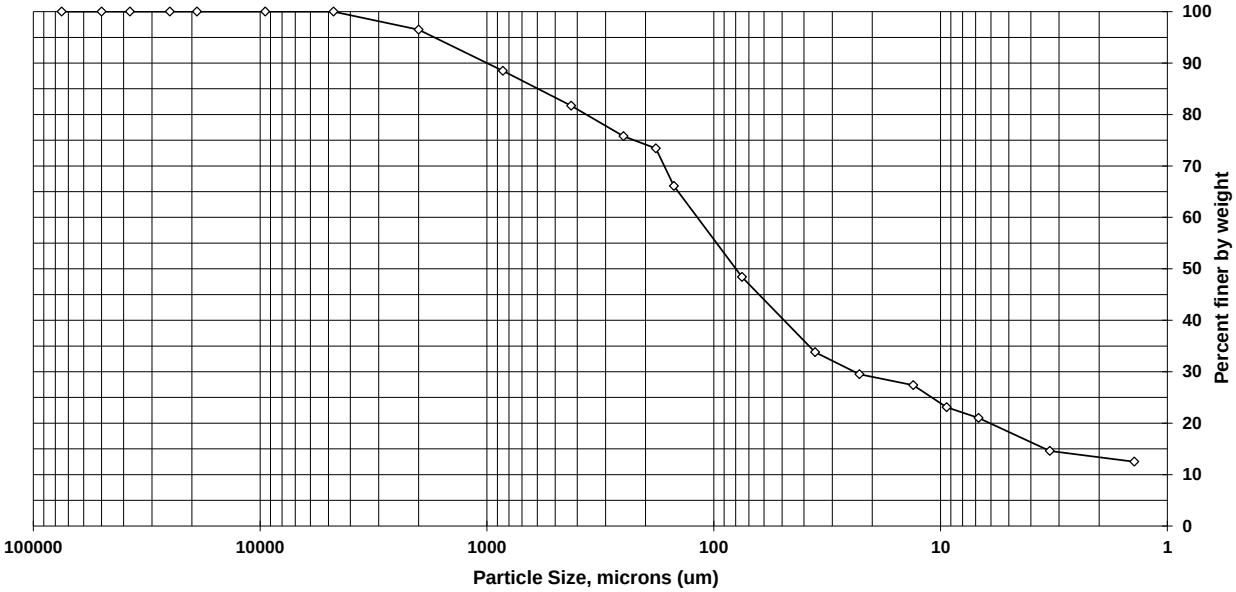
Particle Size of Soils by ASTM D422

Sample ID: TP-1 (0-7)
Lab ID: 620-4175-A-5

Percent Solids: 38.4%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

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



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	96.5	3.5
#20	850	88.5	8.0
#40	425	81.7	6.8
#60	250	75.8	5.9
#80	180	73.4	2.4
#100	150	66.1	7.3
#200	75	48.4	17.7
Hyd1	35.7	33.8	14.6
Hyd2	22.8	29.5	4.3
Hyd3	13.2	27.4	2.1
Hyd4	9.4	23.1	4.3
Hyd5	6.8	21.0	2.1
Hyd6	3.3	14.6	6.4
Hyd7	1.4	12.5	2.1

Soil Classification	Percent of sample
Gravel	0.0
Sand	51.6
Coarse Sand	3.5
Medium Sand	14.8
Fine Sand	33.3
Silt	27.4
Clay	21.0

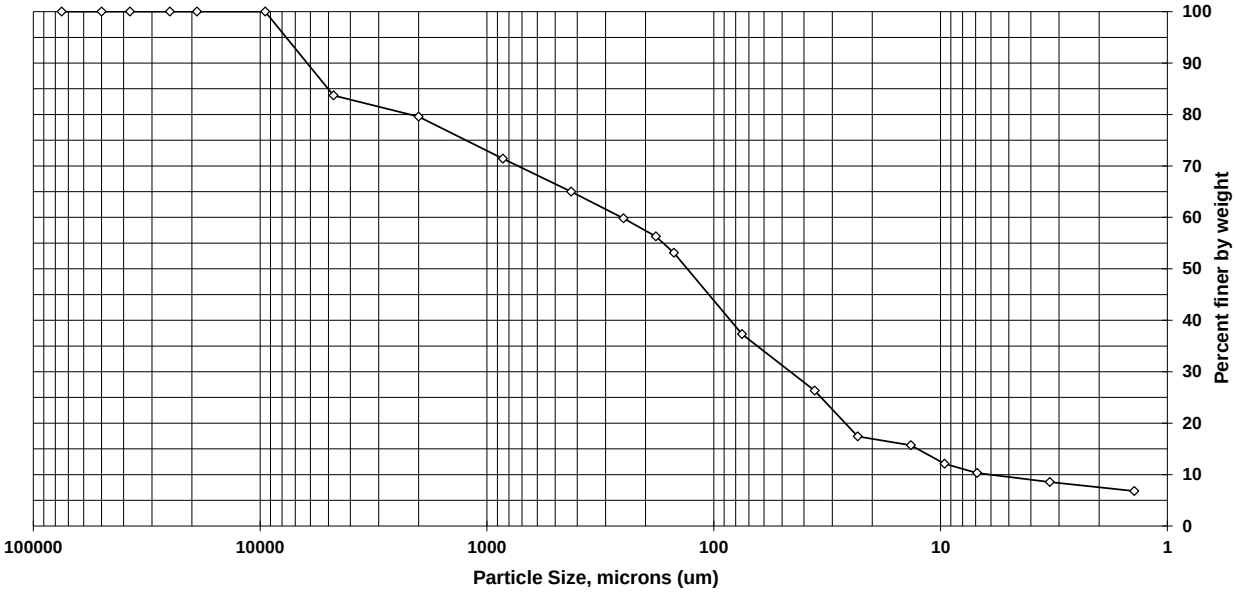
Particle Size of Soils by ASTM D422

Sample ID: TP-2 (0-6)
Lab ID: 620-4175-A-6

Percent Solids: 42.9%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

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



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	83.7	16.3
#10	2000	79.6	4.1
#20	850	71.4	8.2
#40	425	65.0	6.4
#60	250	59.8	5.2
#80	180	56.3	3.5
#100	150	53.1	3.2
#200	75	37.3	15.8
Hyd1	35.9	26.3	11.0
Hyd2	23.2	17.4	8.9
Hyd3	13.5	15.7	1.7
Hyd4	9.6	12.1	3.6
Hyd5	6.9	10.3	1.8
Hyd6	3.3	8.6	1.7
Hyd7	1.4	6.8	1.8

Soil Classification	Percent of sample
Gravel	16.3
Sand	46.4
Coarse Sand	4.1
Medium Sand	14.6
Fine Sand	27.7
Silt	27.0
Clay	10.3

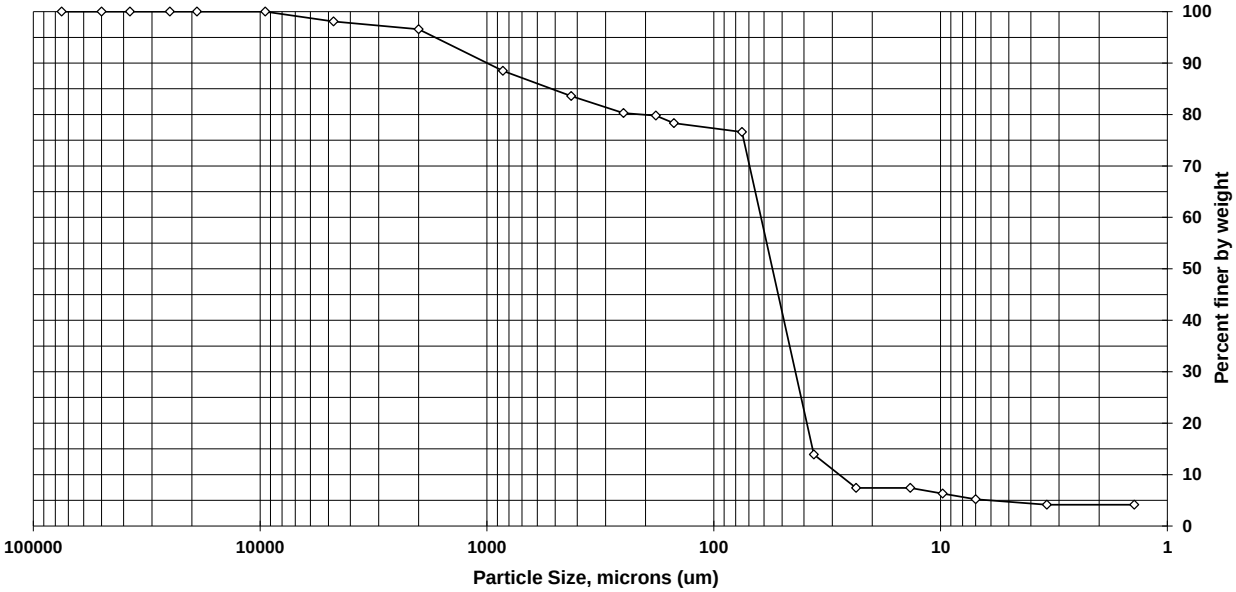
Particle Size of Soils by ASTM D422

Sample ID: TP-2 (8-10)
Lab ID: 620-4175-A-7

Percent Solids: 71.6%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/2/2022

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



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	98.1	1.9
#10	2000	96.6	1.5
#20	850	88.5	8.1
#40	425	83.6	4.9
#60	250	80.3	3.3
#80	180	79.8	0.5
#100	150	78.3	1.5
#200	75	76.6	1.7
Hyd1	36.2	13.9	62.7
Hyd2	23.6	7.4	6.5
Hyd3	13.6	7.4	0.0
Hyd4	9.8	6.3	1.1
Hyd5	7	5.2	1.1
Hyd6	3.4	4.1	1.1
Hyd7	1.4	4.1	0.0

Soil Classification	Percent of sample
Gravel	1.9
Sand	21.5
Coarse Sand	1.5
Medium Sand	13.0
Fine Sand	7.0
Silt	71.4
Clay	5.2

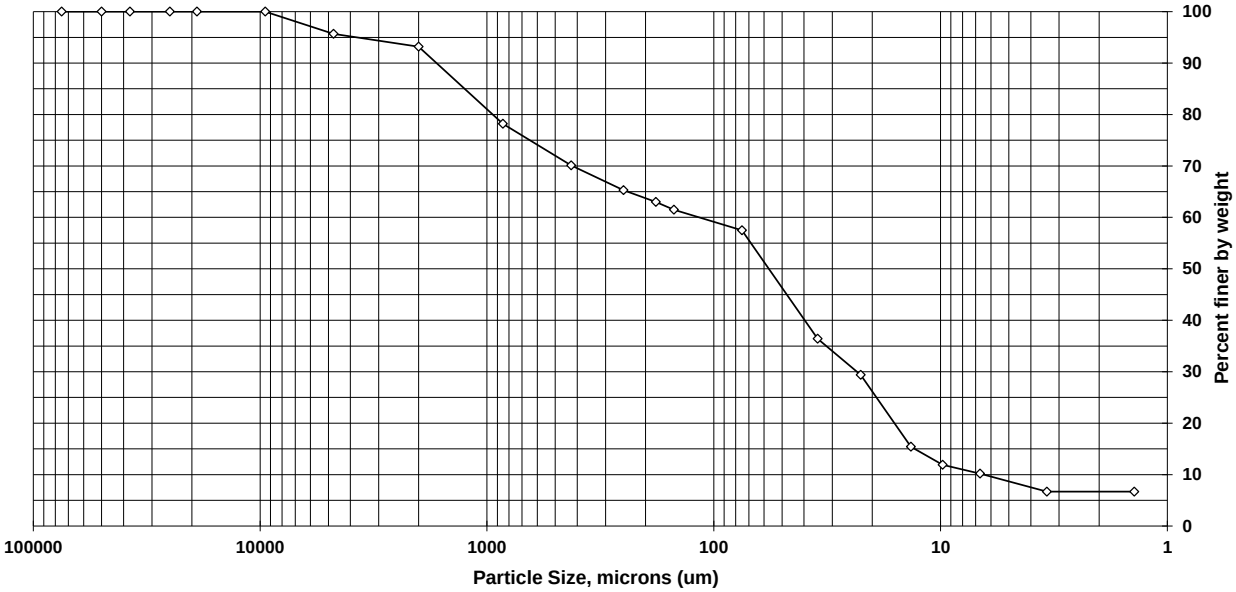
Particle Size of Soils by ASTM D422

Sample ID: TP-2 (11ft)
Lab ID: 620-4175-A-8

Percent Solids: 27.0%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/2/2022

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



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	95.7	4.3
#10	2000	93.2	2.5
#20	850	78.2	15.0
#40	425	70.1	8.1
#60	250	65.3	4.8
#80	180	63.0	2.3
#100	150	61.5	1.5
#200	75	57.5	4.0
Hyd1	34.8	36.4	21.1
Hyd2	22.5	29.4	7.0
Hyd3	13.5	15.4	14.0
Hyd4	9.8	11.9	3.5
Hyd5	6.7	10.2	1.7
Hyd6	3.4	6.7	3.5
Hyd7	1.4	6.7	0.0

Soil Classification	Percent of sample
Gravel	4.3
Sand	38.2
Coarse Sand	2.5
Medium Sand	23.1
Fine Sand	12.6
Silt	47.3
Clay	10.2

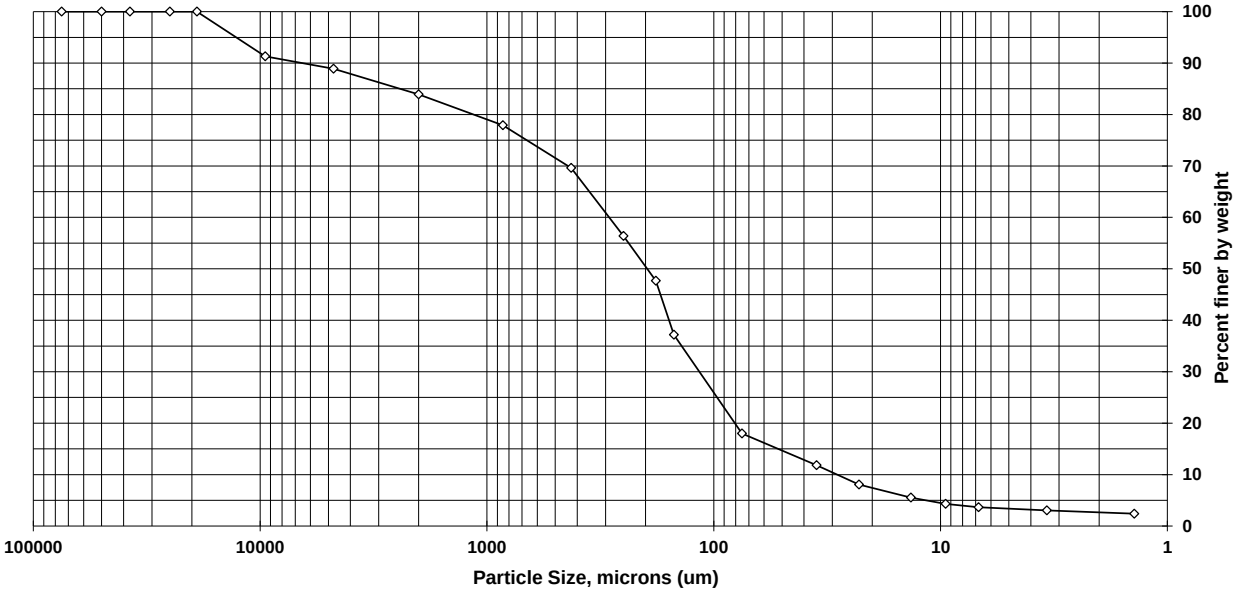
Particle Size of Soils by ASTM D422

Sample ID: TP-3 (0-7ft)
Lab ID: 620-4175-A-9

Percent Solids: 74.1%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

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



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	91.3	8.7
#4	4750	88.9	2.4
#10	2000	83.9	5.0
#20	850	77.9	6.0
#40	425	69.6	8.3
#60	250	56.4	13.2
#80	180	47.7	8.7
#100	150	37.2	10.5
#200	75	18.0	19.2
Hyd1	35.2	11.8	6.2
Hyd2	22.9	8.1	3.8
Hyd3	13.5	5.5	2.5
Hyd4	9.5	4.3	1.3
Hyd5	6.8	3.7	0.6
Hyd6	3.4	3.0	0.6
Hyd7	1.4	2.4	0.6

Soil Classification	Percent of sample
Gravel	11.1
Sand	70.9
Coarse Sand	5.0
Medium Sand	14.3
Fine Sand	51.6
Silt	14.3
Clay	3.7

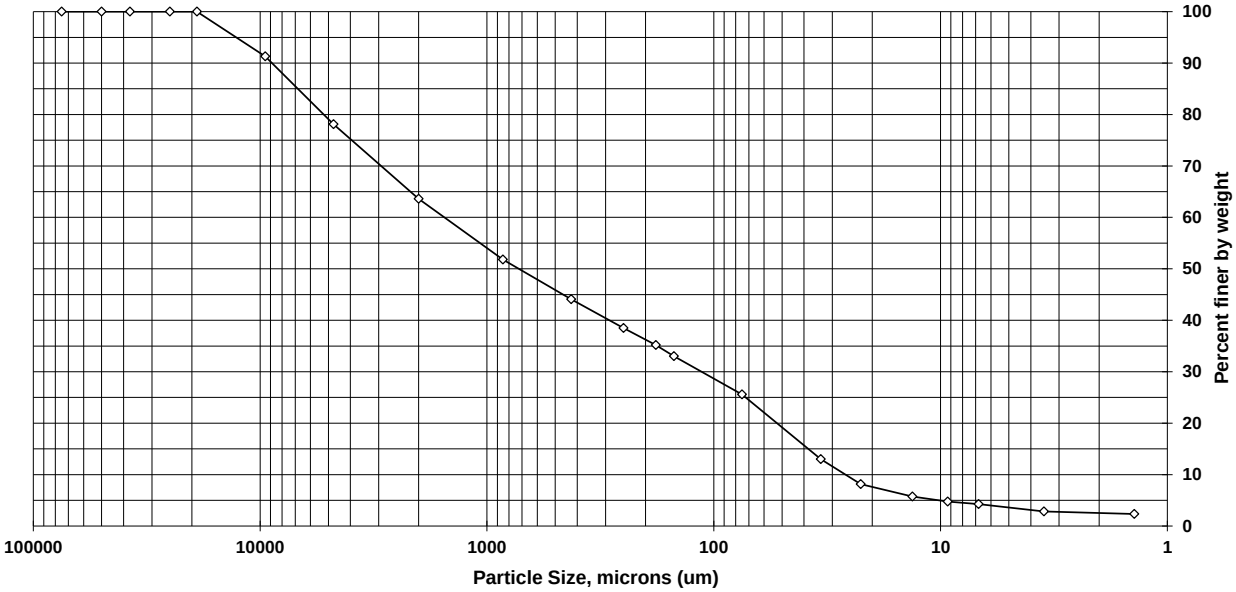
Particle Size of Soils by ASTM D422

Sample ID: TP-4 (0-6)
Lab ID: 620-4175-A-10

Percent Solids: 86.2%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

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



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	91.3	8.7
#4	4750	78.1	13.2
#10	2000	63.6	14.5
#20	850	51.8	11.8
#40	425	44.1	7.7
#60	250	38.5	5.6
#80	180	35.2	3.3
#100	150	33.0	2.2
#200	75	25.6	7.4
Hyd1	33.7	13.0	12.6
Hyd2	22.5	8.1	4.9
Hyd3	13.3	5.7	2.4
Hyd4	9.3	4.8	1.0
Hyd5	6.8	4.3	0.5
Hyd6	3.5	2.8	1.5
Hyd7	1.4	2.3	0.5

Soil Classification	Percent of sample
Gravel	21.9
Sand	52.5
Coarse Sand	14.5
Medium Sand	19.5
Fine Sand	18.5
Silt	21.3
Clay	4.3

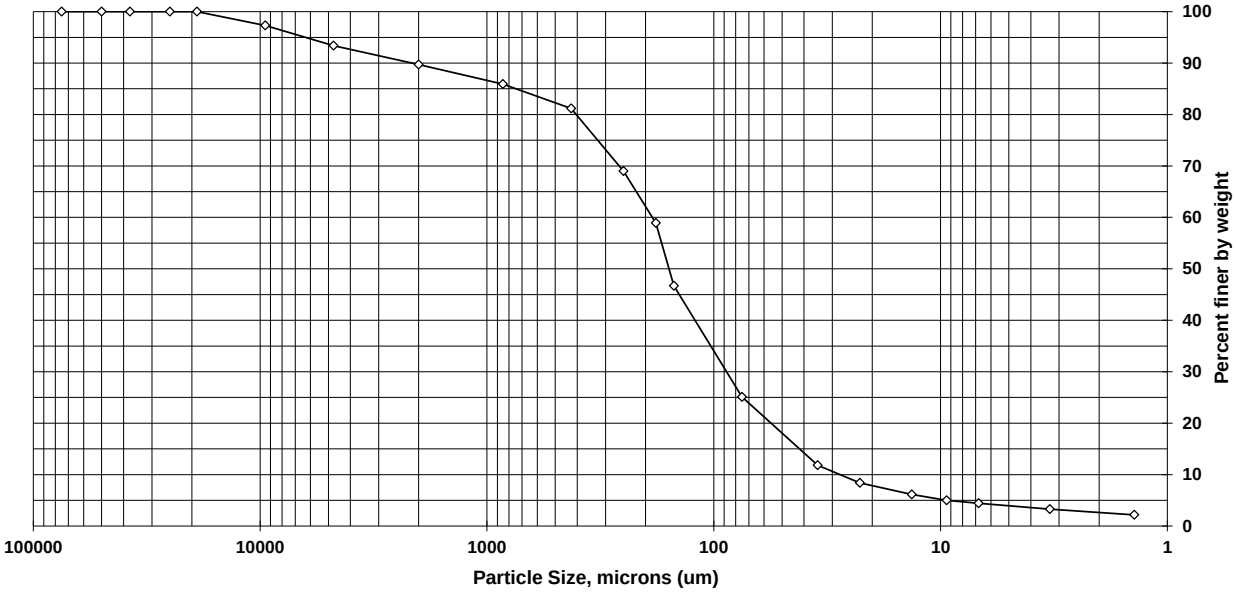
Particle Size of Soils by ASTM D422

Sample ID: TP-3 (10ft)
Lab ID: 620-4175-A-11

Percent Solids: 78.9%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

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



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	97.3	2.7
#4	4750	93.4	3.9
#10	2000	89.7	3.7
#20	850	85.9	3.8
#40	425	81.2	4.7
#60	250	69.0	12.2
#80	180	58.9	10.1
#100	150	46.7	12.2
#200	75	25.1	21.6
Hyd1	34.8	11.8	13.3
Hyd2	22.7	8.4	3.4
Hyd3	13.4	6.1	2.3
Hyd4	9.4	5.0	1.1
Hyd5	6.8	4.4	0.6
Hyd6	3.3	3.3	1.1
Hyd7	1.4	2.2	1.1

Soil Classification	Percent of sample
Gravel	6.6
Sand	68.3
Coarse Sand	3.7
Medium Sand	8.5
Fine Sand	56.1
Silt	20.7
Clay	4.4

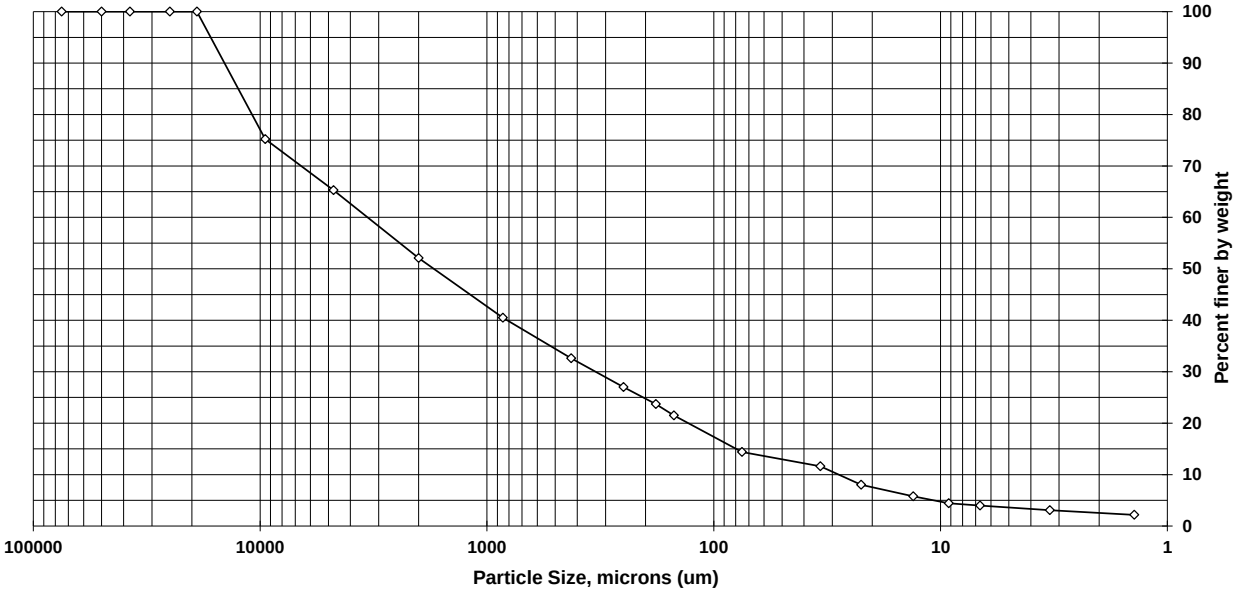
Particle Size of Soils by ASTM D422

Sample ID: TP-4 (6-7)
Lab ID: 620-4175-A-12

Percent Solids: 80.3%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

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



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	75.2	24.8
#4	4750	65.3	9.9
#10	2000	52.1	13.2
#20	850	40.5	11.6
#40	425	32.6	7.9
#60	250	27.0	5.6
#80	180	23.7	3.3
#100	150	21.5	2.2
#200	75	14.4	7.1
Hyd1	33.9	11.6	2.8
Hyd2	22.4	8.0	3.6
Hyd3	13.2	5.8	2.2
Hyd4	9.2	4.4	1.4
Hyd5	6.7	4.0	0.5
Hyd6	3.3	3.1	0.9
Hyd7	1.4	2.2	0.9

Soil Classification	Percent of sample
Gravel	34.7
Sand	50.9
Coarse Sand	13.2
Medium Sand	19.5
Fine Sand	18.2
Silt	10.4
Clay	4.0

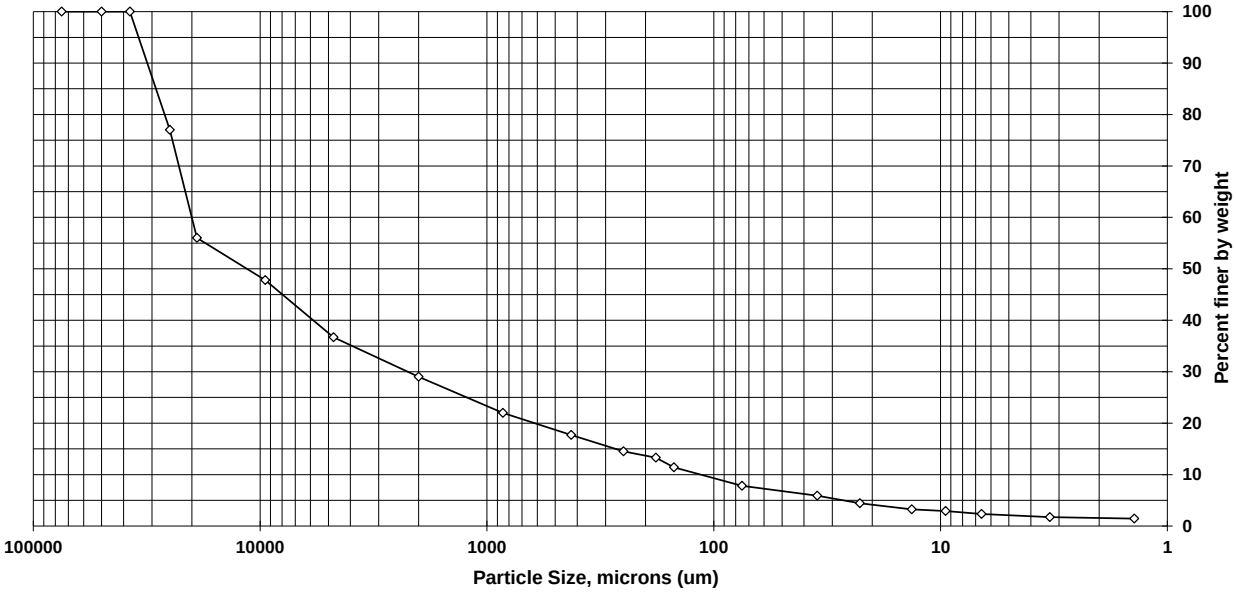
Particle Size of Soils by ASTM D422

Sample ID: TP-5 (0-6)
Lab ID: 620-4175-A-13

Percent Solids: 89.5%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

Shape (> #10): subangular
Non-soil material: n/a
Hardness (> #10): hard



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	77.0	23.0
3/4 inch	19000	56.0	21.0
3/8 inch	9500	47.8	8.2
#4	4750	36.7	11.1
#10	2000	29.0	7.7
#20	850	22.0	7.0
#40	425	17.7	4.3
#60	250	14.5	3.2
#80	180	13.3	1.2
#100	150	11.4	1.9
#200	75	7.8	3.6
Hyd1	35	5.9	1.9
Hyd2	22.7	4.4	1.5
Hyd3	13.4	3.2	1.2
Hyd4	9.5	2.9	0.3
Hyd5	6.6	2.3	0.6
Hyd6	3.3	1.7	0.6
Hyd7	1.4	1.4	0.3

Soil Classification	Percent of sample
Gravel	63.3
Sand	28.9
Coarse Sand	7.7
Medium Sand	11.3
Fine Sand	9.9
Silt	5.5
Clay	2.3

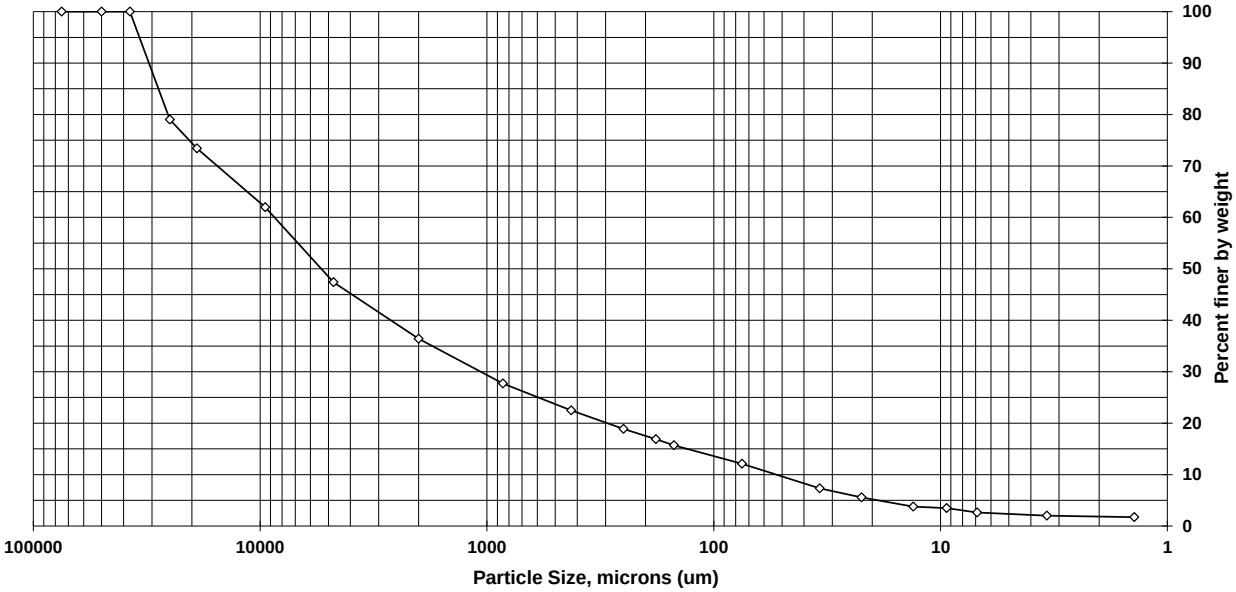
Particle Size of Soils by ASTM D422

Sample ID: TP-5 (6-7)
Lab ID: 620-4175-A-14

Percent Solids: 91.4%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

Shape (> #10): subangular
Non-soil material: n/a
Hardness (> #10): hard



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	79.0	21.0
3/4 inch	19000	73.4	5.6
3/8 inch	9500	62.0	11.4
#4	4750	47.4	14.6
#10	2000	36.4	11.0
#20	850	27.7	8.7
#40	425	22.5	5.2
#60	250	18.9	3.6
#80	180	16.9	2.0
#100	150	15.7	1.2
#200	75	12.1	3.6
Hyd1	34.1	7.3	4.8
Hyd2	22.3	5.6	1.8
Hyd3	13.2	3.8	1.8
Hyd4	9.4	3.5	0.3
Hyd5	6.9	2.6	0.9
Hyd6	3.4	2.0	0.6
Hyd7	1.4	1.7	0.3

Soil Classification	Percent of sample
Gravel	52.6
Sand	35.3
Coarse Sand	11.0
Medium Sand	13.9
Fine Sand	10.4
Silt	9.5
Clay	2.6

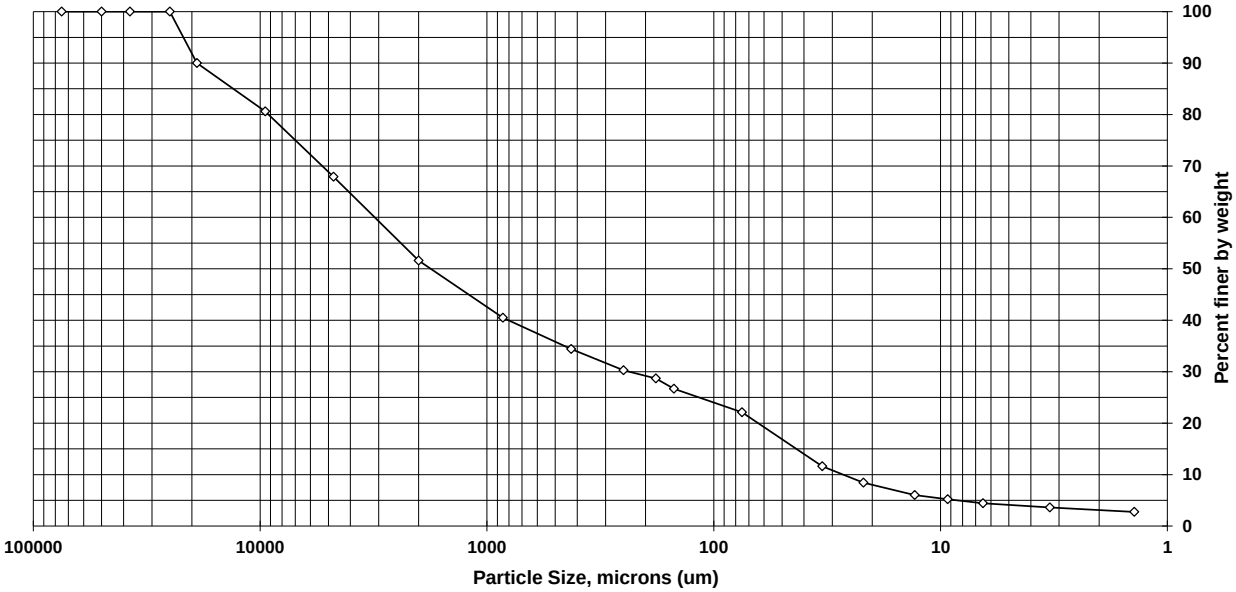
Particle Size of Soils by ASTM D422

Sample ID: TP-6 (9.5ft)
Lab ID: 620-4175-A-15

Percent Solids: 90.7%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

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



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	90.0	10.0
3/8 inch	9500	80.6	9.4
#4	4750	67.9	12.7
#10	2000	51.6	16.3
#20	850	40.5	11.1
#40	425	34.4	6.1
#60	250	30.3	4.1
#80	180	28.7	1.6
#100	150	26.7	2.0
#200	75	22.1	4.6
Hyd1	33.2	11.6	10.5
Hyd2	21.9	8.4	3.2
Hyd3	13	6.0	2.4
Hyd4	9.3	5.2	0.8
Hyd5	6.5	4.4	0.8
Hyd6	3.3	3.6	0.8
Hyd7	1.4	2.7	0.9

Soil Classification	Percent of sample
Gravel	32.1
Sand	45.8
Coarse Sand	16.3
Medium Sand	17.2
Fine Sand	12.3
Silt	17.7
Clay	4.4

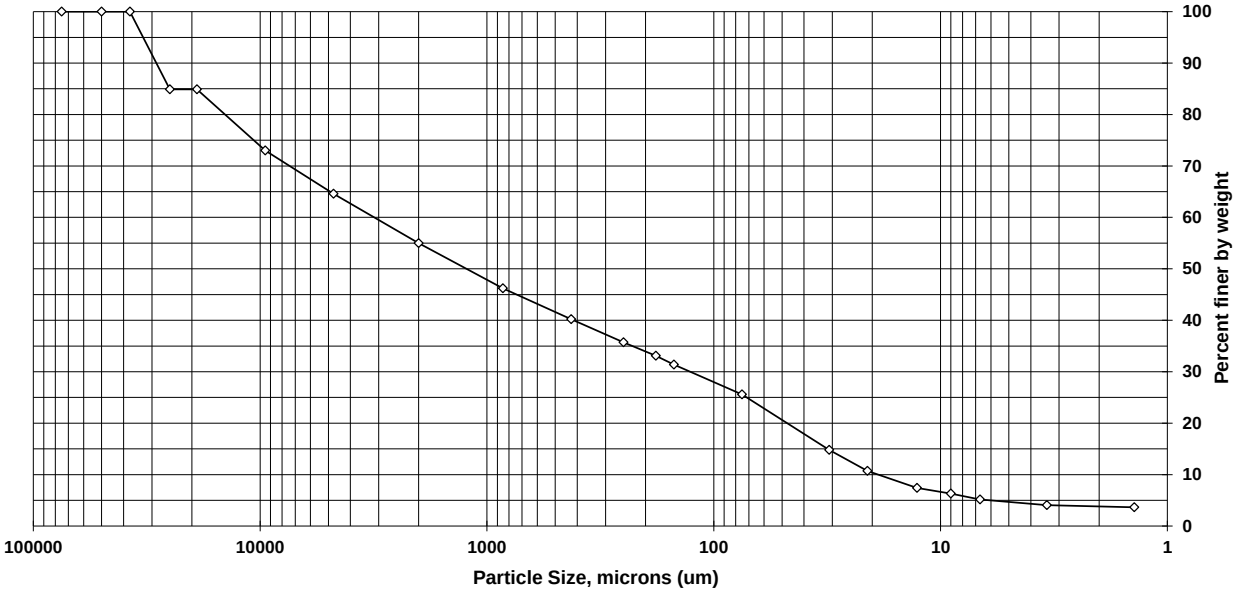
Particle Size of Soils by ASTM D422

Sample ID: TP-6 (5ft)
Lab ID: 620-4175-A-16

Percent Solids: 89.7%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/26/2022
End Date: 6/1/2022

Shape (> #10): subangular
Non-soil material: n/a
Hardness (> #10): hard



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	84.9	15.1
3/4 inch	19000	84.9	0.0
3/8 inch	9500	73.0	11.9
#4	4750	64.6	8.4
#10	2000	55.0	9.6
#20	850	46.2	8.8
#40	425	40.2	6.0
#60	250	35.7	4.5
#80	180	33.1	2.6
#100	150	31.4	1.7
#200	75	25.6	5.8
Hyd1	31	14.8	10.8
Hyd2	21	10.7	4.1
Hyd3	12.7	7.4	3.3
Hyd4	9	6.3	1.1
Hyd5	6.7	5.2	1.1
Hyd6	3.4	4.1	1.1
Hyd7	1.4	3.6	0.4

Soil Classification	Percent of sample
Gravel	35.4
Sand	39.0
Coarse Sand	9.6
Medium Sand	14.8
Fine Sand	14.6
Silt	20.4
Clay	5.2

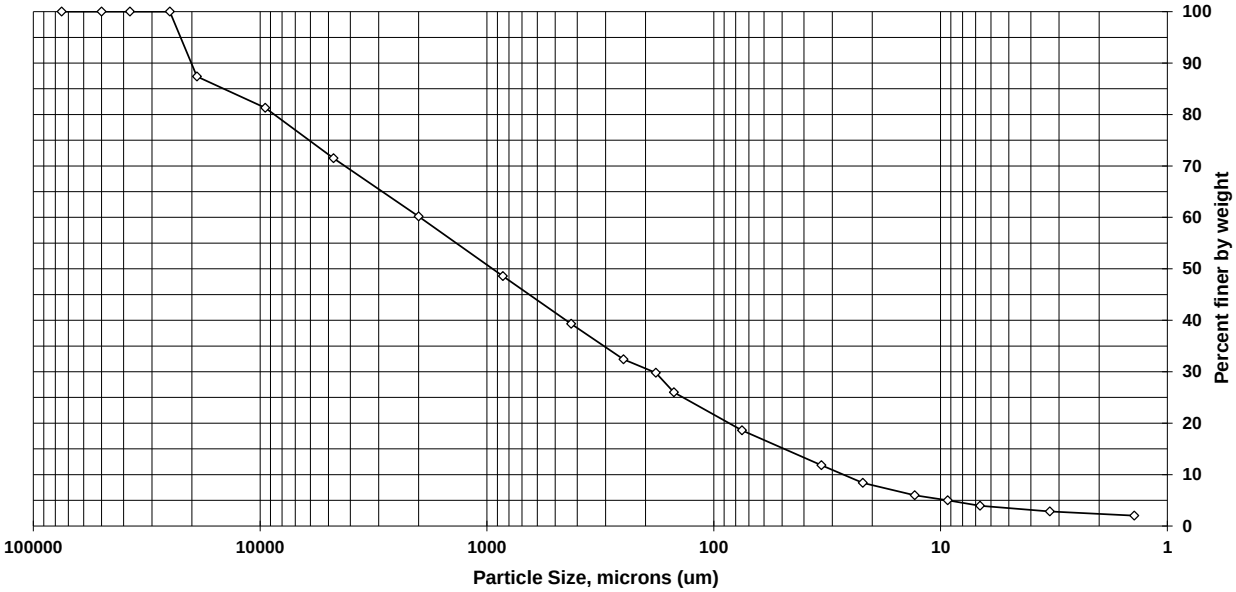
Particle Size of Soils by ASTM D422

Sample ID: TP-7 (0-6)
Lab ID: 620-4175-B-17

Percent Solids: 86.0%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/27/2022
End Date: 6/2/2022

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



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	87.4	12.6
3/8 inch	9500	81.3	6.1
#4	4750	71.5	9.8
#10	2000	60.2	11.3
#20	850	48.6	11.6
#40	425	39.3	9.3
#60	250	32.4	6.9
#80	180	29.8	2.6
#100	150	26.0	3.8
#200	75	18.6	7.4
Hyd1	33.5	11.8	6.8
Hyd2	22	8.4	3.4
Hyd3	13	6.0	2.4
Hyd4	9.3	5.0	1.0
Hyd5	6.7	4.0	1.1
Hyd6	3.3	2.8	1.1
Hyd7	1.4	2.0	0.8

Soil Classification	Percent of sample
Gravel	28.5
Sand	52.9
Coarse Sand	11.3
Medium Sand	20.9
Fine Sand	20.7
Silt	14.7
Clay	4.0

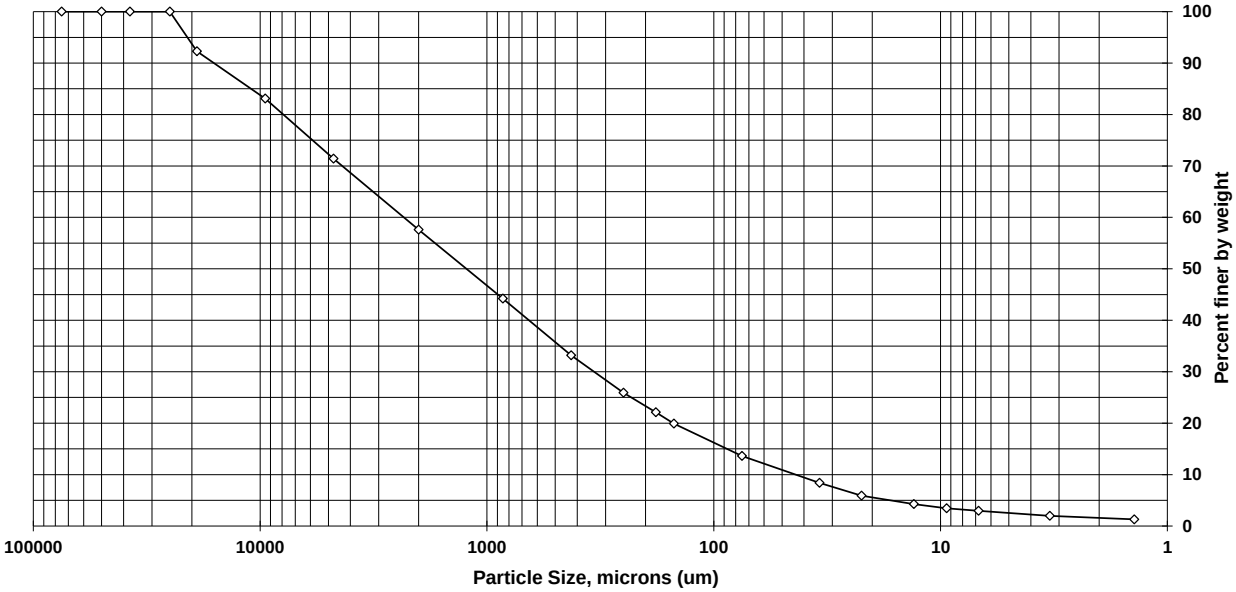
Particle Size of Soils by ASTM D422

Sample ID: TP-7 (6-7ft)
Lab ID: 620-4175-A-18

Percent Solids: 88.5%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/27/2022
End Date: 6/2/2022

Shape (> #10): subangular
Non-soil material: n/a
Hardness (> #10): hard



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	92.3	7.7
3/8 inch	9500	83.1	9.2
#4	4750	71.4	11.7
#10	2000	57.6	13.8
#20	850	44.2	13.4
#40	425	33.2	11.0
#60	250	25.9	7.3
#80	180	22.1	3.8
#100	150	19.9	2.2
#200	75	13.6	6.3
Hyd1	34.2	8.4	5.2
Hyd2	22.3	5.9	2.5
Hyd3	13.1	4.3	1.6
Hyd4	9.4	3.4	0.8
Hyd5	6.8	3.0	0.5
Hyd6	3.3	2.0	1.0
Hyd7	1.4	1.3	0.7

Soil Classification	Percent of sample
Gravel	28.6
Sand	57.8
Coarse Sand	13.8
Medium Sand	24.4
Fine Sand	19.6
Silt	10.7
Clay	3.0

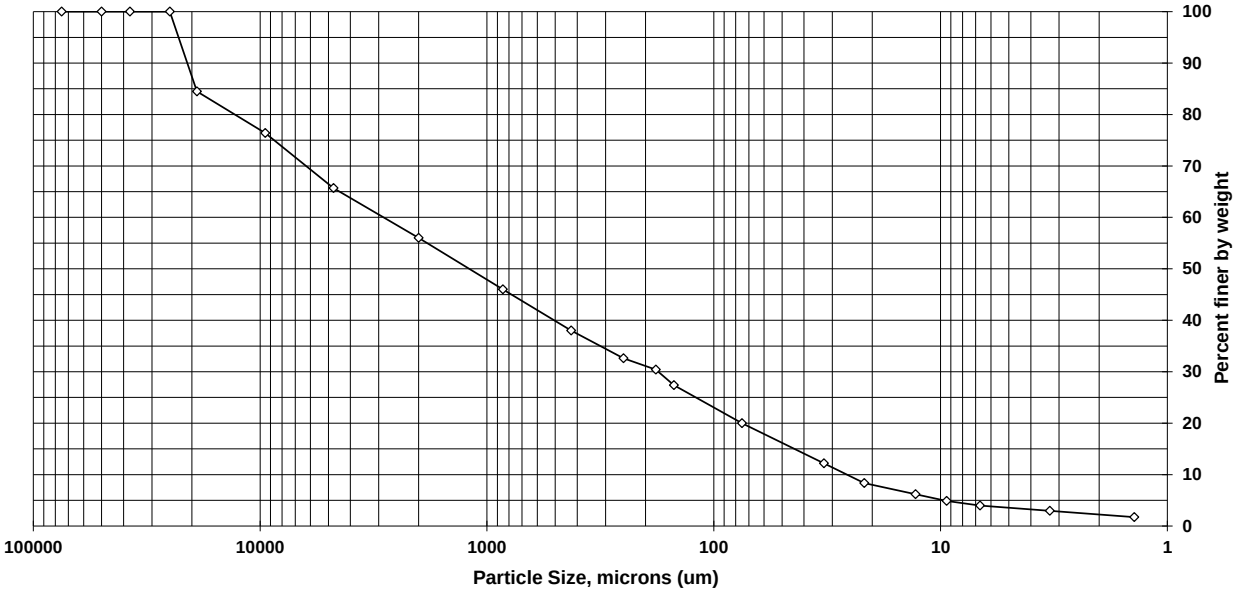
Particle Size of Soils by ASTM D422

Sample ID: TP-7 (10ft)
Lab ID: 620-4175-A-19

Percent Solids: 90.7%
Specific Gravity: 2.650

Date Received: 4/27/2022
Start Date: 5/27/2022
End Date: 6/2/2022

Shape (> #10): subangular
Non-soil material: n/a
Hardness (> #10): hard



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	84.5	15.5
3/8 inch	9500	76.4	8.1
#4	4750	65.7	10.7
#10	2000	56.0	9.7
#20	850	46.0	10.0
#40	425	38.0	8.0
#60	250	32.6	5.4
#80	180	30.4	2.2
#100	150	27.4	3.0
#200	75	20.0	7.4
Hyd1	32.7	12.2	7.8
Hyd2	21.7	8.4	3.9
Hyd3	12.9	6.2	2.2
Hyd4	9.4	4.9	1.3
Hyd5	6.7	4.0	0.9
Hyd6	3.3	3.0	1.0
Hyd7	1.4	1.7	1.2

Soil Classification	Percent of sample
Gravel	34.3
Sand	45.7
Coarse Sand	9.7
Medium Sand	18.0
Fine Sand	18.0
Silt	16.0
Clay	4.0

Sediment Grain Size - D422

Client	
Client Sample ID	TP-1 (0-7)
Lab Sample ID	620-4175-A-5

Date Received	4/27/2022
Start Date	05/26/2022 19:06
End Date	06/01/2022 12:35

Dry Weight Determination

Tin Weight	1.04	g
Wet Sample + Tin	17.10	g
Dry Sample + Tin	7.20	g
% Moisture	61.64	%

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

Date/Time in oven	05/26/2022 19:08
Date/Time out of oven	05/27/2022 16:54

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	44.69	142.61	97.92
Sample Weight (Oven Dried)			37.6

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			1.31
Sample <#10			36.3
% Passing #10			37.1

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	462.58	463.89	1.31	g	96.5	Sand	Coarse
#20	850	378.01	381.03	3.02	g	88.5	Sand	Medium
#40	425	366.13	368.68	2.55	g	81.7	Sand	Medium
#60	250	348.35	350.57	2.22	g	75.8	Sand	Fine
#80	180	337.38	338.30	0.92	g	73.4	Sand	Fine
#100	150	327.38	330.13	2.75	g	66.1	Sand	Fine
#200	75	312.29	318.95	6.66	g	48.4	Sand	Fine
				0.00	g	48.4		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	37.6

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0105	19.5	35.7	33.8	Silt	
5	5	1.0095	19.5	22.8	29.5	Silt	
15	15	1.0090	19.5	13.2	27.4	Silt	
30	30	1.0080	19.5	9.4	23.1	Silt	
60	59	1.0075	19.5	6.8	21	Silt	
250	256	1.0060	19.5	3.3	14.6	Clay	
1440	1440	1.0055	19.5	1.4	12.5	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-2 (0-6)
Lab Sample ID	620-4175-A-6

Date Received	4/27/2022
Start Date	05/26/2022 19:09
End Date	06/01/2022 12:39

Dry Weight Determination

Tin Weight	1.02	g
Wet Sample + Tin	33.77	g
Dry Sample + Tin	15.07	g
% Moisture	57.10	%

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

Date/Time in oven	05/26/2022 19:11
Date/Time out of oven	05/27/2022 16:54

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.88	153.49	105.61
Sample Weight (Oven Dried)			45.3

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			9.26
Sample <#10			36
% Passing #10			34.1

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	487.97	495.37	7.40	g	83.7	Gravel	
#10	2000	462.58	464.44	1.86	g	79.6	Sand	Coarse
#20	850	373.22	376.94	3.72	g	71.4	Sand	Medium
#40	425	361.25	364.15	2.90	g	65.0	Sand	Medium
#60	250	351.75	354.11	2.36	g	59.8	Sand	Fine
#80	180	318.72	320.32	1.60	g	56.3	Sand	Fine
#100	150	327.81	329.25	1.44	g	53.1	Sand	Fine
#200	75	313.65	320.83	7.18	g	37.3	Sand	Fine
				0.00	g	37.3		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	45.3

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0100	19.5	35.9	26.3	Silt	
5	5	1.0075	19.5	23.2	17.4	Silt	
15	15	1.0070	19.5	13.5	15.7	Silt	
30	30	1.0060	19.5	9.6	12.1	Silt	
60	58	1.0055	19.5	6.9	10.3	Silt	
250	256	1.0050	19.5	3.3	8.57	Clay	
1440	1440	1.0045	19.5	1.4	6.8	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-2 (8-10)
Lab Sample ID	620-4175-A-7

Date Received	4/27/2022
Start Date	05/26/2022 19:12
End Date	06/02/2022 14:00

Dry Weight Determination

Tin Weight	1.02	g
Wet Sample + Tin	26.79	g
Dry Sample + Tin	19.46	g
% Moisture	28.44	%

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

Date/Time in oven	05/26/2022 19:14
Date/Time out of oven	05/27/2022 16:54

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.86	151.71	103.85
Sample Weight (Oven Dried)			74.3

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			2.52
Sample <#10			71.8
% Passing #10			69.1

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	487.97	489.38	1.41	g	98.1	Gravel	
#10	2000	462.58	463.69	1.11	g	96.6	Sand	Coarse
#20	850	378.01	384.06	6.05	g	88.5	Sand	Medium
#40	425	366.13	369.78	3.65	g	83.6	Sand	Medium
#60	250	348.35	350.82	2.47	g	80.3	Sand	Fine
#80	180	337.38	337.74	0.36	g	79.8	Sand	Fine
#100	150	327.38	328.47	1.09	g	78.3	Sand	Fine
#200	75	312.29	313.58	1.29	g	76.6	Sand	Fine
				0.00	g	76.6		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	74.3

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0090	19.5	36.2	13.9	Silt	
5	5	1.0060	19.5	23.6	7.39	Silt	
15	15	1.0060	19.5	13.6	7.39	Silt	
30	29	1.0055	19.5	9.8	6.3	Silt	
60	58	1.0050	19.5	7	5.22	Silt	
250	250	1.0045	19.5	3.4	4.14	Clay	
1440	1434	1.0045	19.5	1.4	4.14	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-2 (11ft)
Lab Sample ID	620-4175-A-8

Date Received	4/27/2022
Start Date	05/26/2022 19:24
End Date	06/02/2022 14:06

Dry Weight Determination

Tin Weight	0.97	g
Wet Sample + Tin	28.02	g
Dry Sample + Tin	8.26	g
% Moisture	73.05	%

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

Date/Time in oven	05/26/2022 19:26
Date/Time out of oven	05/27/2022 16:55

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.31	217.87	170.56
Sample Weight (Oven Dried)			46

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			3.13
Sample <#10			42.9
% Passing #10			25.2

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	487.97	489.97	2.00	g	95.7	Gravel	
#10	2000	462.58	463.71	1.13	g	93.2	Sand	Coarse
#20	850	373.22	380.13	6.91	g	78.2	Sand	Medium
#40	425	361.25	364.97	3.72	g	70.1	Sand	Medium
#60	250	351.75	353.97	2.22	g	65.3	Sand	Fine
#80	180	318.72	319.80	1.08	g	63.0	Sand	Fine
#100	150	327.81	328.48	0.67	g	61.5	Sand	Fine
#200	75	313.65	315.47	1.82	g	57.5	Sand	Fine
				0.00	g	57.5		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	46

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0130	19.5	34.8	36.4	Silt	
5	5	1.0110	19.5	22.5	29.4	Silt	
15	15	1.0070	19.5	13.5	15.4	Silt	
30	29	1.0060	19.5	9.8	11.9	Silt	
60	63	1.0055	19.5	6.7	10.2	Silt	
250	250	1.0045	19.5	3.4	6.69	Clay	
1440	1434	1.0045	19.5	1.4	6.69	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-3 (0-7ft)
Lab Sample ID	620-4175-A-9

Date Received	4/27/2022
Start Date	05/26/2022 19:27
End Date	06/01/2022 13:04

Dry Weight Determination

Tin Weight	0.99	g
Wet Sample + Tin	32.58	g
Dry Sample + Tin	24.40	g
% Moisture	25.89	%

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

Date/Time in oven	05/26/2022 19:28
Date/Time out of oven	05/27/2022 16:55

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	44.68	216.82	172.14
Sample Weight (Oven Dried)			128

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			20.7
Sample <#10			107
% Passing #10			62.2

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	447.21	458.33	11.12	g	91.3	Gravel	
#4	4750	487.97	491.10	3.13	g	88.9	Gravel	
#10	2000	462.58	469.03	6.45	g	83.9	Sand	Coarse
#20	850	378.01	385.70	7.69	g	77.9	Sand	Medium
#40	425	366.13	376.81	10.68	g	69.6	Sand	Medium
#60	250	348.35	365.23	16.88	g	56.4	Sand	Fine
#80	180	337.38	348.58	11.20	g	47.7	Sand	Fine
#100	150	327.38	340.82	13.44	g	37.2	Sand	Fine
#200	75	312.29	336.85	24.56	g	18.0	Sand	Fine
				0.00	g	18.0		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	128

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0120	19.5	35.2	11.8	Silt	
5	5	1.0090	19.5	22.9	8.05	Silt	
15	15	1.0070	19.5	13.5	5.54	Silt	
30	31	1.0060	19.5	9.5	4.29	Silt	
60	60	1.0055	19.5	6.8	3.66	Silt	
250	240	1.0050	19.5	3.4	3.03	Clay	
1440	1424	1.0045	19.5	1.4	2.4	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-4 (0-6)
Lab Sample ID	620-4175-A-10

Date Received	4/27/2022
Start Date	05/26/2022 19:29
End Date	06/01/2022 13:08

Dry Weight Determination

Tin Weight	1.01	g
Wet Sample + Tin	37.83	g
Dry Sample + Tin	32.75	g
% Moisture	13.80	%

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

Date/Time in oven	05/26/2022 19:31
Date/Time out of oven	05/27/2022 16:56

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.75	240.27	192.52
Sample Weight (Oven Dried)			166

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			60.3
Sample <#10			106
% Passing #10			55.1

Hydrometer Data

Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	447.21	461.58	14.37	g	91.3	Gravel	
#4	4750	487.97	509.88	21.91	g	78.1	Gravel	
#10	2000	462.58	486.62	24.04	g	63.6	Sand	Coarse
#20	850	373.22	392.85	19.63	g	51.8	Sand	Medium
#40	425	361.25	374.04	12.79	g	44.1	Sand	Medium
#60	250	351.75	361.05	9.30	g	38.5	Sand	Fine
#80	180	318.72	324.23	5.51	g	35.2	Sand	Fine
#100	150	327.81	331.46	3.65	g	33.0	Sand	Fine
#200	75	313.65	325.86	12.21	g	25.6	Sand	Fine
				0.00	g	25.6		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	166

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0160	19.5	33.7	13	Silt	
5	5	1.0110	19.5	22.5	8.14	Silt	
15	15	1.0085	19.5	13.3	5.72	Silt	
30	31	1.0075	19.5	9.3	4.76	Silt	
60	59	1.0070	19.5	6.8	4.27	Silt	
250	234	1.0055	19.5	3.5	2.82	Clay	
1440	1418	1.0050	19.5	1.4	2.34	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-3 (10ft)
Lab Sample ID	620-4175-A-11

Date Received	4/27/2022
Start Date	05/26/2022 19:37
End Date	06/01/2022 14:43

Dry Weight Determination

Tin Weight	1.01	g
Wet Sample + Tin	25.35	g
Dry Sample + Tin	20.22	g
% Moisture	21.08	%

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

Date/Time in oven	05/26/2022 19:39
Date/Time out of oven	05/27/2022 16:56

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.84	228.38	180.54
Sample Weight (Oven Dried)			142

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			14.6
Sample <#10			127
% Passing #10			70.3

Hydrometer Data

Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	447.21	451.01	3.80	g	97.3	Gravel	
#4	4750	487.97	493.55	5.58	g	93.4	Gravel	
#10	2000	462.58	467.84	5.26	g	89.7	Sand	Coarse
#20	850	378.01	383.43	5.42	g	85.9	Sand	Medium
#40	425	366.13	372.80	6.67	g	81.2	Sand	Medium
#60	250	348.35	365.64	17.29	g	69.0	Sand	Fine
#80	180	337.38	351.79	14.41	g	58.9	Sand	Fine
#100	150	327.38	344.76	17.38	g	46.7	Sand	Fine
#200	75	312.29	342.94	30.65	g	25.1	Sand	Fine
				0.00	g	25.1		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	142

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0130	19.5	34.8	11.8	Silt	
5	5	1.0100	19.5	22.7	8.39	Silt	
15	15	1.0080	19.5	13.4	6.13	Silt	
30	31	1.0070	19.5	9.4	5	Silt	
60	59	1.0065	19.5	6.8	4.43	Silt	
250	265	1.0055	19.5	3.3	3.3	Clay	
1440	1412	1.0045	19.5	1.4	2.17	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-4 (6-7)
Lab Sample ID	620-4175-A-12

Date Received	4/27/2022
Start Date	05/26/2022 19:39
End Date	06/01/2022 14:50

Dry Weight Determination

Tin Weight	1.00	g
Wet Sample + Tin	35.11	g
Dry Sample + Tin	28.38	g
% Moisture	19.73	%

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

Date/Time in oven	05/26/2022 19:41
Date/Time out of oven	05/27/2022 16:56

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	44.06	267.22	223.16
Sample Weight (Oven Dried)			179

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			85.8
Sample <#10			93.2
% Passing #10			41.8

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	447.21	491.52	44.31	g	75.2	Gravel	
#4	4750	487.97	505.77	17.80	g	65.3	Gravel	
#10	2000	462.58	486.22	23.64	g	52.1	Sand	Coarse
#20	850	373.22	393.96	20.74	g	40.5	Sand	Medium
#40	425	361.25	375.47	14.22	g	32.6	Sand	Medium
#60	250	351.75	361.80	10.05	g	27.0	Sand	Fine
#80	180	318.72	324.62	5.90	g	23.7	Sand	Fine
#100	150	327.81	331.70	3.89	g	21.5	Sand	Fine
#200	75	313.65	326.33	12.68	g	14.4	Sand	Fine
				0.00	g	14.4		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	179

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0155	19.5	33.9	11.6	Silt	
5	5	1.0115	19.5	22.4	8	Silt	
15	15	1.0090	19.5	13.2	5.76	Silt	
30	32	1.0075	19.5	9.2	4.41	Silt	
60	60	1.0070	19.5	6.7	3.96	Silt	
250	259	1.0060	19.5	3.3	3.07	Clay	
1440	1406	1.0050	19.5	1.4	2.17	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-5 (0-6)
Lab Sample ID	620-4175-A-13

Date Received	4/27/2022
Start Date	05/26/2022 19:42
End Date	06/01/2022 14:59

Dry Weight Determination

Tin Weight	1.00	g
Wet Sample + Tin	41.54	g
Dry Sample + Tin	37.27	g
% Moisture	10.53	%

Non-soil material:	n/a
Shape (> #10):	subangular
Hardness (> #10):	hard

Date/Time in oven	05/26/2022 19:44
Date/Time out of oven	05/27/2022 16:57

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	44.69	346.89	302.2
Sample Weight (Oven Dried)			270

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			192
Sample <#10			78
% Passing #10			25.8

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	466.43	528.60	62.17	g	77.0	Gravel	
3/4 inch	19000	457.64	514.35	56.71	g	56.0	Gravel	
3/8 inch	9500	447.21	469.26	22.05	g	47.8	Gravel	
#4	4750	487.97	518.06	30.09	g	36.7	Gravel	
#10	2000	462.58	483.26	20.68	g	29.0	Sand	Coarse
#20	850	378.01	396.87	18.86	g	22.0	Sand	Medium
#40	425	366.13	377.66	11.53	g	17.7	Sand	Medium
#60	250	348.35	356.95	8.60	g	14.5	Sand	Fine
#80	180	337.38	340.62	3.24	g	13.3	Sand	Fine
#100	150	327.38	332.51	5.13	g	11.4	Sand	Fine
#200	75	312.29	321.97	9.68	g	7.8	Sand	Fine
				0.00	g	7.8		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	270

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0125	19.5	35	5.9	Silt	
5	5	1.0100	19.5	22.7	4.41	Silt	
15	15	1.0080	19.5	13.4	3.22	Silt	
30	30	1.0075	19.5	9.5	2.92	Silt	
60	63	1.0065	19.5	6.6	2.33	Silt	
250	253	1.0055	19.5	3.3	1.73	Clay	
1440	1400	1.0050	19.5	1.4	1.44	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-5 (6-7)
Lab Sample ID	620-4175-A-14

Date Received	4/27/2022
Start Date	05/26/2022 19:45
End Date	06/01/2022 15:05

Dry Weight Determination

Tin Weight	1.00	g
Wet Sample + Tin	34.30	g
Dry Sample + Tin	31.43	g
% Moisture	8.62	%

Non-soil material:	n/a
Shape (> #10):	subangular
Hardness (> #10):	hard

Date/Time in oven	05/26/2022 19:47
Date/Time out of oven	05/27/2022 16:57

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.86	345.03	297.17
Sample Weight (Oven Dried)			272

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			173
Sample <#10			99
% Passing #10			33.3

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	466.43	523.67	57.24	g	79.0	Gravel	
3/4 inch	19000	457.67	472.83	15.16	g	73.4	Gravel	
3/8 inch	9500	447.21	478.15	30.94	g	62.0	Gravel	
#4	4750	487.97	527.65	39.68	g	47.4	Gravel	
#10	2000	462.58	492.54	29.96	g	36.4	Sand	Coarse
#20	850	373.22	396.92	23.70	g	27.7	Sand	Medium
#40	425	361.25	375.28	14.03	g	22.5	Sand	Medium
#60	250	351.75	361.53	9.78	g	18.9	Sand	Fine
#80	180	318.72	324.27	5.55	g	16.9	Sand	Fine
#100	150	327.81	331.18	3.37	g	15.7	Sand	Fine
#200	75	313.65	323.37	9.72	g	12.1	Sand	Fine
				0.00	g	12.1		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	272

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0150	19.5	34.1	7.33	Silt	
5	5	1.0120	19.5	22.3	5.56	Silt	
15	15	1.0090	19.5	13.2	3.79	Silt	
30	30	1.0085	19.5	9.4	3.49	Silt	
60	57	1.0070	19.5	6.9	2.61	Silt	
250	247	1.0060	19.5	3.4	2.02	Clay	
1440	1394	1.0055	19.5	1.4	1.72	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-6 (9.5ft)
Lab Sample ID	620-4175-A-15

Date Received	4/27/2022
Start Date	05/26/2022 19:48
End Date	06/01/2022 15:15

Dry Weight Determination

Tin Weight	1.00	g
Wet Sample + Tin	39.22	g
Dry Sample + Tin	35.68	g
% Moisture	9.26	%

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

Date/Time in oven	05/26/2022 19:50
Date/Time out of oven	05/27/2022 16:57

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.87	268.70	220.83
Sample Weight (Oven Dried)			200

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			96.9
Sample <#10			103
% Passing #10			46.6

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	457.65	477.67	20.02	g	90.0	Gravel	
3/8 inch	9500	447.21	466.06	18.85	g	80.6	Gravel	
#4	4750	487.97	513.28	25.31	g	67.9	Gravel	
#10	2000	462.58	495.27	32.69	g	51.6	Sand	Coarse
#20	850	378.01	400.16	22.15	g	40.5	Sand	Medium
#40	425	366.13	378.32	12.19	g	34.4	Sand	Medium
#60	250	348.35	356.55	8.20	g	30.3	Sand	Fine
#80	180	337.38	340.63	3.25	g	28.7	Sand	Fine
#100	150	327.38	331.48	4.10	g	26.7	Sand	Fine
#200	75	312.29	321.59	9.30	g	22.1	Sand	Fine
				0.00	g	22.1		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	200

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0170	20.0	33.2	11.6	Silt	
5	5	1.0130	20.0	21.9	8.43	Silt	
15	15	1.0100	20.0	13	6.02	Silt	
30	30	1.0090	20.0	9.3	5.22	Silt	
60	63	1.0080	20.0	6.5	4.42	Silt	
250	241	1.0070	20.0	3.3	3.61	Clay	
1440	1388	1.0060	19.5	1.4	2.74	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-6 (5ft)
Lab Sample ID	620-4175-A-16

Date Received	4/27/2022
Start Date	05/26/2022 19:51
End Date	06/01/2022 15:23

Dry Weight Determination

Tin Weight	1.02	g
Wet Sample + Tin	28.22	g
Dry Sample + Tin	25.43	g
% Moisture	10.26	%

Non-soil material:	n/a
Shape (> #10):	subangular
Hardness (> #10):	hard

Date/Time in oven	05/26/2022 19:52
Date/Time out of oven	05/27/2022 16:58

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	44.76	286.19	241.43
Sample Weight (Oven Dried)			217

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			97.5
Sample <#10			120
% Passing #10			49.7

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
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	466.42	499.12	32.70	g	84.9	Gravel	
3/4 inch	19000	457.66	457.66	0.00	g	84.9	Gravel	
3/8 inch	9500	447.21	472.98	25.77	g	73.0	Gravel	
#4	4750	487.97	506.16	18.19	g	64.6	Gravel	
#10	2000	462.58	483.42	20.84	g	55.0	Sand	Coarse
#20	850	373.22	392.22	19.00	g	46.2	Sand	Medium
#40	425	361.25	374.19	12.94	g	40.2	Sand	Medium
#60	250	351.75	361.43	9.68	g	35.7	Sand	Fine
#80	180	318.72	324.29	5.57	g	33.1	Sand	Fine
#100	150	327.81	331.41	3.60	g	31.4	Sand	Fine
#200	75	313.65	326.32	12.67	g	25.6	Sand	Fine
				0.00	g	25.6		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	217

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0225	20.0	31	14.8	Silt	
5	5	1.0170	20.0	21	10.7	Silt	
15	15	1.0125	20.0	12.7	7.4	Silt	
30	31	1.0110	20.0	9	6.29	Silt	
60	57	1.0095	20.0	6.7	5.18	Silt	
250	235	1.0080	20.0	3.4	4.07	Clay	
1440	1382	1.0075	19.5	1.4	3.64	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-7 (0-6)
Lab Sample ID	620-4175-B-17

Date Received	4/27/2022
Start Date	05/27/2022 17:08
End Date	06/02/2022 14:19

Dry Weight Determination

Tin Weight	0.99	g
Wet Sample + Tin	24.49	g
Dry Sample + Tin	21.19	g
% Moisture	14.04	%

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

Date/Time in oven	05/27/2022 17:10
Date/Time out of oven	05/31/2022 21:22

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.49	240.91	193.42
Sample Weight (Oven Dried)			166

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			66.1
Sample <#10			99.9
% Passing #10			51.6

Hydrometer Data

Serial Number	542321
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0035
High Temp (C)	23.0
Reading at High Temp	1.0025
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.006333333
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	457.64	478.55	20.91	g	87.4	Gravel	
3/8 inch	9500	447.21	457.38	10.17	g	81.3	Gravel	
#4	4750	487.97	504.16	16.19	g	71.5	Gravel	
#10	2000	462.58	481.41	18.83	g	60.2	Sand	Coarse
#20	850	378.01	397.19	19.18	g	48.6	Sand	Medium
#40	425	366.13	381.61	15.48	g	39.3	Sand	Medium
#60	250	348.35	359.86	11.51	g	32.4	Sand	Fine
#80	180	337.38	341.63	4.25	g	29.8	Sand	Fine
#100	150	327.38	333.76	6.38	g	26.0	Sand	Fine
#200	75	312.29	324.54	12.25	g	18.6	Sand	Fine
				0.00	g	18.6		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	166

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0150	21.0	33.5	11.8	Silt	
5	5	1.0115	21.0	22	8.39	Silt	
15	15	1.0090	21.0	13	5.97	Silt	
30	30	1.0080	21.0	9.3	5	Silt	
60	59	1.0070	20.5	6.7	3.95	Silt	
250	256	1.0060	19.5	3.3	2.82	Clay	
1440	1440	1.0050	20.5	1.4	2.02	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-7 (6-7ft)
Lab Sample ID	620-4175-A-18

Date Received	4/27/2022
Start Date	05/27/2022 17:11
End Date	06/02/2022 14:23

Dry Weight Determination

Tin Weight	0.99	g
Wet Sample + Tin	35.03	g
Dry Sample + Tin	31.11	g
% Moisture	11.52	%

Non-soil material:	n/a
Shape (> #10):	subangular
Hardness (> #10):	hard

Date/Time in oven	05/27/2022 17:12
Date/Time out of oven	05/31/2022 21:22

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.50	268.42	220.92
Sample Weight (Oven Dried)			195

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			82.9
Sample <#10			112
% Passing #10			50.7

Hydrometer Data	
Serial Number	542321
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0035
High Temp (C)	23.0
Reading at High Temp	1.0025
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.006333333
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	457.67	472.63	14.96	g	92.3	Gravel	
3/8 inch	9500	447.21	465.23	18.02	g	83.1	Gravel	
#4	4750	487.97	510.85	22.88	g	71.4	Gravel	
#10	2000	462.58	489.58	27.00	g	57.6	Sand	Coarse
#20	850	373.22	399.32	26.10	g	44.2	Sand	Medium
#40	425	361.25	382.61	21.36	g	33.2	Sand	Medium
#60	250	351.75	366.02	14.27	g	25.9	Sand	Fine
#80	180	318.72	326.14	7.42	g	22.1	Sand	Fine
#100	150	327.81	332.09	4.28	g	19.9	Sand	Fine
#200	75	313.65	325.94	12.29	g	13.6	Sand	Fine
				0.00	g	13.6		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	195

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0130	21.0	34.2	8.37	Silt	
5	5	1.0100	21.0	22.3	5.9	Silt	
15	15	1.0080	21.0	13.1	4.26	Silt	
30	30	1.0070	21.0	9.4	3.43	Silt	
60	58	1.0065	20.5	6.8	2.95	Silt	
250	256	1.0055	19.5	3.3	1.99	Clay	
1440	1440	1.0045	20.5	1.4	1.3	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	TP-7 (10ft)
Lab Sample ID	620-4175-A-19

Date Received	4/27/2022
Start Date	05/27/2022 17:13
End Date	06/02/2022 14:59

Dry Weight Determination

Tin Weight	1.02	g
Wet Sample + Tin	23.84	g
Dry Sample + Tin	21.71	g
% Moisture	9.33	%

Non-soil material:	n/a
Shape (> #10):	subangular
Hardness (> #10):	hard

Date/Time in oven	05/27/2022 17:14
Date/Time out of oven	05/31/2022 21:23

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	44.70	249.86	205.16
Sample Weight (Oven Dried)			186

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			81.8
Sample <#10			104
% Passing #10			50.7

Hydrometer Data	
Serial Number	542321
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0035
High Temp (C)	23.0
Reading at High Temp	1.0025
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.006333333
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	457.64	486.51	28.87	g	84.5	Gravel	
3/8 inch	9500	447.21	462.29	15.08	g	76.4	Gravel	
#4	4750	487.97	507.82	19.85	g	65.7	Gravel	
#10	2000	462.58	480.62	18.04	g	56.0	Sand	Coarse
#20	850	378.01	396.65	18.64	g	46.0	Sand	Medium
#40	425	366.13	380.92	14.79	g	38.0	Sand	Medium
#60	250	348.35	358.40	10.05	g	32.6	Sand	Fine
#80	180	337.38	341.49	4.11	g	30.4	Sand	Fine
#100	150	327.38	333.05	5.67	g	27.4	Sand	Fine
#200	75	312.29	326.07	13.78	g	20.0	Sand	Fine
				0.00	g	20.0		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	186

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0170	21.0	32.7	12.2	Silt	
5	5	1.0125	21.0	21.7	8.35	Silt	
15	15	1.0100	21.0	12.9	6.19	Silt	
30	29	1.0085	21.0	9.4	4.89	Silt	
60	58	1.0075	20.5	6.7	3.96	Silt	
250	250	1.0065	19.5	3.3	2.95	Clay	
1440	1434	1.0050	20.0	1.4	1.73	Clay	

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Geotechnical

Analysis Batch: 180399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4175-5	TP-1 (0-7)	Total/NA	Solid	D422	
620-4175-6	TP-2 (0-6)	Total/NA	Solid	D422	
620-4175-7	TP-2 (8-10)	Total/NA	Solid	D422	
620-4175-8	TP-2 (11ft)	Total/NA	Solid	D422	
620-4175-9	TP-3 (0-7ft)	Total/NA	Solid	D422	
620-4175-10	TP-4 (0-6)	Total/NA	Solid	D422	
620-4175-11	TP-3 (10ft)	Total/NA	Solid	D422	
620-4175-12	TP-4 (6-7)	Total/NA	Solid	D422	
620-4175-13	TP-5 (0-6)	Total/NA	Solid	D422	
620-4175-14	TP-5 (6-7)	Total/NA	Solid	D422	
620-4175-15	TP-6 (9.5ft)	Total/NA	Solid	D422	
620-4175-16	TP-6 (5ft)	Total/NA	Solid	D422	
620-4175-17	TP-7 (0-6)	Total/NA	Solid	D422	
620-4175-18	TP-7 (6-7ft)	Total/NA	Solid	D422	
620-4175-19	TP-7 (10ft)	Total/NA	Solid	D422	

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-1 (0-7)
Date Collected: 04/26/22 09:50
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:06	MAP	TAL BUR

Client Sample ID: TP-2 (0-6)
Date Collected: 04/26/22 08:10
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:09	MAP	TAL BUR

Client Sample ID: TP-2 (8-10)
Date Collected: 04/26/22 08:25
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:12	MAP	TAL BUR

Client Sample ID: TP-2 (11ft)
Date Collected: 04/26/22 08:30
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:24	MAP	TAL BUR

Client Sample ID: TP-3 (0-7ft)
Date Collected: 04/26/22 09:25
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:27	MAP	TAL BUR

Client Sample ID: TP-4 (0-6)
Date Collected: 04/26/22 12:15
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:29	MAP	TAL BUR

Client Sample ID: TP-3 (10ft)
Date Collected: 04/26/22 10:00
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:37	MAP	TAL BUR

Lab Chronicle

Client: AECOM
Job ID: 620-4175-2
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: TP-4 (6-7)
Lab Sample ID: 620-4175-12
Date Collected: 04/26/22 12:10
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:39	MAP	TAL BUR

Client Sample ID: TP-5 (0-6)
Lab Sample ID: 620-4175-13
Date Collected: 04/26/22 13:20
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:42	MAP	TAL BUR

Client Sample ID: TP-5 (6-7)
Lab Sample ID: 620-4175-14
Date Collected: 04/26/22 13:12
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:45	MAP	TAL BUR

Client Sample ID: TP-6 (9.5ft)
Lab Sample ID: 620-4175-15
Date Collected: 04/27/22 12:10
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:48	MAP	TAL BUR

Client Sample ID: TP-6 (5ft)
Lab Sample ID: 620-4175-16
Date Collected: 04/27/22 12:00
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/26/22 19:51	MAP	TAL BUR

Client Sample ID: TP-7 (0-6)
Lab Sample ID: 620-4175-17
Date Collected: 04/27/22 08:20
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/27/22 17:08	MAP	TAL BUR

Client Sample ID: TP-7 (6-7ft)
Lab Sample ID: 620-4175-18
Date Collected: 04/27/22 08:25
Matrix: Solid
Date Received: 04/27/22 13:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/27/22 17:11	MAP	TAL BUR

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Client Sample ID: TP-7 (10ft)

Date Collected: 04/27/22 08:30
Date Received: 04/27/22 13:06

Lab Sample ID: 620-4175-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	180399	05/27/22 17:13	MAP	TAL BUR

Laboratory References:

TAL BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4175-2
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-23
Florida	NELAP	E87467	06-30-22
Minnesota	NELAP	050-999-436	12-31-22
New Hampshire	NELAP	2006	12-18-22
New Jersey	NELAP	VT972	06-30-22
New York	NELAP	10391	04-01-23
Pennsylvania	NELAP	68-00489	04-30-23
Rhode Island	State	LAO00298	12-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-23
Virginia	NELAP	460209	12-14-22
Wisconsin	State	399133350	08-31-22

Method Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Method	Method Description	Protocol	Laboratory
D422	Grain Size	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International

Laboratory References:

TAL BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4175-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4175-5	TP-1 (0-7)	Solid	04/26/22 09:50	04/27/22 13:06
620-4175-6	TP-2 (0-6)	Solid	04/26/22 08:10	04/27/22 13:06
620-4175-7	TP-2 (8-10)	Solid	04/26/22 08:25	04/27/22 13:06
620-4175-8	TP-2 (11ft)	Solid	04/26/22 08:30	04/27/22 13:06
620-4175-9	TP-3 (0-7ft)	Solid	04/26/22 09:25	04/27/22 13:06
620-4175-10	TP-4 (0-6)	Solid	04/26/22 12:15	04/27/22 13:06
620-4175-11	TP-3 (10ft)	Solid	04/26/22 10:00	04/27/22 13:06
620-4175-12	TP-4 (6-7)	Solid	04/26/22 12:10	04/27/22 13:06
620-4175-13	TP-5 (0-6)	Solid	04/26/22 13:20	04/27/22 13:06
620-4175-14	TP-5 (6-7)	Solid	04/26/22 13:12	04/27/22 13:06
620-4175-15	TP-6 (9.5ft)	Solid	04/27/22 12:10	04/27/22 13:06
620-4175-16	TP-6 (5ft)	Solid	04/27/22 12:00	04/27/22 13:06
620-4175-17	TP-7 (0-6)	Solid	04/27/22 08:20	04/27/22 13:06
620-4175-18	TP-7 (6-7ft)	Solid	04/27/22 08:25	04/27/22 13:06
620-4175-19	TP-7 (10ft)	Solid	04/27/22 08:30	04/27/22 13:06

620-4175 Chain of Custody

ment Testing
New England

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- [x] Standard TAT 7 to 10 business days
- [ ] Rush TAT Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell
AECOM
10 Orms St
Providence, RI 02904
Telephone #: 401-854-2808
Project Mgr: Bruce Bartel

Invoice To:

P.O No. TBD Quote #:

Project No: 60680132 203
Site Name: 295137
Location: Johnston, RI State:
Sampler(s): Courtney Toomey

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic Bags	Analysis: VOC's	SVOC's	PCB's	TPH DRO	Pesticides	PP13 + BaMnZn	Sieve Grain size	Hydrometer	Check if chlorinated
01	TP7 (6-7)	4/27/22	0800	G/C	SO	3	2			x	x	x	x	x	x			
02	TP7 (0-6)	4/27/22	0815	G/C	SO	3	2			x	x	x	x	x	x			
03	TP6 ~~(6-7)~~ 5ft (C)	4/27/22	1200	G/C	SO	3	2			x	x	x	x	x	x			
04	TP6 ~~(0-6)~~ 9.5ft (G)	4/27/22	1210	G/C	SO	3	2			x	x	x	x	x	x			
05	TP1 (0-7)	4/26/22	0950	G/C	SO				1							x	x	
06	TP2 (0-6)	4/26/22	0810	G/C	SO				1							x	x	
07	TP2 (8-10)	4/26/22	0825	G/C	SO				1							x	x	
08	TP2 (11ft)	4/26/22	0830	G/C	SO				1							x	x	
09	TP3 (0-7ft)	4/26/22	0925	G/C	SO				1							x	x	
10	TP4 (0-6)	4/26/22	1215	G/C	SO				1							x	x	

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may apply

MA DEP MCP CAM Report? Yes No
CT DPH RCP Report? Yes No
- [ ] Standard - [ ] No QC
- [ ] DQA*
- [ ] ASP A* - [ ] ASP B*
- [ ] NJ Reduced* - [ ] NJ Full*
- [ ] Tier II* - [ ] Tier IV*
- [ ] Other: _____

State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Courtney Toomey		4/27/22	13 06

Temp °C: Observed 42; Correction Factor .2; Corrected 44; IR ID # 6

- [ ] EDD format:
- [x] E-mail to: patrick.haskell@aecom.com

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [x] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

4 73

eurofins | Environment Testing New England

CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:

- [x] Standard TAT 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell
AECOM
10 Orms St
Providence RI 02904
Telephone #: 401 854 2808
Project Mgr: Bruce Bartel

Invoice To: _____

P.O No.: TBD Quote #: _____

Project No: 60680132 203
Site Name: 295/37
Location: Johnston State: RI
Sampler(s): Courtney Toomey

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic Bags	Sieve Grain Size by Hydrometer	Analysis	Check if chlorinated
11	TP3 (10 ft)	4/26/22	1000	G/C	So				1	X	X	
12	TP4 (6-7)		1210		So				2	X	X	
13	TP5 (0-6)		1320		So				1	X	X	
14	TP5 (6-7)		1312		So				1	X	X	
15	TP6 ~~(0-6)~~ 7.5ft	4/27/22	1210		So				1	X	X	
16	TP6 (~~7-10~~ 5ft		1200		So				1	X	X	
17	TP7 (0-6)		0820		So				2	X	X	
~~18~~	~~TP7 (7ft) (DT)~~				So					X	X	
18	TP7 (6-7ft)		0825		So				1	X	X	
19	TP7 (10 ft)		0830		So				1	X	X	

Relinquished by:	Received by:	Date:	Time:
Courtney Toomey		4/27/22	13:06

Temp °C: Observed 4.2; Correction Factor 0.2; Corrected 4.4; IR ID # 6

- [ ] EDD format:
- [x] E-mail to: patrick.haskell@aecom.com

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [x] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[ ] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[ ] Other: _____
State-specific reporting standards:

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

620-4175 Chain of Custody

Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R		
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	Rhode Island	Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Rhode Island		Job #: 620-4175-2
Address: 530 Community Drive, Suite 11,	Due Date Requested: 5/17/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: I295/Rt 37 - Johnston, RI	Project #: 62001238			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	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/ Grain Size (Sieve and Hydrometer)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TP-1 (0-7) (620-4175-5)	4/26/22	09:50 Eastern		Solid			X	1	
TP-2 (0-6) (620-4175-6)	4/26/22	08.10 Eastern		Solid			X	1	
TP-2 (8-10) (620-4175-7)	4/26/22	08:25 Eastern		Solid			X	1	
TP-2 (11ft) (620-4175-8)	4/26/22	08:30 Eastern		Solid			X	1	
TP-3 (0-7ft) (620-4175-9)	4/26/22	09:25 Eastern		Solid			X	1	
TP-4 (0-6) (620-4175-10)	4/26/22	12:15 Eastern		Solid			X	1	
TP-3 (10ft) (620-4175-11)	4/26/22	10.00 Eastern		Solid			X	1	
TP-4 (6-7) (620-4175-12)	4/26/22	12.10 Eastern		Solid			X	2	
TP-5 (0-6) (620-4175-13)	4/26/22	13.20 Eastern		Solid			X	1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by:	Date/Time: 4/27/22 17:43	Company: ENE	Received by:	Date/Time: 4/28/22 10:35	Company: TABURI	
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company	
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-3828 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Rhode Island	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State - Rhode Island		Job #: 620-4175-2
Address: 530 Community Drive, Suite 11,	Due Date Requested: 5/17/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: I295/Rt 37 - Johnston, RI	Project #: 62001238			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	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/ Grain Size (Sieve and Hydrometer)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TP-5 (6-7) (620-4175-14)	4/26/22	13:12 Eastern		Solid			X	1	
TP-6 (9.5ft) (620-4175-15)	4/27/22	12:10 Eastern		Solid			X	1	
TP-6 (5ft) (620-4175-16)	4/27/22	12:00 Eastern		Solid			X	1	
TP-7 (0-6) (620-4175-17)	4/27/22	08.20 Eastern		Solid			X	2	
TP-7 (6-7ft) (620-4175-18)	4/27/22	08:25 Eastern		Solid			X	1	
TP-7 (10ft) (620-4175-19)	4/27/22	08:30 Eastern		Solid			X	1	

Note, Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time.	Company	Received by:	Date/Time.	Company
				4/28/22 10:35	STARLIMS
Relinquished by:	Date/Time.	Company	Received by:	Date/Time.	Company
Relinquished by:	Date/Time.	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

ORIGIN ID:EHTA (413) 789-9018
JAIME FLORES
EUROFINS SPECTRUM ANALYTICAL
11 ALMGREN DRIVE

AGAWAM, MA 01001
UNITED STATES US

SHIP DATE: 27APR22
ACTWGT: 50.00 LB
CAD: 108821262/INET4490

BILL SENDER

TO SAMPLE RECEIVING
TEST AMERICA - BURLINGTON, VT
30 COMMUNITY DR
STE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF WORKSHARE 4 27
INV:
PO: DEPT

5742/BDF9/FE4A

FedEx Express

J22202204120tuu

FedEx
TRK# 0201 7767 1060 8630

THU - 28 APR 10:30A
THU - 28 APR AA
PRIORITY OVERNIGHT

XE BTVA

05403
VT-US
BTV

3961713 27Apr2022 PVDA 56DG2/BDF9/C0B8

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-3828.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Rhode Island	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Rhode Island		Job #: 620-4175-2
Address: 530 Community Drive, Suite 11,	Due Date Requested: 5/17/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: I295/Rt 37 - Johnston, RI	Project #: 62001238			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	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/ Grain Size (Sieve and Hydrometer)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TP-1 (0-7) (620-4175-5)	4/26/22	09:50 Eastern		Solid			X	1	
TP-2 (0-6) (620-4175-6)	4/26/22	08:10 Eastern		Solid			X	1	
TP-2 (8-10) (620-4175-7)	4/26/22	08:25 Eastern		Solid			X	1	
TP-2 (11ft) (620-4175-8)	4/26/22	08:30 Eastern		Solid			X	1	
TP-3 (0-7ft) (620-4175-9)	4/26/22	09:25 Eastern		Solid			X	1	
TP-4 (0-6) (620-4175-10)	4/26/22	12:15 Eastern		Solid			X	1	
TP-3 (10ft) (620-4175-11)	4/26/22	10:00 Eastern		Solid			X	1	
TP-4 (6-7) (620-4175-12)	4/26/22	12:10 Eastern		Solid			X	2	
TP-5 (0-6) (620-4175-13)	4/26/22	13:20 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/27/22 12:43	Company ENE	Received by:	Date/Time: 4/28/22 10:35	Company TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4175-2

Login Number: 4175
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4175-2

Login Number: 4175
List Number: 2
Creator: Khudaier, Zahraa

List Source: Eurofins Burlington
List Creation: 04/28/22 02:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are 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 is acceptable.	True	
Cooler Temperature is recorded.	True	1.1ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4595-1
Client Project/Site: Pawtucket Tunnel - Pawtucket, RI

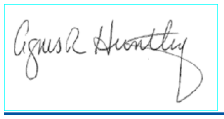
For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
5/31/2022 5:39:51 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

I certify that I have reviewed the report and to the best of my knowledge the data provided is accurate and correct and all analytical testing conforms to 40 CFR Part 136.3 as amended.



Agnes Huntley
Project Manager
5/31/2022 5:39:51 PM

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

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)
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

Case Narrative

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Job ID: 620-4595-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4595-1

Comments
No additional comments.

Receipt
The samples were received on 5/20/2022 10:09 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 was 4.4º C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

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

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

Detection Summary

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Client Sample ID: INFQ1_051922 — Lab Sample ID: 620-4595-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.88		2.00		ug/L	1		200.8 Rev 5.4	Total/NA
Total Suspended Solids	103		5.00		mg/L	1		SM 2540D	Total/NA

Client Sample ID: EFFFQ1_051922 — Lab Sample ID: 620-4595-2

No Detections.

Client Sample ID: INFQ2_051922 — Lab Sample ID: 620-4595-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.08		2.00		ug/L	1		200.8 Rev 5.4	Total/NA
Total Suspended Solids	143		5.00		mg/L	1		SM 2540D	Total/NA

Client Sample ID: EEFQ2_051922 — Lab Sample ID: 620-4595-4

No Detections.

Client Sample ID: INFQ3_051922 — Lab Sample ID: 620-4595-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.05		2.00		ug/L	1		200.8 Rev 5.4	Total/NA
Total Suspended Solids	145		5.00		mg/L	1		SM 2540D	Total/NA

Client Sample ID: EFFQ3_051922 — Lab Sample ID: 620-4595-6

No Detections.

Client Sample ID: INFQ4_051922 — Lab Sample ID: 620-4595-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.79		2.00		ug/L	1		200.8 Rev 5.4	Total/NA
Total Suspended Solids	40.0		5.00		mg/L	1		SM 2540D	Total/NA

Client Sample ID: EFFQ4_051922 — Lab Sample ID: 620-4595-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Oil & Grease	2.7		2.2		mg/L	1		1664B	Total/NA

Client Sample ID: EFFComp_051922 — Lab Sample ID: 620-4595-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.95		2.00		ug/L	1		200.8 Rev 5.4	Total/NA
Chromium	2.79		2.00		ug/L	1		200.8 Rev 5.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Client Sample ID: INFQ1_051922
Lab Sample ID: 620-4595-1
Date Collected: 05/19/22 08:30
Matrix: Water
Date Received: 05/20/22 10:09

Method: 200.8 Rev 5.4 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.88		2.00		ug/L		05/25/22 15:13	05/27/22 16:08	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	103		5.00		mg/L			05/24/22 18:07	1

Client Sample Results

Client: AECOM
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Job ID: 620-4595-1

Client Sample ID: EFFFQ1_051922
Date Collected: 05/19/22 08:30
Date Received: 05/20/22 10:09

Lab Sample ID: 620-4595-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		2.1		mg/L		05/31/22 10:45	05/31/22 14:23	1

Client Sample Results

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Client Sample ID: INFQ2_051922
Lab Sample ID: 620-4595-3
Date Collected: 05/19/22 14:30
Matrix: Water
Date Received: 05/20/22 10:09

Method: 200.8 Rev 5.4 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.08		2.00		ug/L		05/25/22 15:13	05/27/22 15:50	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	143		5.00		mg/L			05/24/22 18:07	1

Client Sample Results

Client: AECOM
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Job ID: 620-4595-1

Client Sample ID: EEFQ2_051922
Date Collected: 05/19/22 14:30
Date Received: 05/20/22 10:09

Lab Sample ID: 620-4595-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		2.2		mg/L		05/31/22 10:45	05/31/22 14:23	1

Client Sample Results

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Client Sample ID: INFQ3_051922
Date Collected: 05/19/22 16:30
Date Received: 05/20/22 10:09

Lab Sample ID: 620-4595-5
Matrix: Water

Method: 200.8 Rev 5.4 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.05		2.00		ug/L		05/25/22 15:13	05/27/22 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	145		5.00		mg/L			05/24/22 18:07	1

Client Sample Results

Client: AECOM
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Job ID: 620-4595-1

Client Sample ID: EFFQ3_051922

Date Collected: 05/19/22 16:30
Date Received: 05/20/22 10:09

Lab Sample ID: 620-4595-6

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		2.2		mg/L		05/31/22 10:45	05/31/22 14:23	1

Client Sample Results

Client: AECOM
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Job ID: 620-4595-1

Client Sample ID: INFQ4_051922

Date Collected: 05/20/22 08:30
Date Received: 05/20/22 10:09

Lab Sample ID: 620-4595-7

Matrix: Water

Method: 200.8 Rev 5.4 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.79		2.00		ug/L		05/26/22 05:02	05/27/22 17:58	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	40.0		5.00		mg/L			05/24/22 18:07	1

Client Sample Results

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Client Sample ID: EFFQ4_051922
Lab Sample ID: 620-4595-8
Date Collected: 05/20/22 08:30
Matrix: Water
Date Received: 05/20/22 10:09

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	2.7		2.2		mg/L		05/31/22 10:45	05/31/22 14:23	1

Client Sample Results

Client: AECOM
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Job ID: 620-4595-1

Client Sample ID: EFFComp_051922

Date Collected: 05/20/22 08:30
Date Received: 05/20/22 10:09

Lab Sample ID: 620-4595-9

Matrix: Water

Method: 200.8 Rev 5.4 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.95**		2.00		ug/L		05/25/22 15:13	05/27/22 16:10	1
Cadmium	ND		0.500		ug/L		05/25/22 15:13	05/27/22 16:10	1
Chromium	**2.79**		2.00		ug/L		05/25/22 15:13	05/27/22 16:10	1
Copper	ND		1.00		ug/L		05/25/22 15:13	05/27/22 16:10	1
Lead	ND		0.500		ug/L		05/25/22 15:13	05/27/22 16:10	1
Nickel	ND		1.00		ug/L		05/25/22 15:13	05/27/22 16:10	1
Silver	ND		0.500		ug/L		05/25/22 15:13	05/27/22 16:10	1
Zinc	ND		10.0		ug/L		05/25/22 15:13	05/27/22 16:10	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		5.00		mg/L			05/24/22 18:07	1

Method: 200.8 Rev 5.4 - Metals (ICP/MS)

Lab Sample ID: MB 410-259067/1-A
Matrix: Water
Analysis Batch: 259911

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259067

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.00		ug/L		05/25/22 15:13	05/27/22 15:46	1
Cadmium	ND		0.500		ug/L		05/25/22 15:13	05/27/22 15:46	1
Chromium	ND		2.00		ug/L		05/25/22 15:13	05/27/22 15:46	1
Copper	ND		1.00		ug/L		05/25/22 15:13	05/27/22 15:46	1
Lead	ND		0.500		ug/L		05/25/22 15:13	05/27/22 15:46	1
Nickel	ND		1.00		ug/L		05/25/22 15:13	05/27/22 15:46	1
Silver	ND		0.500		ug/L		05/25/22 15:13	05/27/22 15:46	1
Zinc	ND		10.0		ug/L		05/25/22 15:13	05/27/22 15:46	1

Lab Sample ID: LCS 410-259067/2-A
Matrix: Water
Analysis Batch: 259911

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259067

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			500	514.4		ug/L		103	85 - 115		
Cadmium			50.0	51.67		ug/L		103	85 - 115		
Chromium			500	494.7		ug/L		99	85 - 115		
Copper			500	502.9		ug/L		101	85 - 115		
Lead			50.0	51.31		ug/L		103	85 - 115		
Nickel			500	512.9		ug/L		103	85 - 115		
Silver			50.0	48.67		ug/L		97	85 - 115		
Zinc			500	519.8		ug/L		104	85 - 115		

Lab Sample ID: 620-4595-3 MS
Matrix: Water
Analysis Batch: 259911

Client Sample ID: INFQ2_051922
Prep Type: Total/NA
Prep Batch: 259067

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	6.08		500	525.2		ug/L		104	70 - 130		
Cadmium	ND		50.0	52.20		ug/L		104	70 - 130		
Chromium	6.52		500	514.4		ug/L		102	70 - 130		
Copper	5.65		500	500.1		ug/L		99	70 - 130		
Lead	5.39		50.0	56.93		ug/L		103	70 - 130		
Nickel	2.00		500	507.8		ug/L		101	70 - 130		
Silver	ND		50.0	48.39		ug/L		97	70 - 130		
Zinc	17.8		500	531.0		ug/L		103	70 - 130		

Lab Sample ID: 620-4595-3 DU
Matrix: Water
Analysis Batch: 259911

Client Sample ID: INFQ2_051922
Prep Type: Total/NA
Prep Batch: 259067

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Arsenic	6.08			6.125		ug/L				0.7	20
Cadmium	ND			ND		ug/L				NC	20
Chromium	6.52			6.681		ug/L				3	20
Copper	5.65			5.662		ug/L				0.2	20
Lead	5.39			5.461		ug/L				1	20
Nickel	2.00			2.078		ug/L				4	20
Silver	ND			ND		ug/L				NC	20

Method: 200.8 Rev 5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 620-4595-3 DU
Matrix: Water
Analysis Batch: 259911

Client Sample ID: INFQ2_051922
Prep Type: Total/NA
Prep Batch: 259067

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Zinc	17.8			18.09		ug/L				2	20

Lab Sample ID: MB 410-259217/1-A
Matrix: Water
Analysis Batch: 260008

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259217

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.00		ug/L		05/26/22 05:02	05/27/22 17:44	1

Lab Sample ID: LCS 410-259217/2-A
Matrix: Water
Analysis Batch: 260008

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259217

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			500	494.9		ug/L		99	85 - 115		

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 620-11328/1-A
Matrix: Water
Analysis Batch: 11342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11328

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		2.0		mg/L		05/31/22 10:45	05/31/22 14:23	1

Lab Sample ID: LCS 620-11328/2-A
Matrix: Water
Analysis Batch: 11342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11328

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease			40.0	34.10		mg/L		85	78 - 114		

Lab Sample ID: LCSD 620-11328/3-A
Matrix: Water
Analysis Batch: 11342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11328

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Oil & Grease			40.0	34.40		mg/L		86	78 - 114	1	11

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 620-11130/1
Matrix: Water
Analysis Batch: 11130

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		5.00		mg/L			05/24/22 18:07	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCDSRM 620-11130/3
Matrix: Water
Analysis Batch: 11130

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

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids			100	98.00		mg/L		98.0	110. - 77.1 0	13	

Lab Sample ID: LCSSRM 620-11130/2
Matrix: Water
Analysis Batch: 11130

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

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	86.00		mg/L		86.0	110. - 77.1 0		

Metals

Prep Batch: 259067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4595-1	INFQ1_051922	Total/NA	Water	200.8 Rev 5.4	
620-4595-3	INFQ2_051922	Total/NA	Water	200.8 Rev 5.4	
620-4595-5	INFQ3_051922	Total/NA	Water	200.8 Rev 5.4	
620-4595-9	EFFComp_051922	Total/NA	Water	200.8 Rev 5.4	
MB 410-259067/1-A	Method Blank	Total/NA	Water	200.8 Rev 5.4	
LCS 410-259067/2-A	Lab Control Sample	Total/NA	Water	200.8 Rev 5.4	
620-4595-3 MS	INFQ2_051922	Total/NA	Water	200.8 Rev 5.4	
620-4595-3 DU	INFQ2_051922	Total/NA	Water	200.8 Rev 5.4	

Prep Batch: 259217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4595-7	INFQ4_051922	Total/NA	Water	200.8 Rev 5.4	
MB 410-259217/1-A	Method Blank	Total/NA	Water	200.8 Rev 5.4	
LCS 410-259217/2-A	Lab Control Sample	Total/NA	Water	200.8 Rev 5.4	

Analysis Batch: 259911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4595-1	INFQ1_051922	Total/NA	Water	200.8 Rev 5.4	259067
620-4595-3	INFQ2_051922	Total/NA	Water	200.8 Rev 5.4	259067
620-4595-5	INFQ3_051922	Total/NA	Water	200.8 Rev 5.4	259067
620-4595-9	EFFComp_051922	Total/NA	Water	200.8 Rev 5.4	259067
MB 410-259067/1-A	Method Blank	Total/NA	Water	200.8 Rev 5.4	259067
LCS 410-259067/2-A	Lab Control Sample	Total/NA	Water	200.8 Rev 5.4	259067
620-4595-3 MS	INFQ2_051922	Total/NA	Water	200.8 Rev 5.4	259067
620-4595-3 DU	INFQ2_051922	Total/NA	Water	200.8 Rev 5.4	259067

Analysis Batch: 260008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4595-7	INFQ4_051922	Total/NA	Water	200.8 Rev 5.4	259217
MB 410-259217/1-A	Method Blank	Total/NA	Water	200.8 Rev 5.4	259217
LCS 410-259217/2-A	Lab Control Sample	Total/NA	Water	200.8 Rev 5.4	259217

General Chemistry

Analysis Batch: 11130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4595-1	INFQ1_051922	Total/NA	Water	SM 2540D	
620-4595-3	INFQ2_051922	Total/NA	Water	SM 2540D	
620-4595-5	INFQ3_051922	Total/NA	Water	SM 2540D	
620-4595-7	INFQ4_051922	Total/NA	Water	SM 2540D	
620-4595-9	EFFComp_051922	Total/NA	Water	SM 2540D	
MB 620-11130/1	Method Blank	Total/NA	Water	SM 2540D	
LCDSRM 620-11130/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
LCSSRM 620-11130/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Prep Batch: 11328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4595-2	EFFFQ1_051922	Total/NA	Water	1664B	
620-4595-4	EEFQ2_051922	Total/NA	Water	1664B	
620-4595-6	EFFQ3_051922	Total/NA	Water	1664B	
620-4595-8	EFFQ4_051922	Total/NA	Water	1664B	

General Chemistry (Continued)

Prep Batch: 11328 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-11328/1-A	Method Blank	Total/NA	Water	1664B	
LCS 620-11328/2-A	Lab Control Sample	Total/NA	Water	1664B	
LCSD 620-11328/3-A	Lab Control Sample Dup	Total/NA	Water	1664B	

Analysis Batch: 11342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4595-2	EFFFQ1_051922	Total/NA	Water	1664B	11328
620-4595-4	EEFQ2_051922	Total/NA	Water	1664B	11328
620-4595-6	EFFQ3_051922	Total/NA	Water	1664B	11328
620-4595-8	EFFQ4_051922	Total/NA	Water	1664B	11328
MB 620-11328/1-A	Method Blank	Total/NA	Water	1664B	11328
LCS 620-11328/2-A	Lab Control Sample	Total/NA	Water	1664B	11328
LCSD 620-11328/3-A	Lab Control Sample Dup	Total/NA	Water	1664B	11328

Lab Chronicle

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Client Sample ID: INFQ1_051922
Lab Sample ID: 620-4595-1
Date Collected: 05/19/22 08:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8 Rev 5.4			259067	05/25/22 15:13	UJLA	ELLE
Total/NA	Analysis	200.8 Rev 5.4		1	259911	05/27/22 16:08	SQ8U	ELLE
Total/NA	Analysis	SM 2540D		1	11130	05/24/22 18:07	PN	ENE

Client Sample ID: EFFFQ1_051922
Lab Sample ID: 620-4595-2
Date Collected: 05/19/22 08:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664B			11328	05/31/22 10:45	JMF	ENE
Total/NA	Analysis	1664B		1	11342	05/31/22 14:23	JMF	ENE

Client Sample ID: INFQ2_051922
Lab Sample ID: 620-4595-3
Date Collected: 05/19/22 14:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8 Rev 5.4			259067	05/25/22 15:13	UJLA	ELLE
Total/NA	Analysis	200.8 Rev 5.4		1	259911	05/27/22 15:50	SQ8U	ELLE
Total/NA	Analysis	SM 2540D		1	11130	05/24/22 18:07	PN	ENE

Client Sample ID: EEFQ2_051922
Lab Sample ID: 620-4595-4
Date Collected: 05/19/22 14:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664B			11328	05/31/22 10:45	JMF	ENE
Total/NA	Analysis	1664B		1	11342	05/31/22 14:23	JMF	ENE

Client Sample ID: INFQ3_051922
Lab Sample ID: 620-4595-5
Date Collected: 05/19/22 16:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8 Rev 5.4			259067	05/25/22 15:13	UJLA	ELLE
Total/NA	Analysis	200.8 Rev 5.4		1	259911	05/27/22 16:12	SQ8U	ELLE
Total/NA	Analysis	SM 2540D		1	11130	05/24/22 18:07	PN	ENE

Client Sample ID: EFFQ3_051922
Lab Sample ID: 620-4595-6
Date Collected: 05/19/22 16:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664B			11328	05/31/22 10:45	JMF	ENE
Total/NA	Analysis	1664B		1	11342	05/31/22 14:23	JMF	ENE

Lab Chronicle

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Client Sample ID: INFQ4_051922
Lab Sample ID: 620-4595-7
Date Collected: 05/20/22 08:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8 Rev 5.4			259217	05/26/22 05:02	UAMX	ELLE
Total/NA	Analysis	200.8 Rev 5.4		1	260008	05/27/22 17:58	S4PD	ELLE
Total/NA	Analysis	SM 2540D		1	11130	05/24/22 18:07	PN	ENE

Client Sample ID: EFFQ4_051922
Lab Sample ID: 620-4595-8
Date Collected: 05/20/22 08:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664B			11328	05/31/22 10:45	JMF	ENE
Total/NA	Analysis	1664B		1	11342	05/31/22 14:23	JMF	ENE

Client Sample ID: EFFComp_051922
Lab Sample ID: 620-4595-9
Date Collected: 05/20/22 08:30
Matrix: Water
Date Received: 05/20/22 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8 Rev 5.4			259067	05/25/22 15:13	UJLA	ELLE
Total/NA	Analysis	200.8 Rev 5.4		1	259911	05/27/22 16:10	SQ8U	ELLE
Total/NA	Analysis	SM 2540D		1	11130	05/24/22 18:07	PN	ENE

Laboratory References:

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

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Laboratory: Eurofins New England

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	1.01	11-30-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	06-30-22
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-0660	08-10-22
California	State	2792	11-30-22
Colorado	State	PA00009	06-30-22
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-22
Georgia (DW)	State	C048	01-31-23
Hawaii	State	N/A	01-31-23
Illinois	NELAP	200027	01-31-23
Iowa	State	361	03-02-22 *
Kansas	NELAP	E-10151	10-31-22
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana	NELAP	02055	06-30-22
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-22
Massachusetts	State	M-PA009	06-30-22
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-22
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-22
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	08-31-22
Oregon	NELAP	PA200001	09-11-22
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-23
Texas	NELAP	T104704194-21-40	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

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

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
USDA	US Federal Programs	P330-19-00197	07-03-22
Vermont	State	VT - 36037	10-28-22
Virginia	NELAP	460182	06-14-22
Washington	State	C457	04-11-23
West Virginia (DW)	State	9906 C	12-31-22
West Virginia DEP	State	055	07-01-22
Wyoming	State	8TMS-L	01-31-23
Wyoming (UST)	A2LA	1.01	11-30-22

Method Summary

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Method	Method Description	Protocol	Laboratory
200.8 Rev 5.4	Metals (ICP/MS)	EPA	ELLE
1664B	HEM and SGT-HEM	1664B	ENE
SM 2540D	Solids, Total Suspended (TSS)	SM	ENE
1664B	HEM and SGT-HEM (Aqueous)	1664B	ENE
200.8 Rev 5.4	Preparation, Total Metals	EPA	ELLE

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

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

Laboratory References:

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

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Job ID: 620-4595-1
Project/Site: Pawtucket Tunnel - Pawtucket, RI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4595-1	INFQ1_051922	Water	05/19/22 08:30	05/20/22 10:09
620-4595-2	EFFFQ1_051922	Water	05/19/22 08:30	05/20/22 10:09
620-4595-3	INFQ2_051922	Water	05/19/22 14:30	05/20/22 10:09
620-4595-4	EEFQ2_051922	Water	05/19/22 14:30	05/20/22 10:09
620-4595-5	INFQ3_051922	Water	05/19/22 16:30	05/20/22 10:09
620-4595-6	EFFQ3_051922	Water	05/19/22 16:30	05/20/22 10:09
620-4595-7	INFQ4_051922	Water	05/20/22 08:30	05/20/22 10:09
620-4595-8	EFFQ4_051922	Water	05/20/22 08:30	05/20/22 10:09
620-4595-9	EFFComp_051922	Water	05/20/22 08:30	05/20/22 10:09

620-4595 Chain of Custody

4595

...ment Testing
... New England

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
☒ Standard TAT 7 to 10 business days
☐ Rush TAT Date Needed. _____
All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell
patrick.haskell@aecom.com
Telephone #:
Project Mgr:

Invoice To: Kate Mignone
kate.mignone@aecom.com
P.O No. 138014 Quote #:

Project No: 60649492
Site Name: NSC Pawtucket Tunnel
Location. Pawtucket State: RI
Sampler(s): N. Carabbio, A. Ballenweg, C. Toomey

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis*: oil & grease	total As*	TSS	total metals	Check if chlorinated
01	Inf01_051922	5/19/22	0830	G	GW				2		X	X		☐
02	Eff01_051922	5/19/22	0830	G	GW		1			X				☐
03	Inf02_051922	5/19/22	1430	G	GW				2		X	X		☐
04	Eff02_051922	5/19/22	1430	G	GW		1			X				☐
05	Inf03_051922	5/19/22	1630	G	GW				2		X	X		☐
06	Eff03_051922	5/19/22	1630	G	GW		1			X				☐
07	Inf04_052022	5/20/22	0830	G	GW				2		X	X		☐
08	Eff04_052022	5/20/22	0830	G	GW		1			X				☐
09	Effcomp_052022	5/20/22	0830	G	GW				2			X	X	☐
														☐

List Preservative Code below*

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

* metals by 200.8

Effcomp sample for: As, Ca, Cr, Cu, Pb, Ni, Ag, Zn

Relinquished by:	Received by:	Date:	Time:
Toomey 10:05		5/19/22	10:09

Temp °C: Observed 3.4; Correction Factor +1; Corrected 4.4; IR ID # 6

☐ EDD format: _____
☐ E-mail to: _____

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

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Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-4146.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Rhode Island	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Rhode Island		Job #: 620-4595-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 5/30/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Pawtucket Tunnel - Pawtucket, RI	Project #: 62000172			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other:

Sample Identification - Client ID (Lab ID)	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)	200.8/200.8_P_TOT As only	200.8/200.8_P_TOT (MOD) Copy Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
INFQ1_051922 (620-4595-1)	5/19/22	08:30 Eastern		Water			X		1	
INFQ2_051922 (620-4595-3)	5/19/22	14:30 Eastern		Water			X		1	
INFQ3_051922 (620-4595-5)	5/19/22	16:30 Eastern		Water			X		1	
INFQ4_051922 (620-4595-7)	5/20/22	08:30 Eastern		Water			X		1	
EFFComp_051922 (620-4595-9)	5/20/22	08:30 Eastern		Water				X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	5/20/22 12:24	ENE	[signature]		
2	Relinquished by: [signature]	Date/Time: [signature]	Company	Received by: [signature]	Date/Time: [signature]	Company
3	Relinquished by: [signature]	Date/Time: [signature]	Company	Received by: [signature]	Date/Time: 5-21-22 1007	Company ECC

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.0

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4595-1

Login Number: 4595
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4595-1

Login Number: 4595
List Number: 2
Creator: McCaskey, Jonathan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/21/22 05:20 PM

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 is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=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.	True	
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?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4602-1
Client Project/Site: I295/Rt 37 - Johnston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
5/31/2022 5:36:19 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-4602-1
Project/Site: I295/Rt 37 - Johnston, RI

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
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
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

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)
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 ID: 620-4602-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4602-1

Comments
No additional comments.

Receipt
The samples were received on 5/20/2022 12:32 PM. 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 was 3.0º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The VOC preservative code is missing from the CoC.

GC/MS VOA
Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: Tetrahydrofuran.
(CCVIS 620-11300/3)

Method 8260C: Internal standard responses were outside of acceptance limits for the following sample: B106 (1) (620-4602-2). The sample shows evidence of matrix interference. Sample was reanalyzed but experienced a poor purge which renders no usable data.

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

GC/MS Semi VOA
Methods 8270, 8270D: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. bis (2-chloroisopropyl) ether and Hexachlorocyclopentadiene

Methods 8270, 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 620-11099 and analytical batch 620-11109 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6010D: The secondary low level passed for Manganese, these samples only needed the Secondary RL so data is acceptable.

Method 6010D: The sample duplicate precision for the following sample associated with preparation batch 620-11070 and analytical batch 620-11089 was outside control limits for chromium: (620-4627-E-1-A). Non-homogeneity of the sample matrix is suspected. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

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

General Chemistry
Method Moisture: The sample duplicate precision for the following sample associated with analytical batch 620-11112 was outside control limits: (620-4602-D-2 DU). Non-homogeneity of the sample matrix is suspected.

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

Job ID: 620-4602-1 (Continued)

Laboratory: Eurofins New England (Continued)

Organic Prep

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4602-1

Client Sample ID: B105 (1) — Lab Sample ID: 620-4602-1

No Detections.

Client Sample ID: B106 (1) — Lab Sample ID: 620-4602-2

No Detections.

Client Sample ID: B105/B106 (0-4) — Lab Sample ID: 620-4602-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	99.0		70.8		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	221		70.8		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	195		70.8		ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	328		70.8		ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	111		70.8		ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	189		70.8		ug/Kg	1	☼	8270D	Total/NA
Chrysene	259		70.8		ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	396		70.8		ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	132		70.8		ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	113		70.8		ug/Kg	1	☼	8270D	Total/NA
Pyrene	391		70.8		ug/Kg	1	☼	8270D	Total/NA
PCB-1254	30.1		20.6		ug/Kg	1	☼	8082A	Total/NA
TEPH (C9-C36)	133		13.0		mg/Kg	1	☼	8100	Total/NA
Arsenic	12.8		1.59		mg/Kg	1	☼	6010D	Total/NA
Barium	26.8		1.06		mg/Kg	1	☼	6010D	Total/NA
Chromium	7.38		1.06		mg/Kg	1	☼	6010D	Total/NA
Copper	20.3		1.06		mg/Kg	1	☼	6010D	Total/NA
Lead	29.4		1.59		mg/Kg	1	☼	6010D	Total/NA
Manganese	125	^3+	1.06		mg/Kg	1	☼	6010D	Total/NA
Nickel	5.77		1.06		mg/Kg	1	☼	6010D	Total/NA
Vanadium	8.30		1.59		mg/Kg	1	☼	6010D	Total/NA
Zinc	31.6		3.18		mg/Kg	1	☼	6010D	Total/NA
Ignitability	Negative				NONE	1		1030	Total/NA
pH	7.9				SU	1		9045D	Soluble
Temperature	20.0				Degrees C	1		9045D	Soluble
Specific Conductance	184		10.0		uS/cm	1		SM 2510B	Soluble

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4602-1

Client Sample ID: B105 (1)
Date Collected: 05/20/22 08:30
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-1
Matrix: Solid
Percent Solids: 94.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Acetone	ND		62.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Acrylonitrile	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Benzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Bromobenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Bromochloromethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Bromodichloromethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Bromoform	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Bromomethane	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
2-Butanone (MEK)	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
n-Butylbenzene	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
sec-Butylbenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
tert-Butylbenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Carbon disulfide	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Carbon tetrachloride	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Chlorobenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Chloroethane	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Chloroform	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Chloromethane	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
2-Chlorotoluene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
4-Chlorotoluene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2-Dibromo-3-Chloropropane	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Dibromochloromethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2-Dibromoethane (EDB)	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Dibromomethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2-Dichlorobenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,3-Dichlorobenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,4-Dichlorobenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Dichlorodifluoromethane (Freon 12)	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,1-Dichloroethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2-Dichloroethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,1-Dichloroethene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
cis-1,2-Dichloroethene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
trans-1,2-Dichloroethene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2-Dichloropropane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,3-Dichloropropane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
2,2-Dichloropropane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,1-Dichloropropene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
cis-1,3-Dichloropropene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
trans-1,3-Dichloropropene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Ethylbenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Hexachlorobutadiene	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
2-Hexanone (MBK)	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Isopropylbenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
4-Isopropyltoluene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Methyl tert-butyl ether	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
4-Methyl-2-pentanone (MIBK)	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Methylene Chloride	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Naphthalene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1

Client Sample ID: B105 (1)
Date Collected: 05/20/22 08:30
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-1
Matrix: Solid
Percent Solids: 94.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Styrene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,1,1,2-Tetrachloroethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,1,2,2-Tetrachloroethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Tetrachloroethene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Toluene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2,3-Trichlorobenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2,4-Trichlorobenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,3,5-Trichlorobenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,1,1-Trichloroethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,1,2-Trichloroethane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Trichloroethene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Trichlorofluoromethane (Freon 11)	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2,3-Trichloropropane	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,2,4-Trimethylbenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,3,5-Trimethylbenzene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Vinyl chloride	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
m,p-Xylene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
o-Xylene	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Tetrahydrofuran	ND		12.5		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Ethyl ether	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Tert-amyl methyl ether	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Ethyl tert-butyl ether	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
di-Isopropyl ether	ND		6.25		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
tert-Butanol	ND		125		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
1,4-Dioxane	ND		125		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
trans-1,4-Dichloro-2-butene	ND		31.2		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1
Ethanol	ND		1250		ug/Kg	☼	05/27/22 17:26	05/28/22 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*05/27/22 17:26*	*05/28/22 20:13*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*	*05/27/22 17:26*	*05/28/22 20:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*05/27/22 17:26*	*05/28/22 20:13*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*05/27/22 17:26*	*05/28/22 20:13*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.4**		0.1		%			05/24/22 13:33	1
Percent Solids	**94.6**		0.1		%			05/24/22 13:33	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4602-1

Client Sample ID: B106 (1)
Date Collected: 05/20/22 10:15
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-2
Matrix: Solid
Percent Solids: 89.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Acetone	ND		49.7		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Acrylonitrile	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Benzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Bromobenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Bromochloromethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Bromodichloromethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Bromoform	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Bromomethane	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
2-Butanone (MEK)	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
n-Butylbenzene	ND	*3	9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
sec-Butylbenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
tert-Butylbenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Carbon disulfide	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Carbon tetrachloride	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Chlorobenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Chloroethane	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Chloroform	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Chloromethane	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
2-Chlorotoluene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
4-Chlorotoluene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2-Dibromo-3-Chloropropane	ND	*3	9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Dibromochloromethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2-Dibromoethane (EDB)	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Dibromomethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2-Dichlorobenzene	ND	*3	4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,3-Dichlorobenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,4-Dichlorobenzene	ND	*3	4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Dichlorodifluoromethane (Freon 12)	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,1-Dichloroethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2-Dichloroethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,1-Dichloroethene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
cis-1,2-Dichloroethene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
trans-1,2-Dichloroethene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2-Dichloropropane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,3-Dichloropropane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
2,2-Dichloropropane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,1-Dichloropropene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
cis-1,3-Dichloropropene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
trans-1,3-Dichloropropene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Ethylbenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Hexachlorobutadiene	ND	*3	9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
2-Hexanone (MBK)	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Isopropylbenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
4-Isopropyltoluene	ND	*3	4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Methyl tert-butyl ether	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
4-Methyl-2-pentanone (MIBK)	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Methylene Chloride	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Naphthalene	ND	*3	4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1

Client Sample ID: B106 (1)
Date Collected: 05/20/22 10:15
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-2
Matrix: Solid
Percent Solids: 89.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Styrene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,1,1,2-Tetrachloroethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,1,2,2-Tetrachloroethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Tetrachloroethene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Toluene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2,3-Trichlorobenzene	ND	*3	4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2,4-Trichlorobenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,3,5-Trichlorobenzene	ND	*3	4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,1,1-Trichloroethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,1,2-Trichloroethane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Trichloroethene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Trichlorofluoromethane (Freon 11)	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2,3-Trichloropropane	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,2,4-Trimethylbenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,3,5-Trimethylbenzene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Vinyl chloride	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
m,p-Xylene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
o-Xylene	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Tetrahydrofuran	ND		9.95		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Ethyl ether	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Tert-amyl methyl ether	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Ethyl tert-butyl ether	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
di-Isopropyl ether	ND		4.97		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
tert-Butanol	ND		99.5		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
1,4-Dioxane	ND		99.5		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
trans-1,4-Dichloro-2-butene	ND		24.9		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1
Ethanol	ND		995		ug/Kg	☼	05/26/22 15:44	05/26/22 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*05/26/22 15:44*	*05/26/22 21:02*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*	*05/26/22 15:44*	*05/26/22 21:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 130*	*05/26/22 15:44*	*05/26/22 21:02*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*	*05/26/22 15:44*	*05/26/22 21:02*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.0**		0.1		%			05/24/22 13:33	1
Percent Solids	**89.0**		0.1		%			05/24/22 13:33	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4602-1

Client Sample ID: B105/B106 (0-4)
Date Collected: 05/20/22 10:40
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-3
Matrix: Solid
Percent Solids: 92.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
1,2,4-Trichlorobenzene	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
1,2-Dichlorobenzene	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
1,3-Dichlorobenzene	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
1,4-Dichlorobenzene	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
1-Methylnaphthalene	ND		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2,4,5-Trichlorophenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2,4,6-Trichlorophenol	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2,4-Dichlorophenol	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2,4-Dimethylphenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2,4-Dinitrophenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2,4-Dinitrotoluene	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2,6-Dinitrotoluene	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2-Chloronaphthalene	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2-Chlorophenol	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2-Methylnaphthalene	ND		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2-Methylphenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2-Nitroaniline	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
2-Nitrophenol	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
3 & 4 Methylphenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
3,3'-Dichlorobenzidine	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
3-Nitroaniline	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
4,6-Dinitro-2-methylphenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
4-Bromophenyl phenyl ether	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
4-Chloro-3-methylphenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
4-Chloroaniline	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
4-Chlorophenyl phenyl ether	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
4-Nitroaniline	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
4-Nitrophenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Acenaphthene	ND		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Acenaphthylene	**99.0**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Aniline	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Anthracene	ND		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Azobenzene/Diphenyldiazene	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Benzidine	ND		700		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Benzo[a]anthracene	**221**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Benzo[a]pyrene	**195**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Benzo[b]fluoranthene	**328**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Benzo[g,h,i]perylene	**111**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Benzo[k]fluoranthene	**189**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Benzoic acid	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Benzyl alcohol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Bis(2-chloroethoxy)methane	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Bis(2-chloroethyl)ether	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
bis (2-chloroisopropyl) ether	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Bis(2-ethylhexyl) phthalate	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Butyl benzyl phthalate	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Carbazole	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Chrysene	**259**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1

Client Sample ID: B105/B106 (0-4)
Date Collected: 05/20/22 10:40
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-3
Matrix: Solid
Percent Solids: 92.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Dibenzofuran	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Diethyl phthalate	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Dimethyl phthalate	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Di-n-butyl phthalate	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Di-n-octyl phthalate	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Fluoranthene	**396**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Fluorene	ND		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Hexachlorobenzene	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Hexachlorobutadiene	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Hexachlorocyclopentadiene	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Hexachloroethane	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Indeno[1,2,3-cd]pyrene	**132**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Isophorone	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Naphthalene	ND		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Nitrobenzene	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
N-Nitrosodimethylamine	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
N-Nitrosodi-n-propylamine	ND		177		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
N-Nitrosodiphenylamine	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Pentachloronitrobenzene	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Pentachlorophenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Phenanthrene	**113**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Phenol	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Pyrene	**391**		70.8		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1
Pyridine	ND		350		ug/Kg	☼	05/24/22 10:44	05/24/22 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*30 - 130*	*05/24/22 10:44*	*05/24/22 23:59*	*1*
2-Fluorophenol (Surr)	*58*		*15 - 110*	*05/24/22 10:44*	*05/24/22 23:59*	*1*
Nitrobenzene-d5 (Surr)	*44*		*30 - 130*	*05/24/22 10:44*	*05/24/22 23:59*	*1*
Phenol-d5 (Surr)	*49*		*15 - 110*	*05/24/22 10:44*	*05/24/22 23:59*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*15 - 110*	*05/24/22 10:44*	*05/24/22 23:59*	*1*
Terphenyl-d14 (Surr)	*74*		*30 - 130*	*05/24/22 10:44*	*05/24/22 23:59*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
beta-BHC	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
delta-BHC	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
gamma-BHC (Lindane)	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Heptachlor	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Aldrin	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Heptachlor epoxide	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Endosulfan I	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Dieldrin	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
4,4'-DDE	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Endrin	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Endosulfan II	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
4,4'-DDD	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Endosulfan sulfate	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1

Client Sample ID: B105/B106 (0-4)
Date Collected: 05/20/22 10:40
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-3
Matrix: Solid
Percent Solids: 92.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Methoxychlor	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Endrin ketone	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Endrin aldehyde	ND		8.26		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
cis-Chlordane	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
trans-Chlordane	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Toxaphene	ND		103		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1
Alachlor	ND		5.16		ug/Kg	☼	05/24/22 16:29	05/25/22 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*54*		*30 - 150*	*05/24/22 16:29*	*05/25/22 16:00*	*1*
Tetrachloro-m-xylene	*66*		*30 - 150*	*05/24/22 16:29*	*05/25/22 16:00*	*1*
DCB Decachlorobiphenyl (Surr)	*109*		*30 - 150*	*05/24/22 16:29*	*05/25/22 16:00*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*30 - 150*	*05/24/22 16:29*	*05/25/22 16:00*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1
PCB-1221	ND		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1
PCB-1232	ND		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1
PCB-1242	ND		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1
PCB-1248	ND		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1
PCB-1254	**30.1**		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1
PCB-1260	ND		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1
PCB-1262	ND		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1
PCB-1268	ND		20.6		ug/Kg	☼	05/24/22 16:29	05/25/22 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*30 - 150*	*05/24/22 16:29*	*05/25/22 17:07*	*1*
Tetrachloro-m-xylene	*87*		*30 - 150*	*05/24/22 16:29*	*05/25/22 17:07*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*30 - 150*	*05/24/22 16:29*	*05/25/22 17:07*	*1*
DCB Decachlorobiphenyl (Surr)	*80*		*30 - 150*	*05/24/22 16:29*	*05/25/22 17:07*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**133**		13.0		mg/Kg	☼	05/26/22 11:37	05/27/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*81*		*40 - 140*	*05/26/22 11:37*	*05/27/22 14:44*	*1*
o-Terphenyl (Surr)	*87*		*40 - 140*	*05/26/22 11:37*	*05/27/22 14:44*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.29		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Arsenic	**12.8**		1.59		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Barium	**26.8**		1.06		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Beryllium	ND		0.529		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Cadmium	ND		0.529		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Chromium	**7.38**		1.06		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Copper	**20.3**		1.06		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Lead	**29.4**		1.59		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1

Client Sample ID: B105/B106 (0-4)

Date Collected: 05/20/22 10:40
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-3

Matrix: Solid
Percent Solids: 92.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**125**	**^3+**	1.06		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Nickel	**5.77**		1.06		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Selenium	ND		1.59		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Silver	ND		1.59		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Thallium	ND		3.18		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Vanadium	**8.30**		1.59		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1
Zinc	**31.6**		3.18		mg/Kg	☼	05/23/22 15:33	05/24/22 18:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0472		mg/Kg	☼	05/23/22 15:35	05/25/22 14:23	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	**Negative**				NONE			05/23/22 15:43	1
Cyanide, Reactive	ND		58.8		mg/Kg		05/23/22 08:24	05/23/22 14:00	1
Sulfide, Reactive	ND		157		mg/Kg		05/23/22 08:24	05/23/22 13:21	1
Percent Moisture	**7.5**		0.1		%			05/24/22 11:08	1
Percent Solids	**92.5**		0.1		%			05/24/22 11:08	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.9**				SU			05/23/22 15:03	1
Temperature	**20.0**				Degrees C			05/23/22 15:03	1
Specific Conductance	**184**		10.0		uS/cm			05/23/22 16:14	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4602-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4602-1	B105 (1)	86	92	112	103
620-4602-2	B106 (1)	84	91	126	107
LCS 620-11235/1-A	Lab Control Sample	99	97	105	100
LCS 620-11299/1-A	Lab Control Sample	98	96	98	98
LCSD 620-11235/2-A	Lab Control Sample Dup	98	97	102	99
LCSD 620-11299/2-A	Lab Control Sample Dup	98	96	98	99
MB 620-11235/3-A	Method Blank	98	96	104	99
MB 620-11299/3-A	Method Blank	98	95	97	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
620-4602-3	B105/B106 (0-4)	48	58	44	49	60	74
LCS 620-11099/2-A	Lab Control Sample	52	65	49	47	63	66
LCSD 620-11099/3-A	Lab Control Sample Dup	54	68	52	50	62	65
MB 620-11099/1-A	Method Blank	52	70	51	58	50	72

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4602-3	B105/B106 (0-4)	54	66	109	76
LCS 620-11126/14-A	Lab Control Sample	78	78	83	69
LCSD 620-11126/15-A	Lab Control Sample Dup	87	88	86	74
MB 620-11126/1-A	Method Blank	76	73	82	68

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Surrogate Summary

Client: AECOM
Job ID: 620-4602-1
Project/Site: I295/Rt 37 - Johnston, RI

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4602-3	B105/B106 (0-4)	89	87	81	80
LCS 620-11126/2-A	Lab Control Sample	86	86	79	87
LCSD 620-11126/3-A	Lab Control Sample Dup	93	91	79	82
MB 620-11126/1-A	Method Blank	90	83	82	81

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	OTPH
Lab Sample ID	Client Sample ID	(40-140)	(40-140)
620-4602-3	B105/B106 (0-4)	81	87
LCS 620-11217/2-A	Lab Control Sample	60	79
LCSD 620-11217/3-A	Lab Control Sample Dup	75	77
MB 620-11217/1-A	Method Blank	68	48

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)
OTPH = o-Terphenyl (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-11235/3-A
Matrix: Solid
Analysis Batch: 11236

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11235

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Acetone	ND		50.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Acrylonitrile	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Benzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Bromobenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Bromochloromethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Bromodichloromethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Bromoform	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Bromomethane	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
2-Butanone (MEK)	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
n-Butylbenzene	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
sec-Butylbenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
tert-Butylbenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Carbon disulfide	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Carbon tetrachloride	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Chlorobenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Chloroethane	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Chloroform	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Chloromethane	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
2-Chlorotoluene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
4-Chlorotoluene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Dibromochloromethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Dibromomethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,1-Dichloroethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2-Dichloroethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,1-Dichloroethene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2-Dichloropropane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,3-Dichloropropane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
2,2-Dichloropropane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,1-Dichloropropene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Ethylbenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Hexachlorobutadiene	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Isopropylbenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
4-Isopropyltoluene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Methylene Chloride	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11235/3-A
Matrix: Solid
Analysis Batch: 11236

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11235

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
N-Propylbenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Styrene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Tetrachloroethene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Toluene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Trichloroethene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Vinyl chloride	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
m,p-Xylene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
o-Xylene	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Tetrahydrofuran	ND		10.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Ethyl ether	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
di-Isopropyl ether	ND		5.00		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
tert-Butanol	ND		100		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
1,4-Dioxane	ND		100		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		05/26/22 15:44	05/26/22 20:10	1
Ethanol	ND		1000		ug/Kg		05/26/22 15:44	05/26/22 20:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/22 15:44*	*05/26/22 20:10*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*05/26/22 15:44*	*05/26/22 20:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*05/26/22 15:44*	*05/26/22 20:10*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*05/26/22 15:44*	*05/26/22 20:10*	*1*

Lab Sample ID: LCS 620-11235/1-A
Matrix: Solid
Analysis Batch: 11236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.92		ug/Kg		100	70 - 130
Acetone	20.0	17.85	J	ug/Kg		89	70 - 130
Acrylonitrile	20.0	19.28		ug/Kg		96	70 - 130
Benzene	20.0	18.98		ug/Kg		95	70 - 130
Bromobenzene	20.0	19.86		ug/Kg		99	70 - 130
Bromochloromethane	20.0	18.39		ug/Kg		92	70 - 130
Bromodichloromethane	20.0	18.70		ug/Kg		93	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11235/1-A
Matrix: Solid
Analysis Batch: 11236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	19.67		ug/Kg		98	70 - 130
Bromomethane	20.0	18.89		ug/Kg		94	70 - 130
2-Butanone (MEK)	20.0	17.34		ug/Kg		87	70 - 130
n-Butylbenzene	20.0	22.42		ug/Kg		112	70 - 130
sec-Butylbenzene	20.0	21.30		ug/Kg		106	70 - 130
tert-Butylbenzene	20.0	18.59		ug/Kg		93	70 - 130
Carbon disulfide	20.0	19.18		ug/Kg		96	70 - 130
Carbon tetrachloride	20.0	19.39		ug/Kg		97	70 - 130
Chlorobenzene	20.0	20.62		ug/Kg		103	70 - 130
Chloroethane	20.0	20.58		ug/Kg		103	70 - 130
Chloroform	20.0	18.98		ug/Kg		95	70 - 130
Chloromethane	20.0	18.65		ug/Kg		93	70 - 130
2-Chlorotoluene	20.0	21.30		ug/Kg		107	70 - 130
4-Chlorotoluene	20.0	21.33		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	19.90		ug/Kg		99	70 - 130
Dibromochloromethane	20.0	17.95		ug/Kg		90	70 - 130
1,2-Dibromoethane (EDB)	20.0	18.51		ug/Kg		93	70 - 130
Dibromomethane	20.0	18.63		ug/Kg		93	70 - 130
1,2-Dichlorobenzene	20.0	21.31		ug/Kg		107	70 - 130
1,3-Dichlorobenzene	20.0	20.33		ug/Kg		102	70 - 130
1,4-Dichlorobenzene	20.0	21.93		ug/Kg		110	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	17.50		ug/Kg		87	70 - 130
1,1-Dichloroethane	20.0	19.39		ug/Kg		97	70 - 130
1,2-Dichloroethane	20.0	19.33		ug/Kg		97	70 - 130
1,1-Dichloroethene	20.0	18.74		ug/Kg		94	70 - 130
cis-1,2-Dichloroethene	20.0	18.17		ug/Kg		91	70 - 130
trans-1,2-Dichloroethene	20.0	18.61		ug/Kg		93	70 - 130
1,2-Dichloropropane	20.0	18.71		ug/Kg		94	70 - 130
1,3-Dichloropropane	20.0	19.06		ug/Kg		95	70 - 130
2,2-Dichloropropane	20.0	19.51		ug/Kg		98	70 - 130
1,1-Dichloropropene	20.0	19.24		ug/Kg		96	70 - 130
cis-1,3-Dichloropropene	20.0	18.47		ug/Kg		92	70 - 130
trans-1,3-Dichloropropene	20.0	19.16		ug/Kg		96	70 - 130
Ethylbenzene	20.0	21.18		ug/Kg		106	70 - 130
Hexachlorobutadiene	20.0	19.97		ug/Kg		100	70 - 130
2-Hexanone (MBK)	20.0	17.43		ug/Kg		87	70 - 130
Isopropylbenzene	20.0	20.71		ug/Kg		104	70 - 130
4-Isopropyltoluene	20.0	21.46		ug/Kg		107	70 - 130
Methyl tert-butyl ether	20.0	18.61		ug/Kg		93	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.90		ug/Kg		89	70 - 130
Methylene Chloride	20.0	19.22		ug/Kg		96	70 - 130
Naphthalene	20.0	21.29		ug/Kg		106	70 - 130
N-Propylbenzene	20.0	21.60		ug/Kg		108	70 - 130
Styrene	20.0	20.36		ug/Kg		102	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.99		ug/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.47		ug/Kg		107	70 - 130
Tetrachloroethene	20.0	17.70		ug/Kg		88	70 - 130
Toluene	20.0	18.57		ug/Kg		93	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11235/1-A
Matrix: Solid
Analysis Batch: 11236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	20.0	19.97		ug/Kg		100	70 - 130
1,2,4-Trichlorobenzene	20.0	19.44		ug/Kg		97	70 - 130
1,3,5-Trichlorobenzene	20.0	20.99		ug/Kg		105	70 - 130
1,1,1-Trichloroethane	20.0	19.40		ug/Kg		97	70 - 130
1,1,2-Trichloroethane	20.0	18.76		ug/Kg		94	70 - 130
Trichloroethene	20.0	18.89		ug/Kg		94	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	18.84		ug/Kg		94	70 - 130
1,2,3-Trichloropropane	20.0	21.53		ug/Kg		108	70 - 130
1,2,4-Trimethylbenzene	20.0	21.13		ug/Kg		106	70 - 130
1,3,5-Trimethylbenzene	20.0	21.20		ug/Kg		106	70 - 130
Vinyl chloride	20.0	18.32		ug/Kg		92	70 - 130
m,p-Xylene	20.0	20.78		ug/Kg		104	70 - 130
o-Xylene	20.0	20.94		ug/Kg		105	70 - 130
Tetrahydrofuran	20.0	22.77		ug/Kg		114	70 - 130
Ethyl ether	20.0	18.51		ug/Kg		93	70 - 130
Tert-amyl methyl ether	20.0	18.91		ug/Kg		95	70 - 130
Ethyl tert-butyl ether	20.0	18.27		ug/Kg		91	70 - 130
di-Isopropyl ether	20.0	18.83		ug/Kg		94	70 - 130
tert-Butanol	200	178.4		ug/Kg		89	70 - 130
1,4-Dioxane	200	174.6		ug/Kg		87	70 - 130
trans-1,4-Dichloro-2-butene	20.0	20.20	J	ug/Kg		101	70 - 130
Ethanol	400	408.9	J	ug/Kg		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 620-11235/2-A
Matrix: Solid
Analysis Batch: 11236

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11235

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	20.59		ug/Kg		103	70 - 130	3	30
Acetone	20.0	17.23	J	ug/Kg		86	70 - 130	4	30
Acrylonitrile	20.0	18.52		ug/Kg		93	70 - 130	4	30
Benzene	20.0	19.82		ug/Kg		99	70 - 130	4	30
Bromobenzene	20.0	20.47		ug/Kg		102	70 - 130	3	30
Bromochloromethane	20.0	19.16		ug/Kg		96	70 - 130	4	30
Bromodichloromethane	20.0	19.34		ug/Kg		97	70 - 130	3	30
Bromoform	20.0	19.45		ug/Kg		97	70 - 130	1	30
Bromomethane	20.0	20.70		ug/Kg		104	70 - 130	9	30
2-Butanone (MEK)	20.0	16.35		ug/Kg		82	70 - 130	6	30
n-Butylbenzene	20.0	23.26		ug/Kg		116	70 - 130	4	30
sec-Butylbenzene	20.0	21.96		ug/Kg		110	70 - 130	3	30
tert-Butylbenzene	20.0	19.28		ug/Kg		96	70 - 130	4	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11235/2-A
Matrix: Solid
Analysis Batch: 11236

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11235

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	20.08		ug/Kg		100	70 - 130	5	30
Carbon tetrachloride			20.0	20.35		ug/Kg		102	70 - 130	5	30
Chlorobenzene			20.0	21.61		ug/Kg		108	70 - 130	5	30
Chloroethane			20.0	21.56		ug/Kg		108	70 - 130	5	30
Chloroform			20.0	19.68		ug/Kg		98	70 - 130	4	30
Chloromethane			20.0	19.65		ug/Kg		98	70 - 130	5	30
2-Chlorotoluene			20.0	21.82		ug/Kg		109	70 - 130	2	30
4-Chlorotoluene			20.0	21.85		ug/Kg		109	70 - 130	2	30
1,2-Dibromo-3-Chloropropane			20.0	18.62		ug/Kg		93	70 - 130	7	30
Dibromochloromethane			20.0	18.50		ug/Kg		93	70 - 130	3	30
1,2-Dibromoethane (EDB)			20.0	18.59		ug/Kg		93	70 - 130	0	30
Dibromomethane			20.0	18.81		ug/Kg		94	70 - 130	1	30
1,2-Dichlorobenzene			20.0	21.94		ug/Kg		110	70 - 130	3	30
1,3-Dichlorobenzene			20.0	20.92		ug/Kg		105	70 - 130	3	30
1,4-Dichlorobenzene			20.0	22.24		ug/Kg		111	70 - 130	1	30
Dichlorodifluoromethane (Freon 12)			20.0	18.16		ug/Kg		91	70 - 130	4	30
1,1-Dichloroethane			20.0	20.07		ug/Kg		100	70 - 130	3	30
1,2-Dichloroethane			20.0	19.63		ug/Kg		98	70 - 130	2	30
1,1-Dichloroethene			20.0	19.35		ug/Kg		97	70 - 130	3	30
cis-1,2-Dichloroethene			20.0	19.15		ug/Kg		96	70 - 130	5	30
trans-1,2-Dichloroethene			20.0	19.29		ug/Kg		96	70 - 130	4	30
1,2-Dichloropropane			20.0	19.37		ug/Kg		97	70 - 130	3	30
1,3-Dichloropropane			20.0	19.25		ug/Kg		96	70 - 130	1	30
2,2-Dichloropropane			20.0	20.41		ug/Kg		102	70 - 130	5	30
1,1-Dichloropropene			20.0	20.09		ug/Kg		100	70 - 130	4	30
cis-1,3-Dichloropropene			20.0	18.87		ug/Kg		94	70 - 130	2	30
trans-1,3-Dichloropropene			20.0	19.14		ug/Kg		96	70 - 130	0	30
Ethylbenzene			20.0	21.88		ug/Kg		109	70 - 130	3	30
Hexachlorobutadiene			20.0	20.70		ug/Kg		104	70 - 130	4	30
2-Hexanone (MBK)			20.0	16.98		ug/Kg		85	70 - 130	3	30
Isopropylbenzene			20.0	21.63		ug/Kg		108	70 - 130	4	30
4-Isopropyltoluene			20.0	22.42		ug/Kg		112	70 - 130	4	30
Methyl tert-butyl ether			20.0	18.81		ug/Kg		94	70 - 130	1	30
4-Methyl-2-pentanone (MIBK)			20.0	17.19		ug/Kg		86	70 - 130	4	30
Methylene Chloride			20.0	20.04		ug/Kg		100	70 - 130	4	30
Naphthalene			20.0	21.04		ug/Kg		105	70 - 130	1	30
N-Propylbenzene			20.0	22.20		ug/Kg		111	70 - 130	3	30
Styrene			20.0	21.14		ug/Kg		106	70 - 130	4	30
1,1,1,2-Tetrachloroethane			20.0	21.40		ug/Kg		107	70 - 130	2	30
1,1,2,2-Tetrachloroethane			20.0	21.03		ug/Kg		105	70 - 130	2	30
Tetrachloroethene			20.0	18.39		ug/Kg		92	70 - 130	4	30
Toluene			20.0	19.36		ug/Kg		97	70 - 130	4	30
1,2,3-Trichlorobenzene			20.0	20.75		ug/Kg		104	70 - 130	4	30
1,2,4-Trichlorobenzene			20.0	19.92		ug/Kg		100	70 - 130	2	30
1,3,5-Trichlorobenzene			20.0	21.56		ug/Kg		108	70 - 130	3	30
1,1,1-Trichloroethane			20.0	20.35		ug/Kg		102	70 - 130	5	30
1,1,2-Trichloroethane			20.0	19.19		ug/Kg		96	70 - 130	2	30
Trichloroethene			20.0	19.79		ug/Kg		99	70 - 130	5	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11235/2-A
Matrix: Solid
Analysis Batch: 11236

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11235

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	19.40		ug/Kg		97	70 - 130	3	30
1,2,3-Trichloropropane			20.0	20.98		ug/Kg		105	70 - 130	3	30
1,2,4-Trimethylbenzene			20.0	21.76		ug/Kg		109	70 - 130	3	30
1,3,5-Trimethylbenzene			20.0	21.77		ug/Kg		109	70 - 130	3	30
Vinyl chloride			20.0	19.40		ug/Kg		97	70 - 130	6	30
m,p-Xylene			20.0	21.73		ug/Kg		109	70 - 130	4	30
o-Xylene			20.0	21.61		ug/Kg		108	70 - 130	3	30
Tetrahydrofuran			20.0	20.68		ug/Kg		103	70 - 130	10	30
Ethyl ether			20.0	18.75		ug/Kg		94	70 - 130	1	30
Tert-amyl methyl ether			20.0	19.19		ug/Kg		96	70 - 130	1	30
Ethyl tert-butyl ether			20.0	18.89		ug/Kg		94	70 - 130	3	30
di-Isopropyl ether			20.0	19.48		ug/Kg		97	70 - 130	3	30
tert-Butanol			200	171.5		ug/Kg		86	70 - 130	4	30
1,4-Dioxane			200	169.5		ug/Kg		85	70 - 130	3	30
trans-1,4-Dichloro-2-butene			20.0	18.94	J	ug/Kg		95	70 - 130	6	30
Ethanol			400	386.3	J	ug/Kg		97	70 - 130	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 620-11299/3-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11299

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Acetone	ND		50.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Acrylonitrile	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Benzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Bromobenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Bromochloromethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Bromodichloromethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Bromoform	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Bromomethane	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
2-Butanone (MEK)	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
n-Butylbenzene	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
sec-Butylbenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
tert-Butylbenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Carbon disulfide	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Carbon tetrachloride	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Chlorobenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Chloroethane	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Chloroform	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Chloromethane	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11299/3-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11299

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
4-Chlorotoluene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Dibromochloromethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Dibromomethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,1-Dichloroethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2-Dichloroethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,1-Dichloroethene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2-Dichloropropane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,3-Dichloropropane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
2,2-Dichloropropane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,1-Dichloropropene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Ethylbenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Hexachlorobutadiene	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Isopropylbenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
4-Isopropyltoluene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Methylene Chloride	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Naphthalene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
N-Propylbenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Styrene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Tetrachloroethene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Toluene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Trichloroethene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Vinyl chloride	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
m,p-Xylene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
o-Xylene	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11299/3-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11299

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND		10.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Ethyl ether	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
di-Isopropyl ether	ND		5.00		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
tert-Butanol	ND		100		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
1,4-Dioxane	ND		100		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		05/27/22 17:26	05/28/22 13:17	1
Ethanol	ND		1000		ug/Kg		05/27/22 17:26	05/28/22 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/27/22 17:26*	*05/28/22 13:17*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*	*05/27/22 17:26*	*05/28/22 13:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*05/27/22 17:26*	*05/28/22 13:17*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*05/27/22 17:26*	*05/28/22 13:17*	*1*

Lab Sample ID: LCS 620-11299/1-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.21		ug/Kg		96	70 - 130
Acetone	20.0	24.42	J	ug/Kg		122	70 - 130
Acrylonitrile	20.0	17.39		ug/Kg		87	70 - 130
Benzene	20.0	18.13		ug/Kg		91	70 - 130
Bromobenzene	20.0	20.10		ug/Kg		101	70 - 130
Bromochloromethane	20.0	18.43		ug/Kg		92	70 - 130
Bromodichloromethane	20.0	17.87		ug/Kg		89	70 - 130
Bromoform	20.0	19.64		ug/Kg		98	70 - 130
Bromomethane	20.0	16.63		ug/Kg		83	70 - 130
2-Butanone (MEK)	20.0	15.49		ug/Kg		77	70 - 130
n-Butylbenzene	20.0	21.45		ug/Kg		107	70 - 130
sec-Butylbenzene	20.0	20.78		ug/Kg		104	70 - 130
tert-Butylbenzene	20.0	18.81		ug/Kg		94	70 - 130
Carbon disulfide	20.0	18.01		ug/Kg		90	70 - 130
Carbon tetrachloride	20.0	18.42		ug/Kg		92	70 - 130
Chlorobenzene	20.0	19.62		ug/Kg		98	70 - 130
Chloroethane	20.0	17.17		ug/Kg		86	70 - 130
Chloroform	20.0	17.91		ug/Kg		90	70 - 130
Chloromethane	20.0	18.14		ug/Kg		91	70 - 130
2-Chlorotoluene	20.0	19.89		ug/Kg		99	70 - 130
4-Chlorotoluene	20.0	20.08		ug/Kg		100	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	19.27		ug/Kg		96	70 - 130
Dibromochloromethane	20.0	17.97		ug/Kg		90	70 - 130
1,2-Dibromoethane (EDB)	20.0	18.22		ug/Kg		91	70 - 130
Dibromomethane	20.0	17.71		ug/Kg		89	70 - 130
1,2-Dichlorobenzene	20.0	21.15		ug/Kg		106	70 - 130
1,3-Dichlorobenzene	20.0	20.67		ug/Kg		103	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11299/1-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	20.0	21.06		ug/Kg		105	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	18.76		ug/Kg		94	70 - 130
1,1-Dichloroethane	20.0	17.75		ug/Kg		89	70 - 130
1,2-Dichloroethane	20.0	17.67		ug/Kg		88	70 - 130
1,1-Dichloroethene	20.0	18.18		ug/Kg		91	70 - 130
cis-1,2-Dichloroethene	20.0	18.19		ug/Kg		91	70 - 130
trans-1,2-Dichloroethene	20.0	18.15		ug/Kg		91	70 - 130
1,2-Dichloropropane	20.0	17.61		ug/Kg		88	70 - 130
1,3-Dichloropropane	20.0	18.30		ug/Kg		91	70 - 130
2,2-Dichloropropane	20.0	18.81		ug/Kg		94	70 - 130
1,1-Dichloropropene	20.0	18.25		ug/Kg		91	70 - 130
cis-1,3-Dichloropropene	20.0	18.10		ug/Kg		90	70 - 130
trans-1,3-Dichloropropene	20.0	18.42		ug/Kg		92	70 - 130
Ethylbenzene	20.0	19.60		ug/Kg		98	70 - 130
Hexachlorobutadiene	20.0	22.15		ug/Kg		111	70 - 130
2-Hexanone (MBK)	20.0	17.66		ug/Kg		88	70 - 130
Isopropylbenzene	20.0	20.03		ug/Kg		100	70 - 130
4-Isopropyltoluene	20.0	21.43		ug/Kg		107	70 - 130
Methyl tert-butyl ether	20.0	19.02		ug/Kg		95	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.07		ug/Kg		85	70 - 130
Methylene Chloride	20.0	19.95		ug/Kg		100	70 - 130
Naphthalene	20.0	20.70		ug/Kg		103	70 - 130
N-Propylbenzene	20.0	20.23		ug/Kg		101	70 - 130
Styrene	20.0	19.79		ug/Kg		99	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.62		ug/Kg		98	70 - 130
1,1,2,2-Tetrachloroethane	20.0	19.45		ug/Kg		97	70 - 130
Tetrachloroethene	20.0	19.08		ug/Kg		95	70 - 130
Toluene	20.0	18.07		ug/Kg		90	70 - 130
1,2,3-Trichlorobenzene	20.0	21.02		ug/Kg		105	70 - 130
1,2,4-Trichlorobenzene	20.0	21.10		ug/Kg		105	70 - 130
1,3,5-Trichlorobenzene	20.0	22.21		ug/Kg		111	70 - 130
1,1,1-Trichloroethane	20.0	18.10		ug/Kg		90	70 - 130
1,1,2-Trichloroethane	20.0	18.09		ug/Kg		90	70 - 130
Trichloroethene	20.0	17.77		ug/Kg		89	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	17.94		ug/Kg		90	70 - 130
1,2,3-Trichloropropane	20.0	19.66		ug/Kg		98	70 - 130
1,2,4-Trimethylbenzene	20.0	20.44		ug/Kg		102	70 - 130
1,3,5-Trimethylbenzene	20.0	20.41		ug/Kg		102	70 - 130
Vinyl chloride	20.0	16.51		ug/Kg		83	70 - 130
m,p-Xylene	20.0	19.80		ug/Kg		99	70 - 130
o-Xylene	20.0	19.86		ug/Kg		99	70 - 130
Tetrahydrofuran	20.0	16.63		ug/Kg		83	70 - 130
Ethyl ether	20.0	17.91		ug/Kg		90	70 - 130
Tert-amyl methyl ether	20.0	19.00		ug/Kg		95	70 - 130
Ethyl tert-butyl ether	20.0	18.44		ug/Kg		92	70 - 130
di-Isopropyl ether	20.0	17.52		ug/Kg		88	70 - 130
tert-Butanol	200	187.3		ug/Kg		94	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11299/1-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	200	186.0		ug/Kg		93	70 - 130
trans-1,4-Dichloro-2-butene	20.0	18.52	J	ug/Kg		93	70 - 130
Ethanol	400	354.9	J	ug/Kg		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 620-11299/2-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11299

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.37		ug/Kg		97	70 - 130	1	30
Acetone	20.0	25.05	J	ug/Kg		125	70 - 130	3	30
Acrylonitrile	20.0	17.86		ug/Kg		89	70 - 130	3	30
Benzene	20.0	18.06		ug/Kg		90	70 - 130	0	30
Bromobenzene	20.0	19.80		ug/Kg		99	70 - 130	2	30
Bromochloromethane	20.0	18.40		ug/Kg		92	70 - 130	0	30
Bromodichloromethane	20.0	17.65		ug/Kg		88	70 - 130	1	30
Bromoform	20.0	19.86		ug/Kg		99	70 - 130	1	30
Bromomethane	20.0	17.62		ug/Kg		88	70 - 130	6	30
2-Butanone (MEK)	20.0	16.73		ug/Kg		84	70 - 130	8	30
n-Butylbenzene	20.0	20.61		ug/Kg		103	70 - 130	4	30
sec-Butylbenzene	20.0	20.30		ug/Kg		102	70 - 130	2	30
tert-Butylbenzene	20.0	18.68		ug/Kg		93	70 - 130	1	30
Carbon disulfide	20.0	18.18		ug/Kg		91	70 - 130	1	30
Carbon tetrachloride	20.0	18.53		ug/Kg		93	70 - 130	1	30
Chlorobenzene	20.0	19.57		ug/Kg		98	70 - 130	0	30
Chloroethane	20.0	17.70		ug/Kg		89	70 - 130	3	30
Chloroform	20.0	18.00		ug/Kg		90	70 - 130	0	30
Chloromethane	20.0	18.08		ug/Kg		90	70 - 130	0	30
2-Chlorotoluene	20.0	19.53		ug/Kg		98	70 - 130	2	30
4-Chlorotoluene	20.0	19.98		ug/Kg		100	70 - 130	1	30
1,2-Dibromo-3-Chloropropane	20.0	19.53		ug/Kg		98	70 - 130	1	30
Dibromochloromethane	20.0	18.15		ug/Kg		91	70 - 130	1	30
1,2-Dibromoethane (EDB)	20.0	18.53		ug/Kg		93	70 - 130	2	30
Dibromomethane	20.0	17.98		ug/Kg		90	70 - 130	1	30
1,2-Dichlorobenzene	20.0	20.57		ug/Kg		103	70 - 130	3	30
1,3-Dichlorobenzene	20.0	20.23		ug/Kg		101	70 - 130	2	30
1,4-Dichlorobenzene	20.0	20.43		ug/Kg		102	70 - 130	3	30
Dichlorodifluoromethane (Freon 12)	20.0	19.31		ug/Kg		97	70 - 130	3	30
1,1-Dichloroethane	20.0	17.68		ug/Kg		88	70 - 130	0	30
1,2-Dichloroethane	20.0	17.61		ug/Kg		88	70 - 130	0	30
1,1-Dichloroethene	20.0	18.39		ug/Kg		92	70 - 130	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11299/2-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11299

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	20.0	18.07		ug/Kg		90	70 - 130	1	30
trans-1,2-Dichloroethene	20.0	18.28		ug/Kg		91	70 - 130	1	30
1,2-Dichloropropane	20.0	17.54		ug/Kg		88	70 - 130	0	30
1,3-Dichloropropane	20.0	18.37		ug/Kg		92	70 - 130	0	30
2,2-Dichloropropane	20.0	18.79		ug/Kg		94	70 - 130	0	30
1,1-Dichloropropene	20.0	18.18		ug/Kg		91	70 - 130	0	30
cis-1,3-Dichloropropene	20.0	18.01		ug/Kg		90	70 - 130	0	30
trans-1,3-Dichloropropene	20.0	18.44		ug/Kg		92	70 - 130	0	30
Ethylbenzene	20.0	19.54		ug/Kg		98	70 - 130	0	30
Hexachlorobutadiene	20.0	21.30		ug/Kg		106	70 - 130	4	30
2-Hexanone (MBK)	20.0	17.98		ug/Kg		90	70 - 130	2	30
Isopropylbenzene	20.0	19.84		ug/Kg		99	70 - 130	1	30
4-Isopropyltoluene	20.0	20.46		ug/Kg		102	70 - 130	5	30
Methyl tert-butyl ether	20.0	19.09		ug/Kg		95	70 - 130	0	30
4-Methyl-2-pentanone (MIBK)	20.0	17.56		ug/Kg		88	70 - 130	3	30
Methylene Chloride	20.0	21.83		ug/Kg		109	70 - 130	9	30
Naphthalene	20.0	20.58		ug/Kg		103	70 - 130	1	30
N-Propylbenzene	20.0	19.89		ug/Kg		99	70 - 130	2	30
Styrene	20.0	19.64		ug/Kg		98	70 - 130	1	30
1,1,1,2-Tetrachloroethane	20.0	19.53		ug/Kg		98	70 - 130	0	30
1,1,2,2-Tetrachloroethane	20.0	19.35		ug/Kg		97	70 - 130	1	30
Tetrachloroethene	20.0	18.91		ug/Kg		95	70 - 130	1	30
Toluene	20.0	17.97		ug/Kg		90	70 - 130	1	30
1,2,3-Trichlorobenzene	20.0	20.62		ug/Kg		103	70 - 130	2	30
1,2,4-Trichlorobenzene	20.0	21.04		ug/Kg		105	70 - 130	0	30
1,3,5-Trichlorobenzene	20.0	21.29		ug/Kg		106	70 - 130	4	30
1,1,1-Trichloroethane	20.0	18.07		ug/Kg		90	70 - 130	0	30
1,1,2-Trichloroethane	20.0	18.25		ug/Kg		91	70 - 130	1	30
Trichloroethene	20.0	17.97		ug/Kg		90	70 - 130	1	30
Trichlorofluoromethane (Freon 11)	20.0	18.10		ug/Kg		91	70 - 130	1	30
1,2,3-Trichloropropane	20.0	19.77		ug/Kg		99	70 - 130	1	30
1,2,4-Trimethylbenzene	20.0	20.05		ug/Kg		100	70 - 130	2	30
1,3,5-Trimethylbenzene	20.0	20.01		ug/Kg		100	70 - 130	2	30
Vinyl chloride	20.0	17.08		ug/Kg		85	70 - 130	3	30
m,p-Xylene	20.0	19.59		ug/Kg		98	70 - 130	1	30
o-Xylene	20.0	19.70		ug/Kg		98	70 - 130	1	30
Tetrahydrofuran	20.0	17.72		ug/Kg		89	70 - 130	6	30
Ethyl ether	20.0	18.12		ug/Kg		91	70 - 130	1	30
Tert-amyl methyl ether	20.0	18.95		ug/Kg		95	70 - 130	0	30
Ethyl tert-butyl ether	20.0	18.37		ug/Kg		92	70 - 130	0	30
di-Isopropyl ether	20.0	17.47		ug/Kg		87	70 - 130	0	30
tert-Butanol	200	198.8		ug/Kg		99	70 - 130	6	30
1,4-Dioxane	200	185.0		ug/Kg		93	70 - 130	1	30
trans-1,4-Dichloro-2-butene	20.0	18.18	J	ug/Kg		91	70 - 130	2	30
Ethanol	400	346.2	J	ug/Kg		87	70 - 130	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11299/2-A
Matrix: Solid
Analysis Batch: 11300

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11299

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 620-11099/1-A
Matrix: Solid
Analysis Batch: 11109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11099

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
1,2,4-Trichlorobenzene	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
1,2-Dichlorobenzene	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
1,3-Dichlorobenzene	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
1,4-Dichlorobenzene	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
1-Methylnaphthalene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2,4,6-Trichlorophenol	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2,4-Dichlorophenol	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2,4-Dimethylphenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2,4-Dinitrophenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2,4-Dinitrotoluene	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2,6-Dinitrotoluene	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2-Chloronaphthalene	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2-Chlorophenol	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2-Methylnaphthalene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2-Methylphenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2-Nitroaniline	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
2-Nitrophenol	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
3 & 4 Methylphenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
3,3'-Dichlorobenzidine	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
3-Nitroaniline	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
4,6-Dinitro-2-methylphenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
4-Chloroaniline	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
4-Nitroaniline	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
4-Nitrophenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Acenaphthene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Acenaphthylene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Aniline	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Anthracene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Azobenzene/Diphenyldiazene	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Benzidine	ND		660		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Benzo[a]anthracene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Benzo[a]pyrene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1

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

Lab Sample ID: MB 620-11099/1-A
Matrix: Solid
Analysis Batch: 11109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11099

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Benzo[g,h,i]perylene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Benzo[k]fluoranthene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Benzoic acid	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Benzyl alcohol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Bis(2-chloroethyl)ether	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
bis (2-chloroisopropyl) ether	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Bis(2-ethylhexyl) phthalate	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Butyl benzyl phthalate	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Carbazole	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Chrysene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Dibenz(a,h)anthracene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Dibenzofuran	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Diethyl phthalate	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Dimethyl phthalate	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Di-n-butyl phthalate	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Di-n-octyl phthalate	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Fluoranthene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Fluorene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Hexachlorobenzene	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Hexachlorobutadiene	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Hexachlorocyclopentadiene	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Hexachloroethane	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Indeno[1,2,3-cd]pyrene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Isophorone	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Naphthalene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Nitrobenzene	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
N-Nitrosodimethylamine	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
N-Nitrosodi-n-propylamine	ND		167		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
N-Nitrosodiphenylamine	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Pentachloronitrobenzene	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Pentachlorophenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Phenanthrene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Phenol	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Pyrene	ND		66.7		ug/Kg		05/24/22 10:44	05/24/22 16:47	1
Pyridine	ND		330		ug/Kg		05/24/22 10:44	05/24/22 16:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*30 - 130*	*05/24/22 10:44*	*05/24/22 16:47*	*1*
2-Fluorophenol (Surr)	*70*		*15 - 110*	*05/24/22 10:44*	*05/24/22 16:47*	*1*
Nitrobenzene-d5 (Surr)	*51*		*30 - 130*	*05/24/22 10:44*	*05/24/22 16:47*	*1*
Phenol-d5 (Surr)	*58*		*15 - 110*	*05/24/22 10:44*	*05/24/22 16:47*	*1*
2,4,6-Tribromophenol (Surr)	*50*		*15 - 110*	*05/24/22 10:44*	*05/24/22 16:47*	*1*
Terphenyl-d14 (Surr)	*72*		*30 - 130*	*05/24/22 10:44*	*05/24/22 16:47*	*1*

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

Lab Sample ID: LCS 620-11099/2-A
Matrix: Solid
Analysis Batch: 11109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	1670	829.7		ug/Kg		50	40 - 140
1,2,4-Trichlorobenzene	1670	774.0		ug/Kg		46	40 - 140
1,2-Dichlorobenzene	1670	784.9		ug/Kg		47	40 - 140
1,3-Dichlorobenzene	1670	807.8		ug/Kg		48	40 - 140
1,4-Dichlorobenzene	1670	767.4		ug/Kg		46	40 - 140
1-Methylnaphthalene	1670	912.5		ug/Kg		55	40 - 140
2,4,5-Trichlorophenol	1670	931.0		ug/Kg		56	30 - 130
2,4,6-Trichlorophenol	1670	870.5		ug/Kg		52	30 - 130
2,4-Dichlorophenol	1670	837.4		ug/Kg		50	30 - 130
2,4-Dimethylphenol	1670	843.2		ug/Kg		51	30 - 130
2,4-Dinitrophenol	1670	667.1		ug/Kg		40	30 - 130
2,4-Dinitrotoluene	1670	1210		ug/Kg		73	40 - 140
2,6-Dinitrotoluene	1670	1117		ug/Kg		67	40 - 140
2-Chloronaphthalene	1670	920.0		ug/Kg		55	40 - 140
2-Chlorophenol	1670	833.9		ug/Kg		50	30 - 130
2-Methylnaphthalene	1670	1101		ug/Kg		66	40 - 140
2-Methylphenol	1670	920.4		ug/Kg		55	30 - 130
2-Nitroaniline	1670	1262		ug/Kg		76	40 - 140
2-Nitrophenol	1670	904.7		ug/Kg		54	30 - 130
3 & 4 Methylphenol	1670	924.3		ug/Kg		55	30 - 130
3,3'-Dichlorobenzidine	1670	1508		ug/Kg		90	40 - 140
3-Nitroaniline	1670	985.2		ug/Kg		59	40 - 140
4,6-Dinitro-2-methylphenol	1670	963.6		ug/Kg		58	30 - 130
4-Bromophenyl phenyl ether	1670	1090		ug/Kg		65	40 - 140
4-Chloro-3-methylphenol	1670	1032		ug/Kg		62	30 - 130
4-Chloroaniline	1670	917.3		ug/Kg		55	40 - 140
4-Chlorophenyl phenyl ether	1670	1018		ug/Kg		61	40 - 140
4-Nitroaniline	1670	1306		ug/Kg		78	40 - 140
4-Nitrophenol	1670	1113		ug/Kg		67	30 - 130
Acenaphthene	1670	943.5		ug/Kg		57	40 - 140
Acenaphthylene	1670	939.0		ug/Kg		56	40 - 140
Aniline	1670	912.6		ug/Kg		55	40 - 140
Anthracene	1670	1201		ug/Kg		72	40 - 140
Azobenzene/Diphenyldiazene	1670	1109		ug/Kg		67	40 - 140
Benzidine	1670	1654		ug/Kg		99	40 - 140
Benzo[a]anthracene	1670	1224		ug/Kg		73	40 - 140
Benzo[a]pyrene	1670	1116		ug/Kg		67	40 - 140
Benzo[b]fluoranthene	1670	1141		ug/Kg		68	40 - 140
Benzo[g,h,i]perylene	1670	1134		ug/Kg		68	40 - 140
Benzo[k]fluoranthene	1670	1160		ug/Kg		70	40 - 140
Benzoic acid	1670	501.0		ug/Kg		30	30 - 130
Benzyl alcohol	1670	936.3		ug/Kg		56	40 - 140
Bis(2-chloroethoxy)methane	1670	910.4		ug/Kg		55	40 - 140
Bis(2-chloroethyl)ether	1670	882.9		ug/Kg		53	40 - 140
bis (2-chloroisopropyl) ether	1670	1440		ug/Kg		86	40 - 140
Bis(2-ethylhexyl) phthalate	1670	1283		ug/Kg		77	40 - 140
Butyl benzyl phthalate	1670	1285		ug/Kg		77	40 - 140
Carbazole	1670	1146		ug/Kg		69	40 - 140

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

Lab Sample ID: LCS 620-11099/2-A
Matrix: Solid
Analysis Batch: 11109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chrysene	1670	1165		ug/Kg		70	40 - 140
Dibenz(a,h)anthracene	1670	1108		ug/Kg		67	40 - 140
Dibenzofuran	1670	993.8		ug/Kg		60	40 - 140
Diethyl phthalate	1670	1068		ug/Kg		64	40 - 140
Dimethyl phthalate	1670	1007		ug/Kg		60	40 - 140
Di-n-butyl phthalate	1670	1187		ug/Kg		71	40 - 140
Di-n-octyl phthalate	1670	1265		ug/Kg		76	40 - 140
Fluoranthene	1670	1185		ug/Kg		71	40 - 140
Fluorene	1670	975.0		ug/Kg		58	40 - 140
Hexachlorobenzene	1670	1003		ug/Kg		60	40 - 140
Hexachlorobutadiene	1670	674.0		ug/Kg		40	40 - 140
Hexachlorocyclopentadiene	1670	709.9		ug/Kg		43	40 - 140
Hexachloroethane	1670	825.5		ug/Kg		50	40 - 140
Indeno[1,2,3-cd]pyrene	1670	1086		ug/Kg		65	40 - 140
Isophorone	1670	789.0		ug/Kg		47	40 - 140
Naphthalene	1670	799.5		ug/Kg		48	40 - 140
Nitrobenzene	1670	861.4		ug/Kg		52	40 - 140
N-Nitrosodimethylamine	1670	833.8		ug/Kg		50	40 - 140
N-Nitrosodi-n-propylamine	1670	905.0		ug/Kg		54	40 - 140
N-Nitrosodiphenylamine	1670	1045		ug/Kg		63	40 - 140
Pentachloronitrobenzene	1670	1261		ug/Kg		76	40 - 140
Pentachlorophenol	1670	699.4		ug/Kg		42	30 - 130
Phenanthrene	1670	1139		ug/Kg		68	40 - 140
Phenol	1670	834.0		ug/Kg		50	40 - 140
Pyrene	1670	1202		ug/Kg		72	40 - 140
Pyridine	1670	833.7		ug/Kg		50	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*52*		*30 - 130*
2-Fluorophenol (Surr)	*65*		*15 - 110*
Nitrobenzene-d5 (Surr)	*49*		*30 - 130*
Phenol-d5 (Surr)	*47*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*63*		*15 - 110*
Terphenyl-d14 (Surr)	*66*		*30 - 130*

Lab Sample ID: LCSD 620-11099/3-A
Matrix: Solid
Analysis Batch: 11109

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11099

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	1670	879.5		ug/Kg		53	40 - 140	6	30
1,2,4-Trichlorobenzene	1670	834.3		ug/Kg		50	40 - 140	7	30
1,2-Dichlorobenzene	1670	857.5		ug/Kg		51	40 - 140	9	30
1,3-Dichlorobenzene	1670	881.2		ug/Kg		53	40 - 140	9	30
1,4-Dichlorobenzene	1670	823.2		ug/Kg		49	40 - 140	7	30
1-Methylnaphthalene	1670	955.6		ug/Kg		57	40 - 140	5	30
2,4,5-Trichlorophenol	1670	959.7		ug/Kg		58	30 - 130	3	30
2,4,6-Trichlorophenol	1670	928.4		ug/Kg		56	30 - 130	6	30

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

Lab Sample ID: LCSD 620-11099/3-A
Matrix: Solid
Analysis Batch: 11109

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11099

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-Dichlorophenol			1670	872.4		ug/Kg		52	30 - 130	4	30
2,4-Dimethylphenol			1670	893.7		ug/Kg		54	30 - 130	6	30
2,4-Dinitrophenol			1670	677.7		ug/Kg		41	30 - 130	2	30
2,4-Dinitrotoluene			1670	1216		ug/Kg		73	40 - 140	1	30
2,6-Dinitrotoluene			1670	1142		ug/Kg		69	40 - 140	2	30
2-Chloronaphthalene			1670	958.9		ug/Kg		58	40 - 140	4	30
2-Chlorophenol			1670	888.3		ug/Kg		53	30 - 130	6	30
2-Methylnaphthalene			1670	1156		ug/Kg		69	40 - 140	5	30
2-Methylphenol			1670	992.6		ug/Kg		60	30 - 130	8	30
2-Nitroaniline			1670	1329		ug/Kg		80	40 - 140	5	30
2-Nitrophenol			1670	981.6		ug/Kg		59	30 - 130	8	30
3 & 4 Methylphenol			1670	977.6		ug/Kg		59	30 - 130	6	30
3,3'-Dichlorobenzidine			1670	1464		ug/Kg		88	40 - 140	3	30
3-Nitroaniline			1670	903.8		ug/Kg		54	40 - 140	9	30
4,6-Dinitro-2-methylphenol			1670	967.6		ug/Kg		58	30 - 130	0	30
4-Bromophenyl phenyl ether			1670	1098		ug/Kg		66	40 - 140	1	30
4-Chloro-3-methylphenol			1670	1055		ug/Kg		63	30 - 130	2	30
4-Chloroaniline			1670	842.8		ug/Kg		51	40 - 140	8	30
4-Chlorophenyl phenyl ether			1670	1048		ug/Kg		63	40 - 140	3	30
4-Nitroaniline			1670	1277		ug/Kg		77	40 - 140	2	30
4-Nitrophenol			1670	1113		ug/Kg		67	30 - 130	0	30
Acenaphthene			1670	984.2		ug/Kg		59	40 - 140	4	30
Acenaphthylene			1670	994.9		ug/Kg		60	40 - 140	6	30
Aniline			1670	937.6		ug/Kg		56	40 - 140	3	30
Anthracene			1670	1197		ug/Kg		72	40 - 140	0	30
Azobenzene/Diphenyldiazene			1670	1130		ug/Kg		68	40 - 140	2	30
Benzidine			1670	1553		ug/Kg		93	40 - 140	6	30
Benzo[a]anthracene			1670	1199		ug/Kg		72	40 - 140	2	30
Benzo[a]pyrene			1670	1108		ug/Kg		66	40 - 140	1	30
Benzo[b]fluoranthene			1670	1151		ug/Kg		69	40 - 140	1	30
Benzo[g,h,i]perylene			1670	1133		ug/Kg		68	40 - 140	0	30
Benzo[k]fluoranthene			1670	1158		ug/Kg		70	40 - 140	0	30
Benzoic acid			1670	507.0		ug/Kg		30	30 - 130	1	30
Benzyl alcohol			1670	940.6		ug/Kg		56	40 - 140	0	30
Bis(2-chloroethoxy)methane			1670	929.3		ug/Kg		56	40 - 140	2	30
Bis(2-chloroethyl)ether			1670	731.7		ug/Kg		44	40 - 140	19	30
bis (2-chloroisopropyl) ether			1670	1513		ug/Kg		91	40 - 140	5	30
Bis(2-ethylhexyl) phthalate			1670	1269		ug/Kg		76	40 - 140	1	30
Butyl benzyl phthalate			1670	1254		ug/Kg		75	40 - 140	2	30
Carbazole			1670	1128		ug/Kg		68	40 - 140	2	30
Chrysene			1670	1144		ug/Kg		69	40 - 140	2	30
Dibenz(a,h)anthracene			1670	1105		ug/Kg		66	40 - 140	0	30
Dibenzofuran			1670	1039		ug/Kg		62	40 - 140	4	30
Diethyl phthalate			1670	1071		ug/Kg		64	40 - 140	0	30
Dimethyl phthalate			1670	1020		ug/Kg		61	40 - 140	1	30
Di-n-butyl phthalate			1670	1168		ug/Kg		70	40 - 140	2	30
Di-n-octyl phthalate			1670	1286		ug/Kg		77	40 - 140	2	30
Fluoranthene			1670	1180		ug/Kg		71	40 - 140	0	30
Fluorene			1670	998.0		ug/Kg		60	40 - 140	2	30

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

Lab Sample ID: LCSD 620-11099/3-A
Matrix: Solid
Analysis Batch: 11109

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11099

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexachlorobenzene			1670	986.4		ug/Kg		59	40 - 140	2	30
Hexachlorobutadiene			1670	724.1		ug/Kg		43	40 - 140	7	30
Hexachlorocyclopentadiene			1670	760.7		ug/Kg		46	40 - 140	7	30
Hexachloroethane			1670	904.2		ug/Kg		54	40 - 140	9	30
Indeno[1,2,3-cd]pyrene			1670	1086		ug/Kg		65	40 - 140	0	30
Isophorone			1670	829.0		ug/Kg		50	40 - 140	5	30
Naphthalene			1670	855.5		ug/Kg		51	40 - 140	7	30
Nitrobenzene			1670	900.1		ug/Kg		54	40 - 140	4	30
N-Nitrosodimethylamine			1670	912.7		ug/Kg		55	40 - 140	9	30
N-Nitrosodi-n-propylamine			1670	948.0		ug/Kg		57	40 - 140	5	30
N-Nitrosodiphenylamine			1670	1053		ug/Kg		63	40 - 140	1	30
Pentachloronitrobenzene			1670	1249		ug/Kg		75	40 - 140	1	30
Pentachlorophenol			1670	686.3		ug/Kg		41	30 - 130	2	30
Phenanthrene			1670	1141		ug/Kg		68	40 - 140	0	30
Phenol			1670	889.5		ug/Kg		53	40 - 140	6	30
Pyrene			1670	1194		ug/Kg		72	40 - 140	1	30
Pyridine			1670	896.5		ug/Kg		54	40 - 140	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*54*		*30 - 130*
2-Fluorophenol (Surr)	*68*		*15 - 110*
Nitrobenzene-d5 (Surr)	*52*		*30 - 130*
Phenol-d5 (Surr)	*50*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*62*		*15 - 110*
Terphenyl-d14 (Surr)	*65*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-11126/1-A
Matrix: Solid
Analysis Batch: 11151

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11126

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
beta-BHC	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
delta-BHC	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
gamma-BHC (Lindane)	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Heptachlor	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Aldrin	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Heptachlor epoxide	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Endosulfan I	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Dieldrin	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
4,4'-DDE	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Endrin	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Endosulfan II	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
4,4'-DDD	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Endosulfan sulfate	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
4,4'-DDT	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Methoxychlor	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1

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

Lab Sample ID: MB 620-11126/1-A
Matrix: Solid
Analysis Batch: 11151

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11126

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Endrin aldehyde	ND		8.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
cis-Chlordane	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
trans-Chlordane	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Toxaphene	ND		100		ug/Kg		05/24/22 16:29	05/25/22 12:28	1
Alachlor	ND		5.00		ug/Kg		05/24/22 16:29	05/25/22 12:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*30 - 150*	*05/24/22 16:29*	*05/25/22 12:28*	*1*
Tetrachloro-m-xylene	*73*		*30 - 150*	*05/24/22 16:29*	*05/25/22 12:28*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*30 - 150*	*05/24/22 16:29*	*05/25/22 12:28*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*30 - 150*	*05/24/22 16:29*	*05/25/22 12:28*	*1*

Lab Sample ID: LCS 620-11126/14-A
Matrix: Solid
Analysis Batch: 11151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11126

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	13.4	11.31		ug/Kg		84	27 - 108
alpha-BHC	13.4	10.64		ug/Kg		79	27 - 108
beta-BHC	13.3	12.25		ug/Kg		92	50 - 114
beta-BHC	13.3	11.39		ug/Kg		85	50 - 114
delta-BHC	13.4	12.23		ug/Kg		91	41 - 101
delta-BHC	13.4	12.35		ug/Kg		92	41 - 101
gamma-BHC (Lindane)	13.5	11.94		ug/Kg		89	40 - 110
gamma-BHC (Lindane)	13.5	10.85		ug/Kg		81	40 - 110
Heptachlor	13.4	11.16		ug/Kg		84	30 - 101
Heptachlor	13.4	10.73		ug/Kg		80	30 - 101
Aldrin	13.4	11.31		ug/Kg		85	21 - 113
Aldrin	13.4	10.61		ug/Kg		79	21 - 113
Heptachlor epoxide	13.3	11.38		ug/Kg		85	46 - 106
Heptachlor epoxide	13.3	10.94		ug/Kg		82	46 - 106
Endosulfan I	13.3	11.93		ug/Kg		90	45 - 115
Endosulfan I	13.3	11.43		ug/Kg		86	45 - 115
Dieldrin	13.4	12.11		ug/Kg		91	48 - 117
Dieldrin	13.4	11.04		ug/Kg		83	48 - 117
4,4'-DDE	13.4	12.06		ug/Kg		90	40 - 136
4,4'-DDE	13.4	11.16		ug/Kg		83	40 - 136
Endrin	13.4	14.90		ug/Kg		111	58 - 148
Endrin	13.4	13.96		ug/Kg		104	58 - 148
Endosulfan II	13.3	12.19		ug/Kg		91	54 - 120
Endosulfan II	13.3	11.31		ug/Kg		85	54 - 120
4,4'-DDD	13.4	12.08		ug/Kg		90	55 - 133
4,4'-DDD	13.4	11.60		ug/Kg		87	55 - 133
Endosulfan sulfate	13.4	12.41		ug/Kg		92	55 - 119
Endosulfan sulfate	13.4	11.33		ug/Kg		84	55 - 119
4,4'-DDT	13.5	12.54		ug/Kg		93	43 - 140
4,4'-DDT	13.5	11.74		ug/Kg		87	43 - 140

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

Lab Sample ID: LCS 620-11126/14-A
Matrix: Solid
Analysis Batch: 11151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11126

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methoxychlor			13.3	13.78		ug/Kg		103	45 - 156		
Methoxychlor			13.3	11.42		ug/Kg		86	45 - 156		
Endrin ketone			13.4	11.50		ug/Kg		86	56 - 107		
Endrin ketone			13.4	10.47		ug/Kg		78	56 - 107		
Endrin aldehyde			13.4	11.95		ug/Kg		89	23 - 145		
Endrin aldehyde			13.4	11.27		ug/Kg		84	23 - 145		
cis-Chlordane			13.4	11.80		ug/Kg		88	44 - 111		
cis-Chlordane			13.4	10.99		ug/Kg		82	44 - 111		
trans-Chlordane			13.4	11.78		ug/Kg		88	50 - 109		
trans-Chlordane			13.4	10.77		ug/Kg		80	50 - 109		
Alachlor			13.4	12.74		ug/Kg		95	53 - 114		
Alachlor			13.4	11.52		ug/Kg		86	53 - 114		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*30 - 150*
Tetrachloro-m-xylene	*78*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*83*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*69*		*30 - 150*

Lab Sample ID: LCSD 620-11126/15-A
Matrix: Solid
Analysis Batch: 11151

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11126

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	12.34		ug/Kg		92	27 - 108	9	30
alpha-BHC			13.4	11.92		ug/Kg		89	27 - 108	11	30
beta-BHC			13.3	12.47		ug/Kg		94	50 - 114	2	30
beta-BHC			13.3	12.74		ug/Kg		96	50 - 114	11	30
delta-BHC			13.4	11.93		ug/Kg		89	41 - 101	3	30
delta-BHC			13.4	12.24		ug/Kg		91	41 - 101	1	30
gamma-BHC (Lindane)			13.5	12.95		ug/Kg		96	40 - 110	8	30
gamma-BHC (Lindane)			13.5	12.26		ug/Kg		91	40 - 110	12	30
Heptachlor			13.4	11.88		ug/Kg		89	30 - 101	6	30
Heptachlor			13.4	12.47		ug/Kg		93	30 - 101	15	30
Aldrin			13.4	12.24		ug/Kg		92	21 - 113	8	30
Aldrin			13.4	11.36		ug/Kg		85	21 - 113	7	30
Heptachlor epoxide			13.3	12.09		ug/Kg		91	46 - 106	6	30
Heptachlor epoxide			13.3	12.07		ug/Kg		91	46 - 106	10	30
Endosulfan I			13.3	12.69		ug/Kg		95	45 - 115	6	30
Endosulfan I			13.3	12.48		ug/Kg		94	45 - 115	9	30
Dieldrin			13.4	12.93		ug/Kg		97	48 - 117	7	30
Dieldrin			13.4	11.95		ug/Kg		89	48 - 117	8	30
4,4'-DDE			13.4	12.69		ug/Kg		94	40 - 136	5	30
4,4'-DDE			13.4	11.71		ug/Kg		87	40 - 136	5	30
Endrin			13.4	15.77		ug/Kg		118	58 - 148	6	30
Endrin			13.4	14.80		ug/Kg		110	58 - 148	6	30
Endosulfan II			13.3	12.63		ug/Kg		95	54 - 120	4	30
Endosulfan II			13.3	11.86		ug/Kg		89	54 - 120	5	30

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

Lab Sample ID: LCSD 620-11126/15-A
Matrix: Solid
Analysis Batch: 11151

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11126

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			13.4	12.40		ug/Kg		93	55 - 133	3	30
4,4'-DDD			13.4	11.48		ug/Kg		86	55 - 133	1	30
Endosulfan sulfate			13.4	13.20		ug/Kg		98	55 - 119	6	30
Endosulfan sulfate			13.4	11.62		ug/Kg		87	55 - 119	3	30
4,4'-DDT			13.5	13.14		ug/Kg		98	43 - 140	5	30
4,4'-DDT			13.5	12.01		ug/Kg		89	43 - 140	2	30
Methoxychlor			13.3	14.89		ug/Kg		112	45 - 156	8	30
Methoxychlor			13.3	11.53		ug/Kg		86	45 - 156	1	30
Endrin ketone			13.4	11.89		ug/Kg		89	56 - 107	3	30
Endrin ketone			13.4	10.77		ug/Kg		80	56 - 107	3	30
Endrin aldehyde			13.4	12.82		ug/Kg		95	23 - 145	7	30
Endrin aldehyde			13.4	11.82		ug/Kg		88	23 - 145	5	30
cis-Chlordane			13.4	12.44		ug/Kg		93	44 - 111	5	30
cis-Chlordane			13.4	11.42		ug/Kg		85	44 - 111	4	30
trans-Chlordane			13.4	12.20		ug/Kg		91	50 - 109	4	30
trans-Chlordane			13.4	11.37		ug/Kg		85	50 - 109	5	30
Alachlor			13.4	13.24		ug/Kg		99	53 - 114	4	30
Alachlor			13.4	12.21		ug/Kg		91	53 - 114	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*87*		*30 - 150*
Tetrachloro-m-xylene	*88*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*86*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*74*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-11126/1-A
Matrix: Solid
Analysis Batch: 11147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11126

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1
PCB-1221	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1
PCB-1232	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1
PCB-1242	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1
PCB-1248	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1
PCB-1254	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1
PCB-1260	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1
PCB-1262	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1
PCB-1268	ND		20.0		ug/Kg		05/24/22 16:29	05/25/22 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*30 - 150*	*05/24/22 16:29*	*05/25/22 13:40*	*1*
Tetrachloro-m-xylene	*83*		*30 - 150*	*05/24/22 16:29*	*05/25/22 13:40*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*30 - 150*	*05/24/22 16:29*	*05/25/22 13:40*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*30 - 150*	*05/24/22 16:29*	*05/25/22 13:40*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 620-11126/2-A
Matrix: Solid
Analysis Batch: 11147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11126

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	159.3		ug/Kg		96	61 - 112		
PCB-1016			167	155.2		ug/Kg		93	61 - 112		
PCB-1260			167	169.4		ug/Kg		102	63 - 105		
PCB-1260			167	172.2		ug/Kg		103	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*30 - 150*
Tetrachloro-m-xylene	*86*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*79*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*87*		*30 - 150*

Lab Sample ID: LCSD 620-11126/3-A
Matrix: Solid
Analysis Batch: 11147

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11126

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	173.9		ug/Kg		104	61 - 112	9	30
PCB-1016			167	162.5		ug/Kg		97	61 - 112	5	30
PCB-1260			167	173.5		ug/Kg		104	63 - 105	2	30
PCB-1260			167	168.1		ug/Kg		101	63 - 105	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*93*		*30 - 150*
Tetrachloro-m-xylene	*91*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*79*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*82*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-11217/1-A
Matrix: Solid
Analysis Batch: 11241

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11217

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		05/26/22 11:37	05/26/22 19:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*68*		*40 - 140*	*05/26/22 11:37*	*05/26/22 19:37*	*1*
o-Terphenyl (Surr)	*48*		*40 - 140*	*05/26/22 11:37*	*05/26/22 19:37*	*1*

Lab Sample ID: LCS 620-11217/2-A
Matrix: Solid
Analysis Batch: 11241

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11217

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	160.0		mg/Kg		48	22 - 93		

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC) (Continued)

Lab Sample ID: LCS 620-11217/2-A
Matrix: Solid
Analysis Batch: 11241

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11217

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*60*		*40 - 140*
o-Terphenyl (Surr)	*79*		*40 - 140*

Lab Sample ID: LCSD 620-11217/3-A
Matrix: Solid
Analysis Batch: 11241

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11217

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	165.1		mg/Kg		50	22 - 93	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*75*		*40 - 140*
o-Terphenyl (Surr)	*77*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-11070/1-A
Matrix: Solid
Analysis Batch: 11089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11070

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.00		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Arsenic	ND		1.50		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Barium	ND		1.00		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Beryllium	ND		0.500		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Cadmium	ND		0.500		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Chromium	ND		1.00		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Copper	ND		1.00		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Lead	ND		1.50		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Manganese	ND	^3+	1.00		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Nickel	ND		1.00		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Selenium	ND		1.50		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Silver	ND		1.50		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Thallium	ND		3.00		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Vanadium	ND		1.50		mg/Kg		05/23/22 15:33	05/24/22 17:07	1
Zinc	ND		3.00		mg/Kg		05/23/22 15:33	05/24/22 17:07	1

Lab Sample ID: LCDSRM 620-11070/3-A
Matrix: Solid
Analysis Batch: 11089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11070

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			244	72.04		mg/Kg		29.5	10.0 - 123.0	7	20
Arsenic			109	93.03		mg/Kg		85.3	75.1 - 106.4	5	20
Barium			364	325.1		mg/Kg		89.3	76.9 - 110.2	4	20
Beryllium			57.0	52.93		mg/Kg		92.9	76.5 - 108.1	3	20

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

Lab Sample ID: LCDSRM 620-11070/3-A
Matrix: Solid
Analysis Batch: 11089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11070

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	48.7	42.82		mg/Kg		87.9	74.7 - 106.0	3	20
Chromium	173	159.3		mg/Kg		92.1	76.3 - 109.8	2	20
Copper	179	164.0		mg/Kg		91.6	79.3 - 110.1	4	20
Lead	101	88.87		mg/Kg		88.0	81.3 - 114.9	6	20
Manganese	370	356.0	^3+	mg/Kg		96.2	78.4 - 113.0	4	20
Nickel	52.2	44.91		mg/Kg		86.0	74.7 - 106.7	3	20
Selenium	104	86.53		mg/Kg		83.2	71.4 - 109.6	2	20
Silver	29.9	24.34		mg/Kg		81.4	74.6 - 112.7	5	20
Thallium	101	86.75		mg/Kg		85.9	72.6 - 107.9	2	20
Vanadium	194	172.9		mg/Kg		89.1	73.2 - 112.4	3	20
Zinc	431	384.2		mg/Kg		89.1	74.9 - 111.4	3	20

Lab Sample ID: LCSSRM 620-11070/2-A
Matrix: Solid
Analysis Batch: 11089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11070

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	244	67.13		mg/Kg		27.5	10.0 - 123.0
Arsenic	109	88.71		mg/Kg		81.4	75.1 - 106.4
Barium	364	313.7		mg/Kg		86.2	76.9 - 110.2
Beryllium	57.0	51.60		mg/Kg		90.5	76.5 - 108.1
Cadmium	48.7	41.63		mg/Kg		85.5	74.7 - 106.0
Chromium	173	155.5		mg/Kg		89.9	76.3 - 109.8
Copper	179	157.6		mg/Kg		88.0	79.3 - 110.1
Lead	101	94.49		mg/Kg		93.6	81.3 - 114.9
Manganese	370	343.3	^3+	mg/Kg		92.8	78.4 - 113.0
Nickel	52.2	43.66		mg/Kg		83.6	74.7 - 106.7
Selenium	104	84.67		mg/Kg		81.4	71.4 - 109.6
Silver	29.9	23.09		mg/Kg		77.2	74.6 - 112.7
Thallium	101	85.00		mg/Kg		84.2	72.6 - 107.9

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

Lab Sample ID: LCSSRM 620-11070/2-A
Matrix: Solid
Analysis Batch: 11089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11070

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Vanadium	194	168.0		mg/Kg		86.6	73.2 - 112.4
Zinc	431	374.4		mg/Kg		86.9	74.9 - 111.4

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-11071/1-A
Matrix: Solid
Analysis Batch: 11221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11071

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	mg/Kg		05/23/22 15:35	05/25/22 14:06	1

Lab Sample ID: LCSSRM 620-11071/2-A ^20
Matrix: Solid
Analysis Batch: 11221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11071

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	11.0	8.847		mg/Kg		80.4	64.3 - 118.2

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-257976/1-A
Matrix: Solid
Analysis Batch: 258178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257976

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		60.0	mg/Kg		05/23/22 08:24	05/23/22 13:25	1

Lab Sample ID: LCS 410-257976/2-A
Matrix: Solid
Analysis Batch: 258178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	ND		mg/Kg		2	0 - 5.14

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-257976/1-A
Matrix: Solid
Analysis Batch: 258134

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257976

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160	mg/Kg		05/23/22 08:24	05/23/22 13:21	1

Method: 9034 - Sulfide, Reactive (Continued)

Lab Sample ID: LCS 410-257976/25-A
Matrix: Solid
Analysis Batch: 258134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	439.9		mg/Kg		82	56 - 104

Method: 9045D - pH

Lab Sample ID: LCDSRM 620-11066/7
Matrix: Solid
Analysis Batch: 11066

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

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
pH	6.00	6.1		SU		100.8	97.5 - 102.5	0	

Lab Sample ID: LCSSRM 620-11066/1
Matrix: Solid
Analysis Batch: 11066

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	6.00	6.0		SU		100.3	97.5 - 102.5

Lab Sample ID: MB 620-11064/1-A
Matrix: Solid
Analysis Batch: 11066

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
pH	7.2				SU			05/23/22 15:03	1
Temperature	20.0				Degrees C			05/23/22 15:03	1

Lab Sample ID: 620-4602-3 DU
Matrix: Solid
Analysis Batch: 11066

Client Sample ID: B105/B106 (0-4)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.9			7.9		SU				0.3	5
Temperature	20.0			20.0		Degrees C				0	

Method: Moisture - Percent Moisture

Lab Sample ID: 620-4602-2 DU
Matrix: Solid
Analysis Batch: 11112

Client Sample ID: B106 (1)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	11.0			12.0	F3	%				9	5
Percent Solids	89.0			88.0		%				1	5

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 620-11074/6
Matrix: Solid
Analysis Batch: 11074

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10.0		uS/cm			05/23/22 16:17	1

Lab Sample ID: LCDSRM 620-11074/7
Matrix: Solid
Analysis Batch: 11074

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

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance			1410	1370		uS/cm		97.0	95.0 - 105.0	1	20

Lab Sample ID: LCSSRM 620-11074/1
Matrix: Solid
Analysis Batch: 11074

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

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Specific Conductance			1410	1356		uS/cm		96.0	95.0 - 105.0		

Lab Sample ID: 620-4602-3 DU
Matrix: Solid
Analysis Batch: 11074

Client Sample ID: B105/B106 (0-4)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	184			197.2	F3	uS/cm				7	5

GC/MS VOA

Pre Prep Batch: 11028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-1	B105 (1)	Total/NA	Solid	Frozen Preserve	
620-4602-2	B106 (1)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 11235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-2	B106 (1)	Total/NA	Solid	5035	11028
MB 620-11235/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-11235/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-11235/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 11236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-2	B106 (1)	Total/NA	Solid	8260C	11235
MB 620-11235/3-A	Method Blank	Total/NA	Solid	8260C	11235
LCS 620-11235/1-A	Lab Control Sample	Total/NA	Solid	8260C	11235
LCSD 620-11235/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	11235

Prep Batch: 11299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-1	B105 (1)	Total/NA	Solid	5035	11028
MB 620-11299/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-11299/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-11299/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 11300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-1	B105 (1)	Total/NA	Solid	8260C	11299
MB 620-11299/3-A	Method Blank	Total/NA	Solid	8260C	11299
LCS 620-11299/1-A	Lab Control Sample	Total/NA	Solid	8260C	11299
LCSD 620-11299/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	11299

GC/MS Semi VOA

Prep Batch: 11099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	3546	
MB 620-11099/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11099/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11099/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 11109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	8270D	11099
MB 620-11099/1-A	Method Blank	Total/NA	Solid	8270D	11099
LCS 620-11099/2-A	Lab Control Sample	Total/NA	Solid	8270D	11099
LCSD 620-11099/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	11099

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4602-1

GC Semi VOA

Prep Batch: 11126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	3546	
MB 620-11126/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11126/14-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-11126/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11126/15-A	Lab Control Sample Dup	Total/NA	Solid	3546	
LCSD 620-11126/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 11147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	8082A	11126
MB 620-11126/1-A	Method Blank	Total/NA	Solid	8082A	11126
LCS 620-11126/2-A	Lab Control Sample	Total/NA	Solid	8082A	11126
LCSD 620-11126/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	11126

Analysis Batch: 11151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	8081B	11126
MB 620-11126/1-A	Method Blank	Total/NA	Solid	8081B	11126
LCS 620-11126/14-A	Lab Control Sample	Total/NA	Solid	8081B	11126
LCSD 620-11126/15-A	Lab Control Sample Dup	Total/NA	Solid	8081B	11126

Prep Batch: 11217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	3546	
MB 620-11217/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11217/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11217/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 11241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-11217/1-A	Method Blank	Total/NA	Solid	8100	11217
LCS 620-11217/2-A	Lab Control Sample	Total/NA	Solid	8100	11217
LCSD 620-11217/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	11217

Analysis Batch: 11255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	8100	11217

Metals

Prep Batch: 11070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	3050B	
MB 620-11070/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 620-11070/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 620-11070/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 11071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	7471B	
MB 620-11071/1-A	Method Blank	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 11071 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 620-11071/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 11089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	6010D	11070
MB 620-11070/1-A	Method Blank	Total/NA	Solid	6010D	11070
LCDSRM 620-11070/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	11070
LCSSRM 620-11070/2-A	Lab Control Sample	Total/NA	Solid	6010D	11070

Analysis Batch: 11221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	7471B	11071
MB 620-11071/1-A	Method Blank	Total/NA	Solid	7471B	11071
LCSSRM 620-11071/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	11071

General Chemistry

Leach Batch: 11064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Soluble	Solid	DI Leach	
MB 620-11064/1-A	Method Blank	Soluble	Solid	DI Leach	
620-4602-3 DU	B105/B106 (0-4)	Soluble	Solid	DI Leach	

Analysis Batch: 11066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Soluble	Solid	9045D	11064
MB 620-11064/1-A	Method Blank	Soluble	Solid	9045D	11064
LCDSRM 620-11066/7	Lab Control Sample Dup	Total/NA	Solid	9045D	
LCSSRM 620-11066/1	Lab Control Sample	Total/NA	Solid	9045D	
620-4602-3 DU	B105/B106 (0-4)	Soluble	Solid	9045D	11064

Analysis Batch: 11072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	1030	

Analysis Batch: 11074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Soluble	Solid	SM 2510B	11064
MB 620-11074/6	Method Blank	Total/NA	Solid	SM 2510B	
LCDSRM 620-11074/7	Lab Control Sample Dup	Total/NA	Solid	SM 2510B	
LCSSRM 620-11074/1	Lab Control Sample	Total/NA	Solid	SM 2510B	
620-4602-3 DU	B105/B106 (0-4)	Soluble	Solid	SM 2510B	11064

Analysis Batch: 11102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	Moisture	

Analysis Batch: 11112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-1	B105 (1)	Total/NA	Solid	Moisture	
620-4602-2	B106 (1)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 11112 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-2 DU	B106 (1)	Total/NA	Solid	Moisture	

Prep Batch: 257976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	7.3.4	
MB 410-257976/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-257976/25-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-257976/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	

Analysis Batch: 258134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	9034	257976
MB 410-257976/1-A	Method Blank	Total/NA	Solid	9034	257976
LCS 410-257976/25-A	Lab Control Sample	Total/NA	Solid	9034	257976

Analysis Batch: 258178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4602-3	B105/B106 (0-4)	Total/NA	Solid	9012	257976
MB 410-257976/1-A	Method Blank	Total/NA	Solid	9012	257976
LCS 410-257976/2-A	Lab Control Sample	Total/NA	Solid	9012	257976

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4602-1

Client Sample ID: B105 (1)
Date Collected: 05/20/22 08:30
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11112	05/24/22 13:33	BJJ	ENE

Client Sample ID: B105 (1)
Date Collected: 05/20/22 08:30
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-1
Matrix: Solid
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11028	05/20/22 19:16	KFS	ENE
Total/NA	Prep	5035			11299	05/27/22 17:26	CLR	ENE
Total/NA	Analysis	8260C		1	11300	05/28/22 20:13	CLR	ENE

Client Sample ID: B106 (1)
Date Collected: 05/20/22 10:15
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11112	05/24/22 13:33	BJJ	ENE

Client Sample ID: B106 (1)
Date Collected: 05/20/22 10:15
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-2
Matrix: Solid
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11028	05/20/22 19:16	KFS	ENE
Total/NA	Prep	5035			11235	05/26/22 15:44	CLR	ENE
Total/NA	Analysis	8260C		1	11236	05/26/22 21:02	CLR	ENE

Client Sample ID: B105/B106 (0-4)
Date Collected: 05/20/22 10:40
Date Received: 05/20/22 12:32

Lab Sample ID: 620-4602-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1030		1	11072	05/23/22 15:43	PN	ENE
Total/NA	Prep	7.3.4			257976	05/23/22 08:24	USE1	ELLE
Total/NA	Analysis	9012		1	258178	05/23/22 14:00	JCG7	ELLE
Total/NA	Prep	7.3.4			257976	05/23/22 08:24	USE1	ELLE
Total/NA	Analysis	9034		1	258134	05/23/22 13:21	USE1	ELLE
Soluble	Leach	DI Leach			11064	05/23/22 14:31	PN	ENE
Soluble	Analysis	9045D		1	11066	05/23/22 15:03	PN	ENE
Total/NA	Analysis	Moisture		1	11102	05/24/22 11:08	JMF	ENE
Soluble	Leach	DI Leach			11064	05/23/22 14:31	PN	ENE
Soluble	Analysis	SM 2510B		1	11074	05/23/22 16:14	PN	ENE

Lab Chronicle

Client: AECOM
Job ID: 620-4602-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: B105/B106 (0-4)
Lab Sample ID: 620-4602-3

Date Collected: 05/20/22 10:40
Matrix: Solid

Date Received: 05/20/22 12:32
Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			11099	05/24/22 10:44	BJJ	ENE
Total/NA	Analysis	8270D		1	11109	05/24/22 23:59	JS	ENE
Total/NA	Prep	3546			11126	05/24/22 16:29	BJJ	ENE
Total/NA	Analysis	8081B		1	11151	05/25/22 16:00	JS	ENE
Total/NA	Prep	3546			11126	05/24/22 16:29	BJJ	ENE
Total/NA	Analysis	8082A		1	11147	05/25/22 17:07	JS	ENE
Total/NA	Prep	3546			11217	05/26/22 11:37	BJJ	ENE
Total/NA	Analysis	8100		1	11255	05/27/22 14:44	BJJ	ENE
Total/NA	Prep	3050B			11070	05/23/22 15:33	CEV	ENE
Total/NA	Analysis	6010D		1	11089	05/24/22 18:32	CEV	ENE
Total/NA	Prep	7471B			11071	05/23/22 15:35	CEV	ENE
Total/NA	Analysis	7471B		1	11221	05/25/22 14:23	CEV	ENE

Laboratory References:

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

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4602-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
1030		Solid	Ignitability
6010D	3050B	Solid	Antimony
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Beryllium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Copper
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Manganese
6010D	3050B	Solid	Nickel
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
6010D	3050B	Solid	Thallium
6010D	3050B	Solid	Vanadium
6010D	3050B	Solid	Zinc
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254

Laboratory: Eurofins New England (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
8082A	3546	Solid	PCB-1260
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform

Laboratory: Eurofins New England (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
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1,2,4,5-Tetrachlorobenzene
8270D	3546	Solid	1,2,4-Trichlorobenzene
8270D	3546	Solid	1,2-Dichlorobenzene
8270D	3546	Solid	1,3-Dichlorobenzene
8270D	3546	Solid	1,4-Dichlorobenzene
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2,4,5-Trichlorophenol
8270D	3546	Solid	2,4,6-Trichlorophenol
8270D	3546	Solid	2,4-Dichlorophenol
8270D	3546	Solid	2,4-Dimethylphenol
8270D	3546	Solid	2,4-Dinitrophenol
8270D	3546	Solid	2,4-Dinitrotoluene
8270D	3546	Solid	2,6-Dinitrotoluene

Laboratory: Eurofins New England (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
8270D	3546	Solid	2-Chloronaphthalene
8270D	3546	Solid	2-Chlorophenol
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	2-Methylphenol
8270D	3546	Solid	2-Nitroaniline
8270D	3546	Solid	2-Nitrophenol
8270D	3546	Solid	3 & 4 Methylphenol
8270D	3546	Solid	3,3'-Dichlorobenzidine
8270D	3546	Solid	3-Nitroaniline
8270D	3546	Solid	4,6-Dinitro-2-methylphenol
8270D	3546	Solid	4-Bromophenyl phenyl ether
8270D	3546	Solid	4-Chloro-3-methylphenol
8270D	3546	Solid	4-Chloroaniline
8270D	3546	Solid	4-Chlorophenyl phenyl ether
8270D	3546	Solid	4-Nitroaniline
8270D	3546	Solid	4-Nitrophenol
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Aniline
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Azobenzene/Diphenyldiazene
8270D	3546	Solid	Benzidine
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Benzoic acid
8270D	3546	Solid	Benzyl alcohol
8270D	3546	Solid	bis (2-chloroisopropyl) ether
8270D	3546	Solid	Bis(2-chloroethoxy)methane
8270D	3546	Solid	Bis(2-chloroethyl)ether
8270D	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D	3546	Solid	Butyl benzyl phthalate
8270D	3546	Solid	Carbazole
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Dibenzofuran
8270D	3546	Solid	Diethyl phthalate
8270D	3546	Solid	Dimethyl phthalate
8270D	3546	Solid	Di-n-butyl phthalate
8270D	3546	Solid	Di-n-octyl phthalate
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene
8270D	3546	Solid	Hexachlorobenzene
8270D	3546	Solid	Hexachlorobutadiene
8270D	3546	Solid	Hexachlorocyclopentadiene

Laboratory: Eurofins New England (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
8270D	3546	Solid	Hexachloroethane
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Isophorone
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Nitrobenzene
8270D	3546	Solid	N-Nitrosodimethylamine
8270D	3546	Solid	N-Nitrosodi-n-propylamine
8270D	3546	Solid	N-Nitrosodiphenylamine
8270D	3546	Solid	Pentachloronitrobenzene
8270D	3546	Solid	Pentachlorophenol
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Phenol
8270D	3546	Solid	Pyrene
8270D	3546	Solid	Pyridine
9045D		Solid	pH
9045D		Solid	Temperature
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids
SM 2510B		Solid	Specific Conductance

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	1.01	11-30-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	06-30-22
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-0660	08-10-22
California	State	2792	11-30-22
Colorado	State	PA00009	06-30-22
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-22
Georgia (DW)	State	C048	01-31-23
Hawaii	State	N/A	01-31-23
Illinois	NELAP	200027	01-31-23
Iowa	State	361	03-02-22 *
Kansas	NELAP	E-10151	10-31-22
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana	NELAP	02055	06-30-22
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4602-1
Project/Site: I295/Rt 37 - Johnston, RI

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

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Massachusetts	State	M-PA009	06-30-22
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-22
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-22
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	08-31-22
Oregon	NELAP	PA200001	09-11-22
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-23
Texas	NELAP	T104704194-21-40	08-31-22
USDA	US Federal Programs	P330-19-00197	07-03-22
Vermont	State	VT - 36037	10-28-22
Virginia	NELAP	460182	06-14-22
Washington	State	C457	04-11-23
West Virginia (DW)	State	9906 C	12-31-22
West Virginia DEP	State	055	07-01-22
Wyoming	State	8TMS-L	01-31-23
Wyoming (UST)	A2LA	1.01	11-30-22

Method Summary

Client: AECOM
Job ID: 620-4602-1
Project/Site: I295/Rt 37 - Johnston, RI

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ENE
8081B	Organochlorine Pesticides (GC)	SW846	ENE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ENE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	ENE
6010D	Metals (ICP)	SW846	ENE
7471B	Mercury (CVAA)	SW846	ENE
1030	Ignitability, Solids	SW846	ENE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW846	ELLE
9045D	pH	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
SM 2510B	Conductivity, Specific Conductance	SM	ENE
3050B	Preparation, Metals	SW846	ENE
3546	Microwave Extraction	SW846	ENE
5035	Closed System Purge and Trap	SW846	ENE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7471B	Preparation, Mercury	SW846	ENE
DI Leach	Deionized Water Leaching Procedure	ASTM	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
None = None
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
ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4602-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4602-1	B105 (1)	Solid	05/20/22 08:30	05/20/22 12:32
620-4602-2	B106 (1)	Solid	05/20/22 10:15	05/20/22 12:32
620-4602-3	B105/B106 (0-4)	Solid	05/20/22 10:40	05/20/22 12:32

620-4602 Chain of Custody

Spectrum Analytical

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Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☒ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:

☒ TAT Date Needed: 1 week

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell, 10 Orms Street, Suite 400, Providence, RI 02904
Telephone #: 401-854-2808
Project Mgr: Richard Prior

Invoice To: AECOM
P.O No.: 60680132
Quote #:

Project No: 60680132
Site Name: 295/37 Interchange
Location: Cranston
State: RI
Sampler(s): P. Haskell

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= X2= X3=

G= Grab C=Compsite

List Preservative Code below:

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	SVOCs	TPH 8100	RP13 metals + Ba, Mn, V	PCBs	Pesticides	Ignitibility	S/CN Reactivity	pH/conductivity	Check if chlorinated
01	B105 (1)	5-20-2022	830	G	So	3				X									☐
02	B106 (1)	5-20-2022	1015	G	So	3				X									☐
03	B105/B106 (0-4)	5-20-2022	1040	C	So			4			X	X	X	X	X	X	X	X	☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other:
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp °C
[signature]	[signature]	5-20-22	1232	Observed 2.8
				Correction Factor +0.2
				Corrected 3.0
				IR ID # 6

☐ EDD format:
☐ E-mail to:

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

www.EurofinsUS.com/Spectrum

Rev Nov 2016

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-4148.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Rhode Island	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Rhode Island		Job #: 620-4602-1
Address: 2425 New Holland Pike,	Due Date Requested: 5/30/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: I295/Rt 37 - Johnston, RI	Project #: 62001238			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	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)	9012_ReactiveCN/7.3.3	9034_Reactive/7.3.4	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
B105/B106 (0-4) (620-4602-3)	5/20/22	10:40 Eastern		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/20/22 17:24	ECC			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5-21-22 1007	Company ECC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.0

Ver: 06/08/2021

5/31/2022

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4602-1

Login Number: 4602
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4602-1

Login Number: 4602
List Number: 2
Creator: McCaskey, Jonathan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/21/22 05:20 PM

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 is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=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.	True	
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?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4677-1
Client Project/Site: I295/Rt 37 - Johnston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
6/1/2022 5:47:25 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-4677-1
Project/Site: I295/Rt 37 - Johnston, RI

Qualifiers

GC/MS VOA

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD 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.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
^3-	Reporting Limit Check Standard is outside acceptance limits, low biased.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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)
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 620-4677-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4677-1

Comments
No additional comments.

Receipt
The samples were received on 5/24/2022 4:47 PM. 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 was 7.6º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The number of containers and preservative codes are missing from the COC.

GC/MS VOA
Methods 8260, 8260C: The continuing calibration verification (CCV) associated with batch 620-11363 exhibited % difference of > 20% for the following analytes: 1,2-Dibromo-3-Chloropropane, cis-1,3-Dichloropropene, and Tetrachloroethene; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

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

GC/MS Semi VOA
Methods 8270, 8270D: The continuing calibration verification (CCV) associated with batch 620-11223 recovered above the upper control limit for 4-Chloroaniline, Aniline and Butyl benzyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 620-11223/6).

Methods 8270, 8270D: The large number of analytes included in the continuing calibration verification (CCV) (CCVIS 620-11223/6) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Pyridine, N-Nitrosodimethylamine, Hexachlorobutadiene, Hexachlorocyclopentadiene, Benzoic acid, bis (2-chloroisopropyl) ether and 1,2,4,5-Tetrachlorobenzene. any reported value of bis (2-chloroisopropyl) ether should be considered an Estimate.

Methods 8270, 8270D: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 620-11316 was outside criteria for the following analyte(s): Benzidine. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Methods 8270, 8270D: The laboratory control sample (LCS) for preparation batch 620-11215 and analytical batch 620-11316 recovered outside control limits for the following analytes: 1,2,4-Trichlorobenzene, 3,3'-Dichlorobenzidine, Aniline, Benzoic acid, bis (2-chloroisopropyl) ether, Bis(2-chloroethoxy)methane, Hexachlorobutadiene, Isophorone and N-Nitrosodimethylamine. The affected target analytes recovered within acceptance limits, >10%; therefore, demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

Methods 8270, 8270D: The laboratory control sample Duplicate (LCSD) for preparation batch 620-11215 and analytical batch 620-11316 recovered outside control limits for Multiple analytes. The laboratory control sample was within control limits and the batch is accepted based on the LCS recovery.

Methods 8270, 8270D, 8270D_LL_PAH: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 620-11215/1-A). These results have been reported and qualified.

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

Job ID: 620-4677-1 (Continued)

Laboratory: Eurofins New England (Continued)

GC Semi VOA

Method 8082A: Internal standard (ISTD) response for the following sample exceeded the control limit on the confirmation column due to interference: (CCV 620-11325/4). As a result of the interference, the elevated response in ISTD caused the surrogate recovery to be below acceptance criteria. The sample results associated with this ISTD were reported from the other column, which met ISTD acceptance criteria.

Method 8081B: The continuing calibration verification (CCV) associated with batch 620-11369 recovered above the upper control limit for Endrin on the confirmation signal. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 620-11369/8) and (CCVIS 620-11369/4).

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

Metals

Method 6010D: The sample duplicate precision for the following sample associated with preparation batch 620-11186 and analytical batch 620-11242 was outside control limits for Ba, Cr, Cu, Mn, Ni, and Pb: (620-4653-D-1-F). The associated Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) precision met acceptance criteria.

Methods 7471, 7471A, 7471B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-11187 and analytical batch 620-11286 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits for mercury.

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

General Chemistry

Method Moisture: The sample duplicate (DUP) precision for analytical batch 620-11397 was outside control limits. Sample non-homogeneity is suspected.

Method Moisture:

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

Organic Prep

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Client Sample ID: B103/B104 (0-4) — Lab Sample ID: 620-4677-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	79.7		68.3		ug/Kg	1	☼	8270D	Total/NA
Pyrene	99.9		68.3		ug/Kg	1	☼	8270D	Total/NA
TEPH (C9-C36)	80.6		13.5		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.82		1.47		mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.625		0.490		mg/Kg	1	☼	6010D	Total/NA
Barium	29.5		0.981		mg/Kg	1	☼	6010D	Total/NA
Chromium	13.1		0.981		mg/Kg	1	☼	6010D	Total/NA
Copper	18.6		0.981		mg/Kg	1	☼	6010D	Total/NA
Lead	9.21		1.47		mg/Kg	1	☼	6010D	Total/NA
Nickel	7.87		0.981		mg/Kg	1	☼	6010D	Total/NA
Zinc	43.0	^3-	2.94		mg/Kg	1	☼	6010D	Total/NA
Manganese	229	^3-	0.981		mg/Kg	1	☼	6010D	Total/NA
Ignitability	negative				NONE	1		1030	Total/NA
pH	5.9				SU	1		9045D	Soluble
Temperature	22.5				Degrees C	1		9045D	Soluble
Specific Conductance	30.8		10.0		uS/cm	1		SM 2510B	Soluble

Client Sample ID: B104 (1) — Lab Sample ID: 620-4677-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
2-Hexanone (MBK)	60.4		12.8		ug/Kg	1	☼	8260C	Total/NA
4-Isopropyltoluene	15.6		6.41		ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: B103 (1) — Lab Sample ID: 620-4677-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Client Sample ID: B103/B104 (0-4)
Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-1
Matrix: Solid
Percent Solids: 96.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
1,2,4-Trichlorobenzene	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
1,2-Dichlorobenzene	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
1,3-Dichlorobenzene	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
1,4-Dichlorobenzene	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
1-Methylnaphthalene	ND	*-	68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2,4,5-Trichlorophenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2,4,6-Trichlorophenol	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2,4-Dichlorophenol	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2,4-Dimethylphenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2,4-Dinitrophenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2,4-Dinitrotoluene	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2,6-Dinitrotoluene	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2-Chloronaphthalene	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2-Chlorophenol	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2-Methylnaphthalene	ND	*-	68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2-Methylphenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2-Nitroaniline	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
2-Nitrophenol	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
3 & 4 Methylphenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
3,3'-Dichlorobenzidine	ND	*+	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
3-Nitroaniline	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
4,6-Dinitro-2-methylphenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
4-Bromophenyl phenyl ether	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
4-Chloro-3-methylphenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
4-Chloroaniline	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
4-Chlorophenyl phenyl ether	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
4-Nitroaniline	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
4-Nitrophenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Acenaphthene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Acenaphthylene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Aniline	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Anthracene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Azobenzene/Diphenyldiazene	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Benzidine	ND	*1	675		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Benzo[a]anthracene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Benzo[a]pyrene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Benzo[b]fluoranthene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Benzo[g,h,i]perylene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Benzo[k]fluoranthene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Benzoic acid	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Benzyl alcohol	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Bis(2-chloroethoxy)methane	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Bis(2-chloroethyl)ether	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
bis (2-chloroisopropyl) ether	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Bis(2-ethylhexyl) phthalate	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Butyl benzyl phthalate	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Carbazole	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Chrysene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1

Client Sample ID: B103/B104 (0-4)
Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-1
Matrix: Solid
Percent Solids: 96.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Dibenzofuran	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Diethyl phthalate	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Dimethyl phthalate	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Di-n-butyl phthalate	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Di-n-octyl phthalate	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Fluoranthene	**79.7**		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Fluorene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Hexachlorobenzene	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Hexachlorobutadiene	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Hexachlorocyclopentadiene	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Hexachloroethane	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Indeno[1,2,3-cd]pyrene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Isophorone	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Naphthalene	ND	*-	68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Nitrobenzene	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
N-Nitrosodimethylamine	ND	*-	171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
N-Nitrosodi-n-propylamine	ND		171		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
N-Nitrosodiphenylamine	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Pentachloronitrobenzene	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Pentachlorophenol	ND		338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Phenanthrene	ND		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Phenol	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Pyrene	**99.9**		68.3		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1
Pyridine	ND	*-	338		ug/Kg	☼	05/26/22 10:31	05/26/22 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*30 - 130*	*05/26/22 10:31*	*05/26/22 22:09*	*1*
2-Fluorophenol (Surr)	*66*		*15 - 110*	*05/26/22 10:31*	*05/26/22 22:09*	*1*
Nitrobenzene-d5 (Surr)	*45*		*30 - 130*	*05/26/22 10:31*	*05/26/22 22:09*	*1*
Phenol-d5 (Surr)	*59*		*15 - 110*	*05/26/22 10:31*	*05/26/22 22:09*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*15 - 110*	*05/26/22 10:31*	*05/26/22 22:09*	*1*
Terphenyl-d14 (Surr)	*95*		*30 - 130*	*05/26/22 10:31*	*05/26/22 22:09*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
beta-BHC	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
delta-BHC	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
gamma-BHC (Lindane)	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Heptachlor	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Aldrin	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Heptachlor epoxide	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Endosulfan I	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Dieldrin	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
4,4'-DDE	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Endrin	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Endosulfan II	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
4,4'-DDD	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Endosulfan sulfate	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1

Client Sample ID: B103/B104 (0-4)
Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-1
Matrix: Solid
Percent Solids: 96.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Methoxychlor	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Endrin ketone	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Endrin aldehyde	ND		7.67		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
cis-Chlordane	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
trans-Chlordane	ND		4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Toxaphene	ND		95.8		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1
Alachlor	ND	*+	4.79		ug/Kg	☼	05/26/22 15:36	06/01/22 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*44*		*30 - 150*	*05/26/22 15:36*	*06/01/22 12:02*	*1*
Tetrachloro-m-xylene	*47*		*30 - 150*	*05/26/22 15:36*	*06/01/22 12:02*	*1*
DCB Decachlorobiphenyl (Surr)	*58*		*30 - 150*	*05/26/22 15:36*	*06/01/22 12:02*	*1*
DCB Decachlorobiphenyl (Surr)	*49*		*30 - 150*	*05/26/22 15:36*	*06/01/22 12:02*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1
PCB-1221	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1
PCB-1232	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1
PCB-1242	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1
PCB-1248	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1
PCB-1254	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1
PCB-1260	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1
PCB-1262	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1
PCB-1268	ND		19.2		ug/Kg	☼	05/26/22 15:36	05/31/22 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*30 - 150*	*05/26/22 15:36*	*05/31/22 15:41*	*1*
Tetrachloro-m-xylene	*60*		*30 - 150*	*05/26/22 15:36*	*05/31/22 15:41*	*1*
DCB Decachlorobiphenyl (Surr)	*57*		*30 - 150*	*05/26/22 15:36*	*05/31/22 15:41*	*1*
DCB Decachlorobiphenyl (Surr)	*62*		*30 - 150*	*05/26/22 15:36*	*05/31/22 15:41*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**80.6**		13.5		mg/Kg	☼	06/01/22 09:18	06/01/22 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*101*		*40 - 140*	*06/01/22 09:18*	*06/01/22 14:24*	*1*
o-Terphenyl (Surr)	*102*		*40 - 140*	*06/01/22 09:18*	*06/01/22 14:24*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.90		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Arsenic	**2.82**		1.47		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Beryllium	**0.625**		0.490		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Barium	**29.5**		0.981		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Cadmium	ND		0.490		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Chromium	**13.1**		0.981		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Copper	**18.6**		0.981		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Lead	**9.21**		1.47		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1

Client Sample ID: B103/B104 (0-4)

Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-1

Matrix: Solid
Percent Solids: 96.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**7.87**		0.981		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Selenium	ND		1.47		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Silver	ND		1.47		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Thallium	ND		2.94		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Zinc	**43.0**	**^3-**	2.94		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1
Manganese	**229**	**^3-**	0.981		mg/Kg	☼	05/25/22 15:27	05/27/22 12:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0490		mg/Kg	☼	05/25/22 15:30	05/27/22 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	**negative**				NONE			06/01/22 11:03	1
Cyanide, Reactive	ND		59.3		mg/Kg		05/26/22 08:15	05/27/22 12:11	1
Sulfide, Reactive	ND	F1	158		mg/Kg		05/26/22 08:15	05/26/22 11:49	1
Percent Moisture	**3.7**		0.1		%			05/31/22 10:28	1
Percent Solids	**96.3**		0.1		%			05/31/22 10:28	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.9**				SU			05/25/22 10:33	1
Temperature	**22.5**				Degrees C			05/25/22 10:33	1
Specific Conductance	**30.8**		10.0		uS/cm			06/01/22 11:57	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Client Sample ID: B104 (1)
Date Collected: 05/23/22 13:25
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-2
Matrix: Solid
Percent Solids: 93.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Acetone	ND		64.1		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Acrylonitrile	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Benzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Bromobenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Bromochloromethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Bromodichloromethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Bromoform	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Bromomethane	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
2-Butanone (MEK)	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
n-Butylbenzene	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
sec-Butylbenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
tert-Butylbenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Carbon disulfide	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Carbon tetrachloride	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Chlorobenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Chloroethane	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Chloroform	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Chloromethane	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
2-Chlorotoluene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
4-Chlorotoluene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2-Dibromo-3-Chloropropane	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Dibromochloromethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2-Dibromoethane (EDB)	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Dibromomethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2-Dichlorobenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,3-Dichlorobenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,4-Dichlorobenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Dichlorodifluoromethane (Freon 12)	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,1-Dichloroethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2-Dichloroethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,1-Dichloroethene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
cis-1,2-Dichloroethene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
trans-1,2-Dichloroethene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2-Dichloropropane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,3-Dichloropropane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
2,2-Dichloropropane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,1-Dichloropropene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
cis-1,3-Dichloropropene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
trans-1,3-Dichloropropene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Ethylbenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Hexachlorobutadiene	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
2-Hexanone (MBK)	**60.4**		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Isopropylbenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
4-Isopropyltoluene	**15.6**		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Methyl tert-butyl ether	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Methylene Chloride	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Naphthalene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Client Sample ID: B104 (1)
Date Collected: 05/23/22 13:25
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-2
Matrix: Solid
Percent Solids: 93.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Styrene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,1,1,2-Tetrachloroethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,1,2,2-Tetrachloroethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Tetrachloroethene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Toluene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2,3-Trichlorobenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2,4-Trichlorobenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,3,5-Trichlorobenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,1,1-Trichloroethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,1,2-Trichloroethane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Trichloroethene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Trichlorofluoromethane (Freon 11)	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2,3-Trichloropropane	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,2,4-Trimethylbenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,3,5-Trimethylbenzene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Vinyl chloride	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
m,p-Xylene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
o-Xylene	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Tetrahydrofuran	ND		12.8		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Ethyl ether	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Tert-amyl methyl ether	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Ethyl tert-butyl ether	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
di-Isopropyl ether	ND		6.41		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
tert-Butanol	ND		128		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
1,4-Dioxane	ND		128		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
trans-1,4-Dichloro-2-butene	ND		32.0		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1
Ethanol	ND		1280		ug/Kg	☼	06/01/22 08:24	06/01/22 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*06/01/22 08:24*	*06/01/22 12:52*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*06/01/22 08:24*	*06/01/22 12:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*06/01/22 08:24*	*06/01/22 12:52*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*	*06/01/22 08:24*	*06/01/22 12:52*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.0**		0.1		%			06/01/22 12:21	1
Percent Solids	**93.0**		0.1		%			06/01/22 12:21	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Client Sample ID: B103 (1)
Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-3
Matrix: Solid
Percent Solids: 77.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Acetone	ND		122		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Acrylonitrile	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Benzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Bromobenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Bromochloromethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Bromodichloromethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Bromoform	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Bromomethane	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
2-Butanone (MEK)	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
n-Butylbenzene	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
sec-Butylbenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
tert-Butylbenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Carbon disulfide	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Carbon tetrachloride	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Chlorobenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Chloroethane	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Chloroform	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Chloromethane	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
2-Chlorotoluene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
4-Chlorotoluene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2-Dibromo-3-Chloropropane	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Dibromochloromethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2-Dibromoethane (EDB)	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Dibromomethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2-Dichlorobenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,3-Dichlorobenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,4-Dichlorobenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Dichlorodifluoromethane (Freon 12)	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,1-Dichloroethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2-Dichloroethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,1-Dichloroethene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
cis-1,2-Dichloroethene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
trans-1,2-Dichloroethene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2-Dichloropropane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,3-Dichloropropane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
2,2-Dichloropropane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,1-Dichloropropene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
cis-1,3-Dichloropropene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
trans-1,3-Dichloropropene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Ethylbenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Hexachlorobutadiene	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
2-Hexanone (MBK)	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Isopropylbenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
4-Isopropyltoluene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Methyl tert-butyl ether	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
4-Methyl-2-pentanone (MIBK)	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Methylene Chloride	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Naphthalene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1

Client Sample ID: B103 (1)
Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-3
Matrix: Solid
Percent Solids: 77.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Styrene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,1,1,2-Tetrachloroethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,1,2,2-Tetrachloroethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Tetrachloroethene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Toluene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2,3-Trichlorobenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2,4-Trichlorobenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,3,5-Trichlorobenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,1,1-Trichloroethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,1,2-Trichloroethane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Trichloroethene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Trichlorofluoromethane (Freon 11)	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2,3-Trichloropropane	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,2,4-Trimethylbenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,3,5-Trimethylbenzene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Vinyl chloride	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
m,p-Xylene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
o-Xylene	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Tetrahydrofuran	ND		24.5		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Ethyl ether	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Tert-amyl methyl ether	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Ethyl tert-butyl ether	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
di-Isopropyl ether	ND		12.2		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
tert-Butanol	ND		245		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
1,4-Dioxane	ND		245		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
trans-1,4-Dichloro-2-butene	ND		61.1		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1
Ethanol	ND		2450		ug/Kg	☼	06/01/22 08:24	06/01/22 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/01/22 08:24*	*06/01/22 15:22*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/01/22 08:24*	*06/01/22 15:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*06/01/22 08:24*	*06/01/22 15:22*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*06/01/22 08:24*	*06/01/22 15:22*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22.4**		0.1		%			06/01/22 12:21	1
Percent Solids	**77.6**		0.1		%			06/01/22 12:21	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4677-2	B104 (1)	89	94	119	105
620-4677-3	B103 (1)	99	98	114	99
LCS 620-11362/1-A	Lab Control Sample	100	99	107	100
LCSD 620-11362/2-A	Lab Control Sample Dup	99	99	107	100
MB 620-11362/3-A	Method Blank	98	97	105	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
620-4677-1	B103/B104 (0-4)	62	66	45	59	88	95
LCS 620-11215/2-A	Lab Control Sample	41	49	39	48	81	93
LCSD 620-11215/3-A	Lab Control Sample Dup	36	43	33	41	72	78
MB 620-11215/1-A	Method Blank	27 S1-	36	25 S1-	30	38	57

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4677-1	B103/B104 (0-4)	44	47	58	49
LCS 620-11234/4-A	Lab Control Sample	84		77	
LCSD 620-11234/5-A	Lab Control Sample Dup	72		73	
MB 620-11234/1-A	Method Blank	78		73	

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Surrogate Summary

Client: AECOM
Job ID: 620-4677-1
Project/Site: I295/Rt 37 - Johnston, RI

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4677-1	B103/B104 (0-4)	62	60	57	62
LCS 620-11234/2-A	Lab Control Sample	84	80	78	87
LCSD 620-11234/3-A	Lab Control Sample Dup	80	77	77	80
MB 620-11234/1-A	Method Blank	78	75	62	65

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	OTPH
Lab Sample ID	Client Sample ID	(40-140)	(40-140)
620-4677-1	B103/B104 (0-4)	101	102
LCS 620-11372/2-A	Lab Control Sample	85	89
LCSD 620-11372/3-A	Lab Control Sample Dup	103	82
MB 620-11372/1-A	Method Blank	99	83

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)
OTPH = o-Terphenyl (Surr)

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-11362/3-A
Matrix: Solid
Analysis Batch: 11363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11362

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Acetone	ND		50.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Acrylonitrile	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Benzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Bromobenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Bromochloromethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Bromodichloromethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Bromoform	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Bromomethane	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
2-Butanone (MEK)	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
n-Butylbenzene	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
sec-Butylbenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
tert-Butylbenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Carbon disulfide	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Carbon tetrachloride	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Chlorobenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Chloroethane	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Chloroform	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Chloromethane	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
2-Chlorotoluene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
4-Chlorotoluene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Dibromochloromethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Dibromomethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,1-Dichloroethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2-Dichloroethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,1-Dichloroethene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2-Dichloropropane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,3-Dichloropropane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
2,2-Dichloropropane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,1-Dichloropropene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Ethylbenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Hexachlorobutadiene	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Isopropylbenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
4-Isopropyltoluene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Methylene Chloride	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11362/3-A
Matrix: Solid
Analysis Batch: 11363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11362

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
N-Propylbenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Styrene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Tetrachloroethene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Toluene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Trichloroethene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Vinyl chloride	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
m,p-Xylene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
o-Xylene	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Tetrahydrofuran	ND		10.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Ethyl ether	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
di-Isopropyl ether	ND		5.00		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
tert-Butanol	ND		100		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
1,4-Dioxane	ND		100		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		06/01/22 08:24	06/01/22 11:08	1
Ethanol	ND		1000		ug/Kg		06/01/22 08:24	06/01/22 11:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*06/01/22 08:24*	*06/01/22 11:08*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*06/01/22 08:24*	*06/01/22 11:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*	*06/01/22 08:24*	*06/01/22 11:08*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*06/01/22 08:24*	*06/01/22 11:08*	*1*

Lab Sample ID: LCS 620-11362/1-A
Matrix: Solid
Analysis Batch: 11363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	21.17		ug/Kg		106	70 - 130
Acetone	20.0	18.07	J	ug/Kg		90	70 - 130
Acrylonitrile	20.0	17.28		ug/Kg		86	70 - 130
Benzene	20.0	19.04		ug/Kg		95	70 - 130
Bromobenzene	20.0	19.31		ug/Kg		97	70 - 130
Bromochloromethane	20.0	17.99		ug/Kg		90	70 - 130
Bromodichloromethane	20.0	18.67		ug/Kg		93	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11362/1-A
Matrix: Solid
Analysis Batch: 11363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	18.45		ug/Kg		92	70 - 130
Bromomethane	20.0	21.17		ug/Kg		106	70 - 130
2-Butanone (MEK)	20.0	17.18		ug/Kg		86	70 - 130
n-Butylbenzene	20.0	22.87		ug/Kg		114	70 - 130
sec-Butylbenzene	20.0	22.11		ug/Kg		111	70 - 130
tert-Butylbenzene	20.0	19.17		ug/Kg		96	70 - 130
Carbon disulfide	20.0	20.22		ug/Kg		101	70 - 130
Carbon tetrachloride	20.0	20.28		ug/Kg		101	70 - 130
Chlorobenzene	20.0	20.81		ug/Kg		104	70 - 130
Chloroethane	20.0	23.82		ug/Kg		119	70 - 130
Chloroform	20.0	19.40		ug/Kg		97	70 - 130
Chloromethane	20.0	20.23		ug/Kg		101	70 - 130
2-Chlorotoluene	20.0	21.24		ug/Kg		106	70 - 130
4-Chlorotoluene	20.0	21.50		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	16.26		ug/Kg		81	70 - 130
Dibromochloromethane	20.0	17.73		ug/Kg		89	70 - 130
1,2-Dibromoethane (EDB)	20.0	17.60		ug/Kg		88	70 - 130
Dibromomethane	20.0	18.02		ug/Kg		90	70 - 130
1,2-Dichlorobenzene	20.0	20.63		ug/Kg		103	70 - 130
1,3-Dichlorobenzene	20.0	21.14		ug/Kg		106	70 - 130
1,4-Dichlorobenzene	20.0	21.50		ug/Kg		107	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	21.28		ug/Kg		106	70 - 130
1,1-Dichloroethane	20.0	19.20		ug/Kg		96	70 - 130
1,2-Dichloroethane	20.0	19.59		ug/Kg		98	70 - 130
1,1-Dichloroethene	20.0	19.03		ug/Kg		95	70 - 130
cis-1,2-Dichloroethene	20.0	17.62		ug/Kg		88	70 - 130
trans-1,2-Dichloroethene	20.0	18.41		ug/Kg		92	70 - 130
1,2-Dichloropropane	20.0	18.55		ug/Kg		93	70 - 130
1,3-Dichloropropane	20.0	18.34		ug/Kg		92	70 - 130
2,2-Dichloropropane	20.0	19.63		ug/Kg		98	70 - 130
1,1-Dichloropropene	20.0	19.34		ug/Kg		97	70 - 130
cis-1,3-Dichloropropene	20.0	17.40		ug/Kg		87	70 - 130
trans-1,3-Dichloropropene	20.0	18.86		ug/Kg		94	70 - 130
Ethylbenzene	20.0	21.42		ug/Kg		107	70 - 130
Hexachlorobutadiene	20.0	18.67		ug/Kg		93	70 - 130
2-Hexanone (MBK)	20.0	16.16		ug/Kg		81	70 - 130
Isopropylbenzene	20.0	20.58		ug/Kg		103	70 - 130
4-Isopropyltoluene	20.0	21.32		ug/Kg		107	70 - 130
Methyl tert-butyl ether	20.0	17.88		ug/Kg		89	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	16.94		ug/Kg		85	70 - 130
Methylene Chloride	20.0	20.36		ug/Kg		102	70 - 130
Naphthalene	20.0	18.91		ug/Kg		95	70 - 130
N-Propylbenzene	20.0	22.24		ug/Kg		111	70 - 130
Styrene	20.0	19.96		ug/Kg		100	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.20		ug/Kg		101	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.79		ug/Kg		104	70 - 130
Tetrachloroethene	20.0	17.80		ug/Kg		89	70 - 130
Toluene	20.0	18.97		ug/Kg		95	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11362/1-A
Matrix: Solid
Analysis Batch: 11363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	20.0	19.45		ug/Kg		97	70 - 130
1,2,4-Trichlorobenzene	20.0	19.71		ug/Kg		99	70 - 130
1,3,5-Trichlorobenzene	20.0	20.57		ug/Kg		103	70 - 130
1,1,1-Trichloroethane	20.0	19.92		ug/Kg		100	70 - 130
1,1,2-Trichloroethane	20.0	18.80		ug/Kg		94	70 - 130
Trichloroethene	20.0	19.13		ug/Kg		96	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	20.70		ug/Kg		104	70 - 130
1,2,3-Trichloropropane	20.0	20.97		ug/Kg		105	70 - 130
1,2,4-Trimethylbenzene	20.0	21.51		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	20.0	21.40		ug/Kg		107	70 - 130
Vinyl chloride	20.0	21.13		ug/Kg		106	70 - 130
m,p-Xylene	20.0	20.90		ug/Kg		105	70 - 130
o-Xylene	20.0	19.98		ug/Kg		100	70 - 130
Tetrahydrofuran	20.0	16.81		ug/Kg		84	70 - 130
Ethyl ether	20.0	18.18		ug/Kg		91	70 - 130
Tert-amyl methyl ether	20.0	17.85		ug/Kg		89	70 - 130
Ethyl tert-butyl ether	20.0	17.35		ug/Kg		87	70 - 130
di-Isopropyl ether	20.0	18.18		ug/Kg		91	70 - 130
tert-Butanol	200	166.0		ug/Kg		83	70 - 130
1,4-Dioxane	200	143.4		ug/Kg		72	70 - 130
trans-1,4-Dichloro-2-butene	20.0	19.54	J	ug/Kg		98	70 - 130
Ethanol	400	367.7	J	ug/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 620-11362/2-A
Matrix: Solid
Analysis Batch: 11363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11362

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.72		ug/Kg		99	70 - 130	7	30
Acetone	20.0	16.92	J	ug/Kg		85	70 - 130	7	30
Acrylonitrile	20.0	17.18		ug/Kg		86	70 - 130	1	30
Benzene	20.0	18.27		ug/Kg		91	70 - 130	4	30
Bromobenzene	20.0	18.52		ug/Kg		93	70 - 130	4	30
Bromochloromethane	20.0	17.27		ug/Kg		86	70 - 130	4	30
Bromodichloromethane	20.0	18.25		ug/Kg		91	70 - 130	2	30
Bromoform	20.0	17.81		ug/Kg		89	70 - 130	4	30
Bromomethane	20.0	20.80		ug/Kg		104	70 - 130	2	30
2-Butanone (MEK)	20.0	16.30		ug/Kg		81	70 - 130	5	30
n-Butylbenzene	20.0	21.22		ug/Kg		106	70 - 130	7	30
sec-Butylbenzene	20.0	20.52		ug/Kg		103	70 - 130	7	30
tert-Butylbenzene	20.0	18.02		ug/Kg		90	70 - 130	6	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11362/2-A
Matrix: Solid
Analysis Batch: 11363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11362

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	18.97		ug/Kg		95	70 - 130	6	30
Carbon tetrachloride			20.0	19.09		ug/Kg		95	70 - 130	6	30
Chlorobenzene			20.0	19.48		ug/Kg		97	70 - 130	7	30
Chloroethane			20.0	22.20		ug/Kg		111	70 - 130	7	30
Chloroform			20.0	18.50		ug/Kg		93	70 - 130	5	30
Chloromethane			20.0	19.42		ug/Kg		97	70 - 130	4	30
2-Chlorotoluene			20.0	19.94		ug/Kg		100	70 - 130	6	30
4-Chlorotoluene			20.0	20.23		ug/Kg		101	70 - 130	6	30
1,2-Dibromo-3-Chloropropane			20.0	16.42		ug/Kg		82	70 - 130	1	30
Dibromochloromethane			20.0	17.14		ug/Kg		86	70 - 130	3	30
1,2-Dibromoethane (EDB)			20.0	17.45		ug/Kg		87	70 - 130	1	30
Dibromomethane			20.0	17.71		ug/Kg		89	70 - 130	2	30
1,2-Dichlorobenzene			20.0	19.59		ug/Kg		98	70 - 130	5	30
1,3-Dichlorobenzene			20.0	19.63		ug/Kg		98	70 - 130	7	30
1,4-Dichlorobenzene			20.0	20.48		ug/Kg		102	70 - 130	5	30
Dichlorodifluoromethane (Freon 12)			20.0	19.83		ug/Kg		99	70 - 130	7	30
1,1-Dichloroethane			20.0	18.51		ug/Kg		93	70 - 130	4	30
1,2-Dichloroethane			20.0	18.97		ug/Kg		95	70 - 130	3	30
1,1-Dichloroethene			20.0	18.04		ug/Kg		90	70 - 130	5	30
cis-1,2-Dichloroethene			20.0	17.21		ug/Kg		86	70 - 130	2	30
trans-1,2-Dichloroethene			20.0	17.71		ug/Kg		89	70 - 130	4	30
1,2-Dichloropropane			20.0	17.81		ug/Kg		89	70 - 130	4	30
1,3-Dichloropropane			20.0	18.11		ug/Kg		91	70 - 130	1	30
2,2-Dichloropropane			20.0	19.10		ug/Kg		96	70 - 130	3	30
1,1-Dichloropropene			20.0	18.67		ug/Kg		93	70 - 130	4	30
cis-1,3-Dichloropropene			20.0	16.86		ug/Kg		84	70 - 130	3	30
trans-1,3-Dichloropropene			20.0	18.24		ug/Kg		91	70 - 130	3	30
Ethylbenzene			20.0	20.01		ug/Kg		100	70 - 130	7	30
Hexachlorobutadiene			20.0	18.12		ug/Kg		91	70 - 130	3	30
2-Hexanone (MBK)			20.0	16.23		ug/Kg		81	70 - 130	0	30
Isopropylbenzene			20.0	19.33		ug/Kg		97	70 - 130	6	30
4-Isopropyltoluene			20.0	19.93		ug/Kg		100	70 - 130	7	30
Methyl tert-butyl ether			20.0	17.47		ug/Kg		87	70 - 130	2	30
4-Methyl-2-pentanone (MIBK)			20.0	16.86		ug/Kg		84	70 - 130	0	30
Methylene Chloride			20.0	20.85		ug/Kg		104	70 - 130	2	30
Naphthalene			20.0	18.74		ug/Kg		94	70 - 130	1	30
N-Propylbenzene			20.0	20.68		ug/Kg		103	70 - 130	7	30
Styrene			20.0	18.98		ug/Kg		95	70 - 130	5	30
1,1,1,2-Tetrachloroethane			20.0	19.51		ug/Kg		98	70 - 130	3	30
1,1,2,2-Tetrachloroethane			20.0	20.08		ug/Kg		100	70 - 130	3	30
Tetrachloroethene			20.0	16.89		ug/Kg		84	70 - 130	5	30
Toluene			20.0	18.14		ug/Kg		91	70 - 130	4	30
1,2,3-Trichlorobenzene			20.0	18.75		ug/Kg		94	70 - 130	4	30
1,2,4-Trichlorobenzene			20.0	18.40		ug/Kg		92	70 - 130	7	30
1,3,5-Trichlorobenzene			20.0	19.22		ug/Kg		96	70 - 130	7	30
1,1,1-Trichloroethane			20.0	18.99		ug/Kg		95	70 - 130	5	30
1,1,2-Trichloroethane			20.0	18.07		ug/Kg		90	70 - 130	4	30
Trichloroethene			20.0	18.32		ug/Kg		92	70 - 130	4	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11362/2-A
Matrix: Solid
Analysis Batch: 11363

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11362

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	19.51		ug/Kg		98	70 - 130	6	30
1,2,3-Trichloropropane			20.0	20.25		ug/Kg		101	70 - 130	3	30
1,2,4-Trimethylbenzene			20.0	19.89		ug/Kg		99	70 - 130	8	30
1,3,5-Trimethylbenzene			20.0	20.12		ug/Kg		101	70 - 130	6	30
Vinyl chloride			20.0	19.72		ug/Kg		99	70 - 130	7	30
m,p-Xylene			20.0	19.70		ug/Kg		99	70 - 130	6	30
o-Xylene			20.0	18.89		ug/Kg		94	70 - 130	6	30
Tetrahydrofuran			20.0	16.96		ug/Kg		85	70 - 130	1	30
Ethyl ether			20.0	17.86		ug/Kg		89	70 - 130	2	30
Tert-amyl methyl ether			20.0	17.68		ug/Kg		88	70 - 130	1	30
Ethyl tert-butyl ether			20.0	17.36		ug/Kg		87	70 - 130	0	30
di-Isopropyl ether			20.0	17.73		ug/Kg		89	70 - 130	2	30
tert-Butanol			200	170.4		ug/Kg		85	70 - 130	3	30
1,4-Dioxane			200	140.7		ug/Kg		70	70 - 130	2	30
trans-1,4-Dichloro-2-butene			20.0	19.18	J	ug/Kg		96	70 - 130	2	30
Ethanol			400	357.1	J	ug/Kg		89	70 - 130	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 620-11215/1-A
Matrix: Solid
Analysis Batch: 11223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11215

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
1,2,4-Trichlorobenzene	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
1,2-Dichlorobenzene	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
1,3-Dichlorobenzene	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
1,4-Dichlorobenzene	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
1-Methylnaphthalene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2,4,6-Trichlorophenol	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2,4-Dichlorophenol	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2,4-Dimethylphenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2,4-Dinitrophenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2,4-Dinitrotoluene	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2,6-Dinitrotoluene	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2-Chloronaphthalene	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2-Chlorophenol	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2-Methylnaphthalene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2-Methylphenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
2-Nitroaniline	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1

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

Lab Sample ID: MB 620-11215/1-A
Matrix: Solid
Analysis Batch: 11223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11215

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
3 & 4 Methylphenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
3,3'-Dichlorobenzidine	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
3-Nitroaniline	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
4,6-Dinitro-2-methylphenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
4-Chloroaniline	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
4-Nitroaniline	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
4-Nitrophenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Acenaphthene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Acenaphthylene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Aniline	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Anthracene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Azobenzene/Diphenyldiazene	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Benzidine	ND		660		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Benzo[a]anthracene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Benzo[a]pyrene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Benzo[b]fluoranthene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Benzo[g,h,i]perylene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Benzo[k]fluoranthene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Benzoic acid	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Benzyl alcohol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Bis(2-chloroethyl)ether	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
bis (2-chloroisopropyl) ether	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Bis(2-ethylhexyl) phthalate	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Butyl benzyl phthalate	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Carbazole	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Chrysene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Dibenz(a,h)anthracene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Dibenzofuran	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Diethyl phthalate	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Dimethyl phthalate	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Di-n-butyl phthalate	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Di-n-octyl phthalate	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Fluoranthene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Fluorene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Hexachlorobenzene	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Hexachlorobutadiene	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Hexachlorocyclopentadiene	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Hexachloroethane	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Indeno[1,2,3-cd]pyrene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Isophorone	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Naphthalene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Nitrobenzene	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
N-Nitrosodimethylamine	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
N-Nitrosodi-n-propylamine	ND		167		ug/Kg		05/26/22 10:31	05/26/22 17:22	1

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

Lab Sample ID: MB 620-11215/1-A
Matrix: Solid
Analysis Batch: 11223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11215

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Pentachloronitrobenzene	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Pentachlorophenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Phenanthrene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Phenol	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Pyrene	ND		66.7		ug/Kg		05/26/22 10:31	05/26/22 17:22	1
Pyridine	ND		330		ug/Kg		05/26/22 10:31	05/26/22 17:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*27*	*S1-*	*30 - 130*	*05/26/22 10:31*	*05/26/22 17:22*	*1*
2-Fluorophenol (Surr)	*36*		*15 - 110*	*05/26/22 10:31*	*05/26/22 17:22*	*1*
Nitrobenzene-d5 (Surr)	*25*	*S1-*	*30 - 130*	*05/26/22 10:31*	*05/26/22 17:22*	*1*
Phenol-d5 (Surr)	*30*		*15 - 110*	*05/26/22 10:31*	*05/26/22 17:22*	*1*
2,4,6-Tribromophenol (Surr)	*38*		*15 - 110*	*05/26/22 10:31*	*05/26/22 17:22*	*1*
Terphenyl-d14 (Surr)	*57*		*30 - 130*	*05/26/22 10:31*	*05/26/22 17:22*	*1*

Lab Sample ID: LCS 620-11215/2-A
Matrix: Solid
Analysis Batch: 11316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	1670	675.1		ug/Kg		41	40 - 140
1,2,4-Trichlorobenzene	1670	632.2	*-	ug/Kg		38	40 - 140
1,2-Dichlorobenzene	1670	703.0		ug/Kg		42	40 - 140
1,3-Dichlorobenzene	1670	685.3		ug/Kg		41	40 - 140
1,4-Dichlorobenzene	1670	684.4		ug/Kg		41	40 - 140
1-Methylnaphthalene	1670	716.5		ug/Kg		43	40 - 140
2,4,5-Trichlorophenol	1670	892.8		ug/Kg		54	30 - 130
2,4,6-Trichlorophenol	1670	752.2		ug/Kg		45	30 - 130
2,4-Dichlorophenol	1670	674.7		ug/Kg		40	30 - 130
2,4-Dimethylphenol	1670	649.3		ug/Kg		39	30 - 130
2,4-Dinitrophenol	1670	1054		ug/Kg		63	30 - 130
2,4-Dinitrotoluene	1670	1398		ug/Kg		84	40 - 140
2,6-Dinitrotoluene	1670	1131		ug/Kg		68	40 - 140
2-Chloronaphthalene	1670	754.3		ug/Kg		45	40 - 140
2-Chlorophenol	1670	701.2		ug/Kg		42	30 - 130
2-Methylnaphthalene	1670	718.4		ug/Kg		43	40 - 140
2-Methylphenol	1670	706.6		ug/Kg		42	30 - 130
2-Nitroaniline	1670	1051		ug/Kg		63	40 - 140
2-Nitrophenol	1670	669.3		ug/Kg		40	30 - 130
3 & 4 Methylphenol	1670	735.9		ug/Kg		44	30 - 130
3,3'-Dichlorobenzidine	1670	2719	*+	ug/Kg		163	40 - 140
3-Nitroaniline	1670	1089		ug/Kg		65	40 - 140
4,6-Dinitro-2-methylphenol	1670	1193		ug/Kg		72	30 - 130
4-Bromophenyl phenyl ether	1670	1160		ug/Kg		70	40 - 140
4-Chloro-3-methylphenol	1670	874.7		ug/Kg		52	30 - 130
4-Chloroaniline	1670	680.2		ug/Kg		41	40 - 140
4-Chlorophenyl phenyl ether	1670	1003		ug/Kg		60	40 - 140

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

Lab Sample ID: LCS 620-11215/2-A
Matrix: Solid
Analysis Batch: 11316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitroaniline	1670	1423		ug/Kg		85	40 - 140
4-Nitrophenol	1670	1365		ug/Kg		82	30 - 130
Acenaphthene	1670	806.0		ug/Kg		48	40 - 140
Acenaphthylene	1670	810.9		ug/Kg		49	40 - 140
Aniline	1670	555.9	*-	ug/Kg		33	40 - 140
Anthracene	1670	1409		ug/Kg		85	40 - 140
Azobenzene/Diphenyldiazene	1670	996.2		ug/Kg		60	40 - 140
Benzidine	1670	1353		ug/Kg		81	40 - 140
Benzo[a]anthracene	1670	1754		ug/Kg		105	40 - 140
Benzo[a]pyrene	1670	1512		ug/Kg		91	40 - 140
Benzo[b]fluoranthene	1670	1659		ug/Kg		100	40 - 140
Benzo[g,h,i]perylene	1670	1579		ug/Kg		95	40 - 140
Benzo[k]fluoranthene	1670	1206		ug/Kg		72	40 - 140
Benzoic acid	1670	331.6	*-	ug/Kg		20	30 - 130
Benzyl alcohol	1670	666.9		ug/Kg		40	40 - 140
Bis(2-chloroethoxy)methane	1670	627.2	*-	ug/Kg		38	40 - 140
Bis(2-chloroethyl)ether	1670	707.7		ug/Kg		42	40 - 140
bis (2-chloroisopropyl) ether	1670	613.0	*-	ug/Kg		37	40 - 140
Bis(2-ethylhexyl) phthalate	1670	1761		ug/Kg		106	40 - 140
Butyl benzyl phthalate	1670	1706		ug/Kg		102	40 - 140
Carbazole	1670	1500		ug/Kg		90	40 - 140
Chrysene	1670	1543		ug/Kg		93	40 - 140
Dibenz(a,h)anthracene	1670	1470		ug/Kg		88	40 - 140
Dibenzofuran	1670	877.1		ug/Kg		53	40 - 140
Diethyl phthalate	1670	1302		ug/Kg		78	40 - 140
Dimethyl phthalate	1670	988.0		ug/Kg		59	40 - 140
Di-n-butyl phthalate	1670	1456		ug/Kg		87	40 - 140
Di-n-octyl phthalate	1670	1553		ug/Kg		93	40 - 140
Fluoranthene	1670	1513		ug/Kg		91	40 - 140
Fluorene	1670	1016		ug/Kg		61	40 - 140
Hexachlorobenzene	1670	1206		ug/Kg		72	40 - 140
Hexachlorobutadiene	1670	537.0	*-	ug/Kg		32	40 - 140
Hexachlorocyclopentadiene	1670	746.5		ug/Kg		45	40 - 140
Hexachloroethane	1670	662.6		ug/Kg		40	40 - 140
Indeno[1,2,3-cd]pyrene	1670	1541		ug/Kg		92	40 - 140
Isophorone	1670	618.2	*-	ug/Kg		37	40 - 140
Naphthalene	1670	685.6		ug/Kg		41	40 - 140
Nitrobenzene	1670	671.1		ug/Kg		40	40 - 140
N-Nitrosodimethylamine	1670	559.5	*-	ug/Kg		34	40 - 140
N-Nitrosodi-n-propylamine	1670	751.4		ug/Kg		45	40 - 140
N-Nitrosodiphenylamine	1670	1337		ug/Kg		80	40 - 140
Pentachloronitrobenzene	1670	1249		ug/Kg		75	40 - 140
Pentachlorophenol	1670	1130		ug/Kg		68	30 - 130
Phenanthrene	1670	1324		ug/Kg		79	40 - 140
Phenol	1670	759.3		ug/Kg		46	40 - 140
Pyrene	1670	1648		ug/Kg		99	40 - 140
Pyridine	1670	672.2		ug/Kg		40	40 - 140

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

Lab Sample ID: LCS 620-11215/2-A
Matrix: Solid
Analysis Batch: 11316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11215

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*41*		*30 - 130*
2-Fluorophenol (Surr)	*49*		*15 - 110*
Nitrobenzene-d5 (Surr)	*39*		*30 - 130*
Phenol-d5 (Surr)	*48*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*81*		*15 - 110*
Terphenyl-d14 (Surr)	*93*		*30 - 130*

Lab Sample ID: LCSD 620-11215/3-A
Matrix: Solid
Analysis Batch: 11316

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11215

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene			1670	575.8	*-	ug/Kg		35	40 - 140	16	30
1,2,4-Trichlorobenzene			1670	542.9	*-	ug/Kg		33	40 - 140	15	30
1,2-Dichlorobenzene			1670	614.5	*-	ug/Kg		37	40 - 140	13	30
1,3-Dichlorobenzene			1670	599.9	*-	ug/Kg		36	40 - 140	13	30
1,4-Dichlorobenzene			1670	597.8	*-	ug/Kg		36	40 - 140	14	30
1-Methylnaphthalene			1670	617.8	*-	ug/Kg		37	40 - 140	15	30
2,4,5-Trichlorophenol			1670	789.0		ug/Kg		47	30 - 130	12	30
2,4,6-Trichlorophenol			1670	679.3		ug/Kg		41	30 - 130	10	30
2,4-Dichlorophenol			1670	562.4		ug/Kg		34	30 - 130	18	30
2,4-Dimethylphenol			1670	541.9		ug/Kg		33	30 - 130	18	30
2,4-Dinitrophenol			1670	892.5		ug/Kg		54	30 - 130	17	30
2,4-Dinitrotoluene			1670	1215		ug/Kg		73	40 - 140	14	30
2,6-Dinitrotoluene			1670	958.3		ug/Kg		58	40 - 140	17	30
2-Chloronaphthalene			1670	668.3		ug/Kg		40	40 - 140	12	30
2-Chlorophenol			1670	604.1		ug/Kg		36	30 - 130	15	30
2-Methylnaphthalene			1670	611.4	*-	ug/Kg		37	40 - 140	16	30
2-Methylphenol			1670	606.8		ug/Kg		36	30 - 130	15	30
2-Nitroaniline			1670	897.9		ug/Kg		54	40 - 140	16	30
2-Nitrophenol			1670	559.8		ug/Kg		34	30 - 130	18	30
3 & 4 Methylphenol			1670	627.1		ug/Kg		38	30 - 130	16	30
3,3'-Dichlorobenzidine			1670	2125		ug/Kg		127	40 - 140	25	30
3-Nitroaniline			1670	932.4		ug/Kg		56	40 - 140	16	30
4,6-Dinitro-2-methylphenol			1670	1102		ug/Kg		66	30 - 130	8	30
4-Bromophenyl phenyl ether			1670	1003		ug/Kg		60	40 - 140	15	30
4-Chloro-3-methylphenol			1670	733.3		ug/Kg		44	30 - 130	18	30
4-Chloroaniline			1670	565.4	*-	ug/Kg		34	40 - 140	18	30
4-Chlorophenyl phenyl ether			1670	880.0		ug/Kg		53	40 - 140	13	30
4-Nitroaniline			1670	1360		ug/Kg		82	40 - 140	5	30
4-Nitrophenol			1670	1206		ug/Kg		72	30 - 130	12	30
Acenaphthene			1670	699.9		ug/Kg		42	40 - 140	14	30
Acenaphthylene			1670	697.7		ug/Kg		42	40 - 140	15	30
Aniline			1670	496.2	*-	ug/Kg		30	40 - 140	11	30
Anthracene			1670	1240		ug/Kg		74	40 - 140	13	30
Azobenzene/Diphenyldiazene			1670	820.6		ug/Kg		49	40 - 140	19	30
Benzidine			1670	949.7	*1	ug/Kg		57	40 - 140	35	30
Benzo[a]anthracene			1670	1452		ug/Kg		87	40 - 140	19	30

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

Lab Sample ID: LCSD 620-11215/3-A
Matrix: Solid
Analysis Batch: 11316

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11215

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene			1670	1364		ug/Kg		82	40 - 140	10	30
Benzo[b]fluoranthene			1670	1568		ug/Kg		94	40 - 140	6	30
Benzo[g,h,i]perylene			1670	1431		ug/Kg		86	40 - 140	10	30
Benzo[k]fluoranthene			1670	993.0		ug/Kg		60	40 - 140	19	30
Benzoic acid			1670	273.0	J *-	ug/Kg		16	30 - 130	19	30
Benzyl alcohol			1670	567.3	*-	ug/Kg		34	40 - 140	16	30
Bis(2-chloroethoxy)methane			1670	536.5	*-	ug/Kg		32	40 - 140	16	30
Bis(2-chloroethyl)ether			1670	607.9	*-	ug/Kg		36	40 - 140	15	30
bis (2-chloroisopropyl) ether			1670	528.5	*-	ug/Kg		32	40 - 140	15	30
Bis(2-ethylhexyl) phthalate			1670	1489		ug/Kg		89	40 - 140	17	30
Butyl benzyl phthalate			1670	1436		ug/Kg		86	40 - 140	17	30
Carbazole			1670	1349		ug/Kg		81	40 - 140	11	30
Chrysene			1670	1413		ug/Kg		85	40 - 140	9	30
Dibenz(a,h)anthracene			1670	1348		ug/Kg		81	40 - 140	9	30
Dibenzofuran			1670	749.3		ug/Kg		45	40 - 140	16	30
Diethyl phthalate			1670	1136		ug/Kg		68	40 - 140	14	30
Dimethyl phthalate			1670	849.4		ug/Kg		51	40 - 140	15	30
Di-n-butyl phthalate			1670	1312		ug/Kg		79	40 - 140	10	30
Di-n-octyl phthalate			1670	1426		ug/Kg		86	40 - 140	8	30
Fluoranthene			1670	1356		ug/Kg		81	40 - 140	11	30
Fluorene			1670	888.2		ug/Kg		53	40 - 140	13	30
Hexachlorobenzene			1670	1056		ug/Kg		63	40 - 140	13	30
Hexachlorobutadiene			1670	467.3	*-	ug/Kg		28	40 - 140	14	30
Hexachlorocyclopentadiene			1670	622.6	*-	ug/Kg		37	40 - 140	18	30
Hexachloroethane			1670	574.5	*-	ug/Kg		34	40 - 140	14	30
Indeno[1,2,3-cd]pyrene			1670	1387		ug/Kg		83	40 - 140	11	30
Isophorone			1670	505.3	*-	ug/Kg		30	40 - 140	20	30
Naphthalene			1670	578.9	*-	ug/Kg		35	40 - 140	17	30
Nitrobenzene			1670	573.5	*-	ug/Kg		34	40 - 140	16	30
N-Nitrosodimethylamine			1670	480.9	*-	ug/Kg		29	40 - 140	15	30
N-Nitrosodi-n-propylamine			1670	659.8		ug/Kg		40	40 - 140	13	30
N-Nitrosodiphenylamine			1670	1186		ug/Kg		71	40 - 140	12	30
Pentachloronitrobenzene			1670	1125		ug/Kg		67	40 - 140	10	30
Pentachlorophenol			1670	989.2		ug/Kg		59	30 - 130	13	30
Phenanthrene			1670	1170		ug/Kg		70	40 - 140	12	30
Phenol			1670	625.2	*-	ug/Kg		38	40 - 140	19	30
Pyrene			1670	1383		ug/Kg		83	40 - 140	18	30
Pyridine			1670	580.0	*-	ug/Kg		35	40 - 140	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*36*		*30 - 130*
2-Fluorophenol (Surr)	*43*		*15 - 110*
Nitrobenzene-d5 (Surr)	*33*		*30 - 130*
Phenol-d5 (Surr)	*41*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*72*		*15 - 110*
Terphenyl-d14 (Surr)	*78*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-11234/1-A
Matrix: Solid
Analysis Batch: 11333

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11234

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
beta-BHC	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
delta-BHC	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
gamma-BHC (Lindane)	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Heptachlor	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Aldrin	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Heptachlor epoxide	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Endosulfan I	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Dieldrin	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
4,4'-DDE	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Endrin	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Endosulfan II	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
4,4'-DDD	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Endosulfan sulfate	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
4,4'-DDT	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Methoxychlor	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Endrin ketone	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Endrin aldehyde	ND		8.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
cis-Chlordane	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
trans-Chlordane	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Toxaphene	ND		100		ug/Kg		05/26/22 15:36	05/31/22 18:03	1
Alachlor	ND		5.00		ug/Kg		05/26/22 15:36	05/31/22 18:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*05/26/22 15:36*	*05/31/22 18:03*	*1*
DCB Decachlorobiphenyl (Surr)	*73*		*30 - 150*	*05/26/22 15:36*	*05/31/22 18:03*	*1*

Lab Sample ID: LCS 620-11234/4-A
Matrix: Solid
Analysis Batch: 11333

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	13.4	11.54		ug/Kg		86	27 - 108
beta-BHC	13.3	11.87		ug/Kg		89	50 - 114
delta-BHC	13.4	11.84		ug/Kg		88	41 - 101
gamma-BHC (Lindane)	13.5	12.66		ug/Kg		94	40 - 110
Heptachlor	13.4	11.33		ug/Kg		85	30 - 101
Aldrin	13.4	11.50		ug/Kg		86	21 - 113
Heptachlor epoxide	13.3	11.62		ug/Kg		87	46 - 106
Endosulfan I	13.3	11.96		ug/Kg		90	45 - 115
Dieldrin	13.4	11.83		ug/Kg		89	48 - 117
4,4'-DDE	13.4	11.71		ug/Kg		87	40 - 136
Endrin	13.4	14.60		ug/Kg		109	58 - 148
Endosulfan II	13.3	11.47		ug/Kg		86	54 - 120
4,4'-DDD	13.4	11.24		ug/Kg		84	55 - 133
Endosulfan sulfate	13.4	11.51		ug/Kg		86	55 - 119
4,4'-DDT	13.5	12.38		ug/Kg		92	43 - 140
Methoxychlor	13.3	12.43		ug/Kg		93	45 - 156

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

Lab Sample ID: LCS 620-11234/4-A
Matrix: Solid
Analysis Batch: 11333

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11234

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endrin ketone			13.4	10.45		ug/Kg		78	56 - 107		
Endrin aldehyde			13.4	10.81		ug/Kg		81	23 - 145		
cis-Chlordane			13.4	11.56		ug/Kg		86	44 - 111		
trans-Chlordane			13.4	12.35		ug/Kg		92	50 - 109		
Alachlor			13.4	12.84	p	ug/Kg		96	53 - 114		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*77*		*30 - 150*

Lab Sample ID: LCSD 620-11234/5-A
Matrix: Solid
Analysis Batch: 11333

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11234

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	10.48		ug/Kg		78	27 - 108	10	30
beta-BHC			13.3	11.33		ug/Kg		85	50 - 114	5	30
delta-BHC			13.4	11.13		ug/Kg		83	41 - 101	6	30
gamma-BHC (Lindane)			13.5	11.52		ug/Kg		86	40 - 110	9	30
Heptachlor			13.4	10.42		ug/Kg		78	30 - 101	8	30
Aldrin			13.4	10.69		ug/Kg		80	21 - 113	7	30
Heptachlor epoxide			13.3	10.99		ug/Kg		82	46 - 106	6	30
Endosulfan I			13.3	11.33		ug/Kg		85	45 - 115	5	30
Dieldrin			13.4	11.31		ug/Kg		85	48 - 117	4	30
4,4'-DDE			13.4	11.33		ug/Kg		84	40 - 136	3	30
Endrin			13.4	13.92		ug/Kg		104	58 - 148	5	30
Endosulfan II			13.3	11.04		ug/Kg		83	54 - 120	4	30
4,4'-DDD			13.4	10.93		ug/Kg		82	55 - 133	3	30
Endosulfan sulfate			13.4	11.04		ug/Kg		82	55 - 119	4	30
4,4'-DDT			13.5	12.03		ug/Kg		89	43 - 140	3	30
Methoxychlor			13.3	12.38		ug/Kg		93	45 - 156	0	30
Endrin ketone			13.4	10.07		ug/Kg		75	56 - 107	4	30
Endrin aldehyde			13.4	10.16		ug/Kg		76	23 - 145	6	30
cis-Chlordane			13.4	11.02		ug/Kg		82	44 - 111	5	30
trans-Chlordane			13.4	11.15		ug/Kg		83	50 - 109	10	30
Alachlor			13.4	12.34		ug/Kg		92	53 - 114	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*72*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*73*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-11234/1-A
Matrix: Solid
Analysis Batch: 11325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11234

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1
PCB-1221	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1
PCB-1232	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1
PCB-1242	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1
PCB-1248	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1
PCB-1254	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1
PCB-1260	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1
PCB-1262	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1
PCB-1268	ND		20.0		ug/Kg		05/26/22 15:36	05/31/22 12:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*05/26/22 15:36*	*05/31/22 12:20*	*1*
Tetrachloro-m-xylene	*75*		*30 - 150*	*05/26/22 15:36*	*05/31/22 12:20*	*1*
DCB Decachlorobiphenyl (Surr)	*62*		*30 - 150*	*05/26/22 15:36*	*05/31/22 12:20*	*1*
DCB Decachlorobiphenyl (Surr)	*65*		*30 - 150*	*05/26/22 15:36*	*05/31/22 12:20*	*1*

Lab Sample ID: LCS 620-11234/2-A
Matrix: Solid
Analysis Batch: 11325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11234

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	138.1		ug/Kg		83	61 - 112		
PCB-1016			167	139.3		ug/Kg		84	61 - 112		
PCB-1260			167	144.9		ug/Kg		87	63 - 105		
PCB-1260			167	150.3		ug/Kg		90	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*30 - 150*
Tetrachloro-m-xylene	*80*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*78*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*87*		*30 - 150*

Lab Sample ID: LCSD 620-11234/3-A
Matrix: Solid
Analysis Batch: 11325

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11234

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	143.5		ug/Kg		86	61 - 112	4	30
PCB-1016			167	139.5		ug/Kg		84	61 - 112	0	30
PCB-1260			167	150.2		ug/Kg		90	63 - 105	4	30
PCB-1260			167	146.8		ug/Kg		88	63 - 105	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*80*		*30 - 150*
Tetrachloro-m-xylene	*77*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*77*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*80*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-11372/1-A
Matrix: Solid
Analysis Batch: 11379

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11372

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		06/01/22 09:18	06/01/22 13:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*99*		*40 - 140*	*06/01/22 09:18*	*06/01/22 13:08*	*1*
o-Terphenyl (Surr)	*83*		*40 - 140*	*06/01/22 09:18*	*06/01/22 13:08*	*1*

Lab Sample ID: LCS 620-11372/2-A
Matrix: Solid
Analysis Batch: 11379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11372

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	159.8		mg/Kg		48	22 - 93		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*85*		*40 - 140*
o-Terphenyl (Surr)	*89*		*40 - 140*

Lab Sample ID: LCSD 620-11372/3-A
Matrix: Solid
Analysis Batch: 11379

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11372

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	154.0		mg/Kg		46	22 - 93	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*103*		*40 - 140*
o-Terphenyl (Surr)	*82*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-11186/1-A
Matrix: Solid
Analysis Batch: 11242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11186

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.89		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Arsenic	ND		1.47		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Beryllium	ND		0.489		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Barium	ND		0.978		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Cadmium	ND		0.489		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Chromium	ND		0.978		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Copper	ND		0.978		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Lead	ND		1.47		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Nickel	ND		0.978		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Selenium	ND		1.47		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Silver	ND		1.47		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Thallium	ND		2.93		mg/Kg		05/25/22 15:27	05/27/22 11:10	1
Zinc	ND	^3-	2.93		mg/Kg		05/25/22 15:27	05/27/22 11:10	1

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

Lab Sample ID: MB 620-11186/1-A
Matrix: Solid
Analysis Batch: 11242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11186

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND	^3-	0.978		mg/Kg		05/25/22 15:27	05/27/22 11:10	1

Lab Sample ID: LCDSRM 620-11186/3-A
Matrix: Solid
Analysis Batch: 11242

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11186

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			244	76.70		mg/Kg		31.4	10.0 - 123.0	9	20
Arsenic			109	90.96		mg/Kg		83.4	75.1 - 106.4	8	20
Beryllium			57.0	48.24		mg/Kg		84.6	76.5 - 108.1	10	20
Barium			364	316.3		mg/Kg		86.9	76.9 - 110.2	8	20
Cadmium			48.7	40.84		mg/Kg		83.9	74.7 - 106.0	5	20
Chromium			173	138.5		mg/Kg		80.1	76.3 - 109.8	11	20
Copper			179	159.2		mg/Kg		88.9	79.3 - 110.1	8	20
Lead			101	89.99		mg/Kg		89.1	81.3 - 114.9	3	20
Nickel			52.2	41.24		mg/Kg		79.0	74.7 - 106.7	11	20
Selenium			104	87.51		mg/Kg		84.1	71.4 - 109.6	7	20
Silver			29.9	24.17		mg/Kg		80.8	74.6 - 112.7	3	20
Thallium			101	87.59		mg/Kg		86.7	72.6 - 107.9	6	20
Zinc			431	374.7	^3-	mg/Kg		86.9	74.9 - 111.4	4	20
Manganese			370	319.8	^3-	mg/Kg		86.4	78.4 - 113.0	10	20

Lab Sample ID: LCSSRM 620-11186/2-A
Matrix: Solid
Analysis Batch: 11242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11186

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Antimony			244	84.23		mg/Kg		34.5	10.0 - 123.0
Arsenic			109	98.75		mg/Kg		90.6	75.1 - 106.4
Beryllium			57.0	53.24		mg/Kg		93.4	76.5 - 108.1
Barium			364	343.5		mg/Kg		94.4	76.9 - 110.2
Cadmium			48.7	42.72		mg/Kg		87.7	74.7 - 106.0
Chromium			173	154.1		mg/Kg		89.1	76.3 - 109.8

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

Lab Sample ID: LCSSRM 620-11186/2-A
Matrix: Solid
Analysis Batch: 11242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11186

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Copper	179	172.5		mg/Kg		96.4	79.3 - 110.1
Lead	101	93.04		mg/Kg		92.1	81.3 - 114.9
Nickel	52.2	45.91		mg/Kg		87.9	74.7 - 106.7
Selenium	104	93.43		mg/Kg		89.8	71.4 - 109.6
Silver	29.9	24.96		mg/Kg		83.5	74.6 - 112.7
Thallium	101	93.12		mg/Kg		92.2	72.6 - 107.9
Zinc	431	390.1	^3-	mg/Kg		90.5	74.9 - 111.4
Manganese	370	354.1	^3-	mg/Kg		95.7	78.4 - 113.0

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-11187/1-A
Matrix: Solid
Analysis Batch: 11286

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11187

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0451	mg/Kg		05/25/22 15:30	05/27/22 13:37	1

Lab Sample ID: LCSSRM 620-11187/2-A ^20
Matrix: Solid
Analysis Batch: 11286

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11187

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	11.0	8.643		mg/Kg		78.6	64.3 - 118.2

Method: 1030 - Ignitability, Solids

Lab Sample ID: 620-4677-1 DU
Matrix: Solid
Analysis Batch: 11387

Client Sample ID: B103/B104 (0-4)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ignitability	negative		negative		NONE		NC	35

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-259318/1-A
Matrix: Solid
Analysis Batch: 259885

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259318

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		60.0	mg/Kg		05/26/22 08:15	05/27/22 12:07	1

Method: 9012 - Cyanide, Reactive (Continued)

Lab Sample ID: LCS 410-259318/2-A
Matrix: Solid
Analysis Batch: 259885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259318

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Reactive			1000	ND		mg/Kg		1	0 - 5.14		

Lab Sample ID: 620-4677-1 MS
Matrix: Solid
Analysis Batch: 259885

Client Sample ID: B103/B104 (0-4)
Prep Type: Total/NA
Prep Batch: 259318

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Reactive	ND		973	ND		mg/Kg		0	0 - 44		

Lab Sample ID: 620-4677-1 MSD
Matrix: Solid
Analysis Batch: 259885

Client Sample ID: B103/B104 (0-4)
Prep Type: Total/NA
Prep Batch: 259318

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Reactive	ND		976	ND		mg/Kg		0	0 - 44	NC	11

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-259318/1-A
Matrix: Solid
Analysis Batch: 259413

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259318

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160		mg/Kg		05/26/22 08:15	05/26/22 11:49	1

Lab Sample ID: LCS 410-259318/22-A
Matrix: Solid
Analysis Batch: 259413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259318

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide, Reactive			538	509.0		mg/Kg		95	56 - 104		

Lab Sample ID: 620-4677-1 MS
Matrix: Solid
Analysis Batch: 259413

Client Sample ID: B103/B104 (0-4)
Prep Type: Total/NA
Prep Batch: 259318

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide, Reactive	ND	F1	529	267.8	F1	mg/Kg		51	56 - 104		

Lab Sample ID: 620-4677-1 MSD
Matrix: Solid
Analysis Batch: 259413

Client Sample ID: B103/B104 (0-4)
Prep Type: Total/NA
Prep Batch: 259318

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide, Reactive	ND	F1	531	161.6	F1	mg/Kg		30	56 - 104	49	52

Method: 9045D - pH

Lab Sample ID: LCDSRM 620-11170/6
Matrix: Solid
Analysis Batch: 11170

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

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
pH			6.00	6.0		SU		100.7	97.5 - 102.5	0	

Lab Sample ID: LCSSRM 620-11170/5
Matrix: Solid
Analysis Batch: 11170

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

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
pH			6.00	6.1		SU		101.0	97.5 - 102.5		

Lab Sample ID: MB 620-11135/1-A
Matrix: Solid
Analysis Batch: 11170

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
pH	6.3				SU			05/25/22 10:33	1
Temperature	22.5				Degrees C			05/25/22 10:33	1

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 620-11388/1-A
Matrix: Solid
Analysis Batch: 11392

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10.0		uS/cm			06/01/22 11:57	1

Lab Sample ID: 620-4677-1 DU
Matrix: Solid
Analysis Batch: 11392

Client Sample ID: B103/B104 (0-4)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	30.8			29.55		uS/cm				4	5

GC/MS VOA

Pre Prep Batch: 11131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-2	B104 (1)	Total/NA	Solid	Frozen Preserve	
620-4677-3	B103 (1)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 11362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-2	B104 (1)	Total/NA	Solid	5035	11131
620-4677-3	B103 (1)	Total/NA	Solid	5035	11131
MB 620-11362/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-11362/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-11362/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 11363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-2	B104 (1)	Total/NA	Solid	8260C	11362
620-4677-3	B103 (1)	Total/NA	Solid	8260C	11362
MB 620-11362/3-A	Method Blank	Total/NA	Solid	8260C	11362
LCS 620-11362/1-A	Lab Control Sample	Total/NA	Solid	8260C	11362
LCSD 620-11362/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	11362

GC/MS Semi VOA

Prep Batch: 11215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	3546	
MB 620-11215/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11215/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11215/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 11223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	8270D	11215
MB 620-11215/1-A	Method Blank	Total/NA	Solid	8270D	11215

Analysis Batch: 11316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 620-11215/2-A	Lab Control Sample	Total/NA	Solid	8270D	11215
LCSD 620-11215/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	11215

GC Semi VOA

Prep Batch: 11234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	3546	
MB 620-11234/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11234/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-11234/4-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11234/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
LCSD 620-11234/5-A	Lab Control Sample Dup	Total/NA	Solid	3546	

GC Semi VOA

Analysis Batch: 11325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	8082A	11234
MB 620-11234/1-A	Method Blank	Total/NA	Solid	8082A	11234
LCS 620-11234/2-A	Lab Control Sample	Total/NA	Solid	8082A	11234
LCSD 620-11234/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	11234

Analysis Batch: 11333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-11234/1-A	Method Blank	Total/NA	Solid	8081B	11234
LCS 620-11234/4-A	Lab Control Sample	Total/NA	Solid	8081B	11234
LCSD 620-11234/5-A	Lab Control Sample Dup	Total/NA	Solid	8081B	11234

Analysis Batch: 11369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	8081B	11234

Prep Batch: 11372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	3546	
MB 620-11372/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11372/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11372/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 11379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	8100	11372
MB 620-11372/1-A	Method Blank	Total/NA	Solid	8100	11372
LCS 620-11372/2-A	Lab Control Sample	Total/NA	Solid	8100	11372
LCSD 620-11372/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	11372

Metals

Prep Batch: 11186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	3050B	
MB 620-11186/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 620-11186/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 620-11186/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 11187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	7471B	
MB 620-11187/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-11187/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 11242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	6010D	11186
MB 620-11186/1-A	Method Blank	Total/NA	Solid	6010D	11186
LCDSRM 620-11186/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	11186
LCSSRM 620-11186/2-A	Lab Control Sample	Total/NA	Solid	6010D	11186

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Metals

Analysis Batch: 11286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	7471B	11187
MB 620-11187/1-A	Method Blank	Total/NA	Solid	7471B	11187
LCSSRM 620-11187/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	11187

General Chemistry

Leach Batch: 11135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Soluble	Solid	DI Leach	
MB 620-11135/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 11170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Soluble	Solid	9045D	11135
MB 620-11135/1-A	Method Blank	Soluble	Solid	9045D	11135
LCDSRM 620-11170/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
LCSSRM 620-11170/5	Lab Control Sample	Total/NA	Solid	9045D	

Analysis Batch: 11324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	Moisture	

Analysis Batch: 11387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	1030	
620-4677-1 DU	B103/B104 (0-4)	Total/NA	Solid	1030	

Leach Batch: 11388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Soluble	Solid	DI Leach	
MB 620-11388/1-A	Method Blank	Soluble	Solid	DI Leach	
620-4677-1 DU	B103/B104 (0-4)	Soluble	Solid	DI Leach	

Analysis Batch: 11392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Soluble	Solid	SM 2510B	11388
MB 620-11388/1-A	Method Blank	Soluble	Solid	SM 2510B	11388
620-4677-1 DU	B103/B104 (0-4)	Soluble	Solid	SM 2510B	11388

Analysis Batch: 11397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-2	B104 (1)	Total/NA	Solid	Moisture	
620-4677-3	B103 (1)	Total/NA	Solid	Moisture	

Prep Batch: 259318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	7.3.4	
MB 410-259318/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-259318/22-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-259318/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
620-4677-1 MS	B103/B104 (0-4)	Total/NA	Solid	7.3.4	

General Chemistry (Continued)

Prep Batch: 259318 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1 MS	B103/B104 (0-4)	Total/NA	Solid	7.3.4	
620-4677-1 MSD	B103/B104 (0-4)	Total/NA	Solid	7.3.4	
620-4677-1 MSD	B103/B104 (0-4)	Total/NA	Solid	7.3.4	

Analysis Batch: 259413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	9034	259318
MB 410-259318/1-A	Method Blank	Total/NA	Solid	9034	259318
LCS 410-259318/22-A	Lab Control Sample	Total/NA	Solid	9034	259318
620-4677-1 MS	B103/B104 (0-4)	Total/NA	Solid	9034	259318
620-4677-1 MSD	B103/B104 (0-4)	Total/NA	Solid	9034	259318

Analysis Batch: 259885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4677-1	B103/B104 (0-4)	Total/NA	Solid	9012	259318
MB 410-259318/1-A	Method Blank	Total/NA	Solid	9012	259318
LCS 410-259318/2-A	Lab Control Sample	Total/NA	Solid	9012	259318
620-4677-1 MS	B103/B104 (0-4)	Total/NA	Solid	9012	259318
620-4677-1 MSD	B103/B104 (0-4)	Total/NA	Solid	9012	259318

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Client Sample ID: B103/B104 (0-4)

Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1030		1	11387	06/01/22 11:03	ZLH	ENE
Total/NA	Prep	7.3.4			259318	05/26/22 08:15	USE1	ELLE
Total/NA	Analysis	9012		1	259885	05/27/22 12:11	UJE2	ELLE
Total/NA	Prep	7.3.4			259318	05/26/22 08:15	USE1	ELLE
Total/NA	Analysis	9034		1	259413	05/26/22 11:49	USE1	ELLE
Soluble	Leach	DI Leach			11135	05/24/22 22:00	PN	ENE
Soluble	Analysis	9045D		1	11170	05/25/22 10:33	CAJ	ENE
Total/NA	Analysis	Moisture		1	11324	05/31/22 10:28	CAJ	ENE
Soluble	Leach	DI Leach			11388	06/01/22 11:11	PN	ENE
Soluble	Analysis	SM 2510B		1	11392	06/01/22 11:57	PN	ENE

Client Sample ID: B103/B104 (0-4)

Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-1

Matrix: Solid
Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			11215	05/26/22 10:31	BJJ	ENE
Total/NA	Analysis	8270D		1	11223	05/26/22 22:09	BJJ	ENE
Total/NA	Prep	3546			11234	05/26/22 15:36	PRB	ENE
Total/NA	Analysis	8081B		1	11369	06/01/22 12:02	SFL	ENE
Total/NA	Prep	3546			11234	05/26/22 15:36	PRB	ENE
Total/NA	Analysis	8082A		1	11325	05/31/22 15:41	SFL	ENE
Total/NA	Prep	3546			11372	06/01/22 09:18	AEK	ENE
Total/NA	Analysis	8100		1	11379	06/01/22 14:24	JS	ENE
Total/NA	Prep	3050B			11186	05/25/22 15:27	CEV	ENE
Total/NA	Analysis	6010D		1	11242	05/27/22 12:06	CEV	ENE
Total/NA	Prep	7471B			11187	05/25/22 15:30	CEV	ENE
Total/NA	Analysis	7471B		1	11286	05/27/22 13:48	CEV	ENE

Client Sample ID: B104 (1)

Date Collected: 05/23/22 13:25
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11397	06/01/22 12:21	PN	ENE

Client Sample ID: B104 (1)

Date Collected: 05/23/22 13:25
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-2

Matrix: Solid
Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11131	05/24/22 19:16	KFS	ENE
Total/NA	Prep	5035			11362	06/01/22 08:24	CLR	ENE
Total/NA	Analysis	8260C		1	11363	06/01/22 12:52	CLR	ENE

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-4677-1

Client Sample ID: B103 (1)
Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11397	06/01/22 12:21	PN	ENE

Client Sample ID: B103 (1)
Date Collected: 05/24/22 13:55
Date Received: 05/24/22 16:47

Lab Sample ID: 620-4677-3
Matrix: Solid
Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11131	05/24/22 19:16	KFS	ENE
Total/NA	Prep	5035			11362	06/01/22 08:24	CLR	ENE
Total/NA	Analysis	8260C		1	11363	06/01/22 15:22	CLR	ENE

Laboratory References:

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

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4677-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
1030		Solid	Ignitability
6010D	3050B	Solid	Antimony
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Beryllium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Copper
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Manganese
6010D	3050B	Solid	Nickel
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
6010D	3050B	Solid	Thallium
6010D	3050B	Solid	Zinc
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260

Laboratory: Eurofins New England (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
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1,2,4,5-Tetrachlorobenzene
8270D	3546	Solid	1,2,4-Trichlorobenzene
8270D	3546	Solid	1,2-Dichlorobenzene
8270D	3546	Solid	1,3-Dichlorobenzene
8270D	3546	Solid	1,4-Dichlorobenzene
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2,4,5-Trichlorophenol
8270D	3546	Solid	2,4,6-Trichlorophenol
8270D	3546	Solid	2,4-Dichlorophenol
8270D	3546	Solid	2,4-Dimethylphenol
8270D	3546	Solid	2,4-Dinitrophenol
8270D	3546	Solid	2,4-Dinitrotoluene
8270D	3546	Solid	2,6-Dinitrotoluene
8270D	3546	Solid	2-Chloronaphthalene

Laboratory: Eurofins New England (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
8270D	3546	Solid	2-Chlorophenol
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	2-Methylphenol
8270D	3546	Solid	2-Nitroaniline
8270D	3546	Solid	2-Nitrophenol
8270D	3546	Solid	3 & 4 Methylphenol
8270D	3546	Solid	3,3'-Dichlorobenzidine
8270D	3546	Solid	3-Nitroaniline
8270D	3546	Solid	4,6-Dinitro-2-methylphenol
8270D	3546	Solid	4-Bromophenyl phenyl ether
8270D	3546	Solid	4-Chloro-3-methylphenol
8270D	3546	Solid	4-Chloroaniline
8270D	3546	Solid	4-Chlorophenyl phenyl ether
8270D	3546	Solid	4-Nitroaniline
8270D	3546	Solid	4-Nitrophenol
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Aniline
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Azobenzene/Diphenyldiazene
8270D	3546	Solid	Benzidine
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Benzoic acid
8270D	3546	Solid	Benzyl alcohol
8270D	3546	Solid	bis (2-chloroisopropyl) ether
8270D	3546	Solid	Bis(2-chloroethoxy)methane
8270D	3546	Solid	Bis(2-chloroethyl)ether
8270D	3546	Solid	Bis(2-ethylhexyl) phthalate
8270D	3546	Solid	Butyl benzyl phthalate
8270D	3546	Solid	Carbazole
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Dibenzofuran
8270D	3546	Solid	Diethyl phthalate
8270D	3546	Solid	Dimethyl phthalate
8270D	3546	Solid	Di-n-butyl phthalate
8270D	3546	Solid	Di-n-octyl phthalate
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene
8270D	3546	Solid	Hexachlorobenzene
8270D	3546	Solid	Hexachlorobutadiene
8270D	3546	Solid	Hexachlorocyclopentadiene
8270D	3546	Solid	Hexachloroethane

Laboratory: Eurofins New England (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
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Isophorone
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Nitrobenzene
8270D	3546	Solid	N-Nitrosodimethylamine
8270D	3546	Solid	N-Nitrosodi-n-propylamine
8270D	3546	Solid	N-Nitrosodiphenylamine
8270D	3546	Solid	Pentachloronitrobenzene
8270D	3546	Solid	Pentachlorophenol
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Phenol
8270D	3546	Solid	Pyrene
8270D	3546	Solid	Pyridine
9045D		Solid	pH
9045D		Solid	Temperature
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids
SM 2510B		Solid	Specific Conductance

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	1.01	11-30-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	06-30-22
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-0660	08-10-22
California	State	2792	11-30-22
Colorado	State	PA00009	06-30-22
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-22
Georgia (DW)	State	C048	01-31-23
Hawaii	State	N/A	01-31-23
Illinois	NELAP	200027	01-31-23
Iowa	State	361	03-02-22 *
Kansas	NELAP	E-10151	10-31-22
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana	NELAP	02055	06-30-22
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-22
Massachusetts	State	M-PA009	06-30-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4677-1
Project/Site: I295/Rt 37 - Johnston, RI

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

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-22
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-22
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	08-31-22
Oregon	NELAP	PA200001	09-11-22
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-23
Texas	NELAP	T104704194-21-40	08-31-22
USDA	US Federal Programs	P330-19-00197	07-03-22
Vermont	State	VT - 36037	10-28-22
Virginia	NELAP	460182	06-14-22
Washington	State	C457	04-11-23
West Virginia (DW)	State	9906 C	12-31-22
West Virginia DEP	State	055	07-01-22
Wyoming	State	8TMS-L	01-31-23
Wyoming (UST)	A2LA	1.01	11-30-22

Method Summary

Client: AECOM
Job ID: 620-4677-1
Project/Site: I295/Rt 37 - Johnston, RI

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ENE
8081B	Organochlorine Pesticides (GC)	SW846	ENE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ENE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	ENE
6010D	Metals (ICP)	SW846	ENE
7471B	Mercury (CVAA)	SW846	ENE
1030	Ignitability, Solids	SW846	ENE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW846	ELLE
9045D	pH	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
SM 2510B	Conductivity, Specific Conductance	SM	ENE
3050B	Preparation, Metals	SW846	ENE
3546	Microwave Extraction	SW846	ENE
5035	Closed System Purge and Trap	SW846	ENE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7471B	Preparation, Mercury	SW846	ENE
DI Leach	Deionized Water Leaching Procedure	ASTM	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
None = None
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
ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Job ID: 620-4677-1
Project/Site: I295/Rt 37 - Johnston, RI

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4677-1	B103/B104 (0-4)	Solid	05/24/22 13:55	05/24/22 16:47
620-4677-2	B104 (1)	Solid	05/23/22 13:25	05/24/22 16:47
620-4677-3	B103 (1)	Solid	05/24/22 13:55	05/24/22 16:47

4677

620-4677 Chain of Custody

alytical

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☒ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:

☒ TAT - Date Needed: 5 work days

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell, AECOM, 10 Orms Street, Suite 400, Providence, RI 02904
Telephone #: 401.854.2808
Project Mgr: Richard Prior

Invoice To: Richard Prior, AECOM
P O No: ____ Quote #: ____

Project No: 60680132
Site Name: 295/37 Interchange
Location: Cranston State: RI
Sampler(s): Emma deSilva, P. Haskell

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=____ 12=____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=____ X2=____ X3=____

G= Grab C=Composite

List Preservative Code below:

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	PAHs	TPH	PCBs	Pesticides	*13 PP metals	Ignitability	S/W Reactivity	pH/Conductivity	Check if chlorinated
01	B103/B104 (0-4)	3-24-22	1:55	C	So						X	X	X	X	X	X	X	X	☐
02	B104 (1)	3-23-22	1:25	G	So	3			1	X									☐
03	B103 (1)	3-24-22	1:55	G	So	3			1	X									☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐

QA/QC Reporting Notes:

QA/QC Reporting Level
☒ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other: ____
State-specific reporting standards.

Relinquished by:	Received by:	Date:	Time:	Temp °C
Emma deSilva	Pat Haskell	3/24/22	4:10	Observed 7.4
Pat Haskell	[signature]	3/24/2022	4:47	Correction Factor +0.2
				Corrected 7.6
				IR ID # 6

☐ EDD format: ____
☐ E-mail to ____
* 13 PP metals + Ba, Mn + V

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

www.EurofinsUS.com/Spectrum

Rev Nov 2016

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-4217.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Rhode Island	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Rhode Island		Job #: 620-4677-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 5/31/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: I295/Rt 37 - Johnston, RI	Project #: 62001238			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, Other:
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Sample Identification - Client ID (Lab ID)	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)	9012_ReactiveCN/7.3.3	9034_Reactive/7.3.4	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
B103/B104 (0-4) (620-4677-1)	5/24/22	13.55 Eastern		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/24/22 17:34	ENE			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/25/22 1055	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.7

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4677-1

Login Number: 4677
List Number: 1
Creator: McAdams, Nicole L

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
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.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4677-1

Login Number: 4677
List Number: 2
Creator: McCaskey, Jonathan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/25/22 12:06 PM

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 is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=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.	True	
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?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4760-1
Client Project/Site: I295/Rt 37 - Cranston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
6/6/2022 2:48:48 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-4760-1
Project/Site: I295/Rt 37 - Cranston, RI

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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
F3	Duplicate RPD exceeds the control limit

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)
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 ID: 620-4760-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4760-1

Comments
No additional comments.

Receipt
The sample was received on 5/27/2022 4:38 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.6º C.

GC/MS VOA
Methods 8260, 8260C: The continuing calibration verification (CCV) associated with batch 620-11495 exhibited % difference of > 20% for the following analyte: 1,2-Dibromo-3-Chloropropane; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

Methods 8260, 8260C: The laboratory control sample (LCS) for preparation batch 620-11494 and analytical batch 620-11495 recovered outside control limits for the following analyte: 1,4-Dioxane, which has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

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

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4760-1

Client Sample ID: B107 (2)

Lab Sample ID: 620-4760-1

No Detections.

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4760-1

Client Sample ID: B107 (2)
Date Collected: 05/26/22 12:50
Date Received: 05/27/22 16:38

Lab Sample ID: 620-4760-1
Matrix: Solid
Percent Solids: 97.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Acetone	ND		44.8		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Acrylonitrile	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Benzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Bromobenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Bromochloromethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Bromodichloromethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Bromoform	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Bromomethane	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
2-Butanone (MEK)	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
n-Butylbenzene	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
sec-Butylbenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
tert-Butylbenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Carbon disulfide	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Carbon tetrachloride	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Chlorobenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Chloroethane	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Chloroform	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Chloromethane	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
2-Chlorotoluene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
4-Chlorotoluene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2-Dibromo-3-Chloropropane	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Dibromochloromethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2-Dibromoethane (EDB)	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Dibromomethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2-Dichlorobenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,3-Dichlorobenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,4-Dichlorobenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Dichlorodifluoromethane (Freon 12)	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,1-Dichloroethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2-Dichloroethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,1-Dichloroethene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
cis-1,2-Dichloroethene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
trans-1,2-Dichloroethene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2-Dichloropropane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,3-Dichloropropane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
2,2-Dichloropropane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,1-Dichloropropene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
cis-1,3-Dichloropropene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
trans-1,3-Dichloropropene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Ethylbenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Hexachlorobutadiene	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
2-Hexanone (MBK)	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Isopropylbenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
4-Isopropyltoluene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Methyl tert-butyl ether	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
4-Methyl-2-pentanone (MIBK)	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Methylene Chloride	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Naphthalene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1

Client Sample ID: B107 (2)
Date Collected: 05/26/22 12:50
Date Received: 05/27/22 16:38

Lab Sample ID: 620-4760-1
Matrix: Solid
Percent Solids: 97.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Styrene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,1,1,2-Tetrachloroethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,1,2,2-Tetrachloroethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Tetrachloroethene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Toluene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2,3-Trichlorobenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2,4-Trichlorobenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,3,5-Trichlorobenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,1,1-Trichloroethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,1,2-Trichloroethane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Trichloroethene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Trichlorofluoromethane (Freon 11)	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2,3-Trichloropropane	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,2,4-Trimethylbenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,3,5-Trimethylbenzene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Vinyl chloride	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
m,p-Xylene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
o-Xylene	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Tetrahydrofuran	ND		8.96		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Ethyl ether	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Tert-amyl methyl ether	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Ethyl tert-butyl ether	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
di-Isopropyl ether	ND		4.48		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
tert-Butanol	ND		89.6		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
1,4-Dioxane	ND	*-	89.6		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
trans-1,4-Dichloro-2-butene	ND		22.4		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1
Ethanol	ND		896		ug/Kg	☼	06/03/22 09:46	06/03/22 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*06/03/22 09:46*	*06/03/22 16:03*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/03/22 09:46*	*06/03/22 16:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*06/03/22 09:46*	*06/03/22 16:03*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*06/03/22 09:46*	*06/03/22 16:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**3.0**		0.1		%			06/02/22 14:52	1
Percent Solids	**97.0**		0.1		%			06/02/22 14:52	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4760-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4760-1	B107 (2)	97	98	112	101
LCS 620-11494/1-A	Lab Control Sample	101	99	109	101
LCSD 620-11494/2-A	Lab Control Sample Dup	101	99	110	100
MB 620-11494/3-A	Method Blank	97	97	110	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-11494/3-A
Matrix: Solid
Analysis Batch: 11495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11494

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Acetone	ND		50.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Acrylonitrile	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Benzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Bromobenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Bromochloromethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Bromodichloromethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Bromoform	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Bromomethane	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
2-Butanone (MEK)	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
n-Butylbenzene	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
sec-Butylbenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
tert-Butylbenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Carbon disulfide	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Carbon tetrachloride	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Chlorobenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Chloroethane	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Chloroform	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Chloromethane	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
2-Chlorotoluene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
4-Chlorotoluene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Dibromochloromethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Dibromomethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,1-Dichloroethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2-Dichloroethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,1-Dichloroethene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2-Dichloropropane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,3-Dichloropropane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
2,2-Dichloropropane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,1-Dichloropropene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Ethylbenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Hexachlorobutadiene	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Isopropylbenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
4-Isopropyltoluene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Methylene Chloride	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11494/3-A
Matrix: Solid
Analysis Batch: 11495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11494

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
N-Propylbenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Styrene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Tetrachloroethene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Toluene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Trichloroethene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Vinyl chloride	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
m,p-Xylene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
o-Xylene	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Tetrahydrofuran	ND		10.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Ethyl ether	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
di-Isopropyl ether	ND		5.00		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
tert-Butanol	ND		100		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
1,4-Dioxane	ND		100		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		06/03/22 09:46	06/03/22 12:40	1
Ethanol	ND		1000		ug/Kg		06/03/22 09:46	06/03/22 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*06/03/22 09:46*	*06/03/22 12:40*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*06/03/22 09:46*	*06/03/22 12:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*	*06/03/22 09:46*	*06/03/22 12:40*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*06/03/22 09:46*	*06/03/22 12:40*	*1*

Lab Sample ID: LCS 620-11494/1-A
Matrix: Solid
Analysis Batch: 11495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	21.38		ug/Kg		107	70 - 130
Acetone	20.0	18.48	J	ug/Kg		92	70 - 130
Acrylonitrile	20.0	16.70		ug/Kg		83	70 - 130
Benzene	20.0	19.30		ug/Kg		97	70 - 130
Bromobenzene	20.0	19.02		ug/Kg		95	70 - 130
Bromochloromethane	20.0	18.29		ug/Kg		91	70 - 130
Bromodichloromethane	20.0	19.34		ug/Kg		97	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11494/1-A
Matrix: Solid
Analysis Batch: 11495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	18.28		ug/Kg		91	70 - 130
Bromomethane	20.0	23.00		ug/Kg		115	70 - 130
2-Butanone (MEK)	20.0	18.35		ug/Kg		92	70 - 130
n-Butylbenzene	20.0	22.38		ug/Kg		112	70 - 130
sec-Butylbenzene	20.0	21.85		ug/Kg		109	70 - 130
tert-Butylbenzene	20.0	18.95		ug/Kg		95	70 - 130
Carbon disulfide	20.0	20.63		ug/Kg		103	70 - 130
Carbon tetrachloride	20.0	20.06		ug/Kg		100	70 - 130
Chlorobenzene	20.0	20.44		ug/Kg		102	70 - 130
Chloroethane	20.0	25.46		ug/Kg		127	70 - 130
Chloroform	20.0	19.78		ug/Kg		99	70 - 130
Chloromethane	20.0	20.86		ug/Kg		104	70 - 130
2-Chlorotoluene	20.0	21.24		ug/Kg		106	70 - 130
4-Chlorotoluene	20.0	21.37		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	16.09		ug/Kg		80	70 - 130
Dibromochloromethane	20.0	18.03		ug/Kg		90	70 - 130
1,2-Dibromoethane (EDB)	20.0	17.72		ug/Kg		89	70 - 130
Dibromomethane	20.0	18.25		ug/Kg		91	70 - 130
1,2-Dichlorobenzene	20.0	20.11		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	20.0	20.31		ug/Kg		102	70 - 130
1,4-Dichlorobenzene	20.0	21.10		ug/Kg		105	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	21.33		ug/Kg		107	70 - 130
1,1-Dichloroethane	20.0	19.73		ug/Kg		99	70 - 130
1,2-Dichloroethane	20.0	19.76		ug/Kg		99	70 - 130
1,1-Dichloroethene	20.0	19.10		ug/Kg		96	70 - 130
cis-1,2-Dichloroethene	20.0	17.86		ug/Kg		89	70 - 130
trans-1,2-Dichloroethene	20.0	18.40		ug/Kg		92	70 - 130
1,2-Dichloropropane	20.0	18.69		ug/Kg		93	70 - 130
1,3-Dichloropropane	20.0	18.35		ug/Kg		92	70 - 130
2,2-Dichloropropane	20.0	20.31		ug/Kg		102	70 - 130
1,1-Dichloropropene	20.0	19.67		ug/Kg		98	70 - 130
cis-1,3-Dichloropropene	20.0	17.26		ug/Kg		86	70 - 130
trans-1,3-Dichloropropene	20.0	19.08		ug/Kg		95	70 - 130
Ethylbenzene	20.0	21.16		ug/Kg		106	70 - 130
Hexachlorobutadiene	20.0	18.92		ug/Kg		95	70 - 130
2-Hexanone (MBK)	20.0	16.20		ug/Kg		81	70 - 130
Isopropylbenzene	20.0	20.35		ug/Kg		102	70 - 130
4-Isopropyltoluene	20.0	20.89		ug/Kg		104	70 - 130
Methyl tert-butyl ether	20.0	17.51		ug/Kg		88	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.53		ug/Kg		88	70 - 130
Methylene Chloride	20.0	19.93		ug/Kg		100	70 - 130
Naphthalene	20.0	17.72		ug/Kg		89	70 - 130
N-Propylbenzene	20.0	22.07		ug/Kg		110	70 - 130
Styrene	20.0	19.67		ug/Kg		98	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.10		ug/Kg		101	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.13		ug/Kg		106	70 - 130
Tetrachloroethene	20.0	17.49		ug/Kg		87	70 - 130
Toluene	20.0	18.76		ug/Kg		94	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11494/1-A
Matrix: Solid
Analysis Batch: 11495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	20.0	18.03		ug/Kg		90	70 - 130
1,2,4-Trichlorobenzene	20.0	18.11		ug/Kg		91	70 - 130
1,3,5-Trichlorobenzene	20.0	19.04		ug/Kg		95	70 - 130
1,1,1-Trichloroethane	20.0	20.34		ug/Kg		102	70 - 130
1,1,2-Trichloroethane	20.0	19.17		ug/Kg		96	70 - 130
Trichloroethene	20.0	19.61		ug/Kg		98	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	21.16		ug/Kg		106	70 - 130
1,2,3-Trichloropropane	20.0	21.52		ug/Kg		108	70 - 130
1,2,4-Trimethylbenzene	20.0	21.07		ug/Kg		105	70 - 130
1,3,5-Trimethylbenzene	20.0	21.50		ug/Kg		107	70 - 130
Vinyl chloride	20.0	22.29		ug/Kg		111	70 - 130
m,p-Xylene	20.0	20.66		ug/Kg		103	70 - 130
o-Xylene	20.0	19.96		ug/Kg		100	70 - 130
Tetrahydrofuran	20.0	16.92		ug/Kg		85	70 - 130
Ethyl ether	20.0	18.16		ug/Kg		91	70 - 130
Tert-amyl methyl ether	20.0	17.81		ug/Kg		89	70 - 130
Ethyl tert-butyl ether	20.0	17.60		ug/Kg		88	70 - 130
di-Isopropyl ether	20.0	18.35		ug/Kg		92	70 - 130
tert-Butanol	200	170.0		ug/Kg		85	70 - 130
1,4-Dioxane	200	136.8	*-	ug/Kg		68	70 - 130
trans-1,4-Dichloro-2-butene	20.0	21.02	J	ug/Kg		105	70 - 130
Ethanol	400	401.7	J	ug/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 620-11494/2-A
Matrix: Solid
Analysis Batch: 11495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	20.76		ug/Kg		104	70 - 130	3	30
Acetone	20.0	19.01	J	ug/Kg		95	70 - 130	3	30
Acrylonitrile	20.0	18.51		ug/Kg		93	70 - 130	10	30
Benzene	20.0	18.84		ug/Kg		94	70 - 130	2	30
Bromobenzene	20.0	18.91		ug/Kg		95	70 - 130	1	30
Bromochloromethane	20.0	18.38		ug/Kg		92	70 - 130	0	30
Bromodichloromethane	20.0	19.05		ug/Kg		95	70 - 130	1	30
Bromoform	20.0	19.04		ug/Kg		95	70 - 130	4	30
Bromomethane	20.0	22.28		ug/Kg		111	70 - 130	3	30
2-Butanone (MEK)	20.0	18.01		ug/Kg		90	70 - 130	2	30
n-Butylbenzene	20.0	21.44		ug/Kg		107	70 - 130	4	30
sec-Butylbenzene	20.0	21.24		ug/Kg		106	70 - 130	3	30
tert-Butylbenzene	20.0	18.44		ug/Kg		92	70 - 130	3	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11494/2-A
Matrix: Solid
Analysis Batch: 11495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11494

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	19.88		ug/Kg		99	70 - 130	4	30
Carbon tetrachloride			20.0	19.80		ug/Kg		99	70 - 130	1	30
Chlorobenzene			20.0	20.18		ug/Kg		101	70 - 130	1	30
Chloroethane			20.0	24.36		ug/Kg		122	70 - 130	4	30
Chloroform			20.0	19.52		ug/Kg		98	70 - 130	1	30
Chloromethane			20.0	19.88		ug/Kg		99	70 - 130	5	30
2-Chlorotoluene			20.0	20.46		ug/Kg		102	70 - 130	4	30
4-Chlorotoluene			20.0	20.70		ug/Kg		103	70 - 130	3	30
1,2-Dibromo-3-Chloropropane			20.0	16.79		ug/Kg		84	70 - 130	4	30
Dibromochloromethane			20.0	18.05		ug/Kg		90	70 - 130	0	30
1,2-Dibromoethane (EDB)			20.0	17.58		ug/Kg		88	70 - 130	1	30
Dibromomethane			20.0	18.32		ug/Kg		92	70 - 130	0	30
1,2-Dichlorobenzene			20.0	19.79		ug/Kg		99	70 - 130	2	30
1,3-Dichlorobenzene			20.0	19.81		ug/Kg		99	70 - 130	3	30
1,4-Dichlorobenzene			20.0	20.39		ug/Kg		102	70 - 130	3	30
Dichlorodifluoromethane (Freon 12)			20.0	20.39		ug/Kg		102	70 - 130	5	30
1,1-Dichloroethane			20.0	19.48		ug/Kg		97	70 - 130	1	30
1,2-Dichloroethane			20.0	20.08		ug/Kg		100	70 - 130	2	30
1,1-Dichloroethene			20.0	18.78		ug/Kg		94	70 - 130	2	30
cis-1,2-Dichloroethene			20.0	17.34		ug/Kg		87	70 - 130	3	30
trans-1,2-Dichloroethene			20.0	17.94		ug/Kg		90	70 - 130	3	30
1,2-Dichloropropane			20.0	18.44		ug/Kg		92	70 - 130	1	30
1,3-Dichloropropane			20.0	18.72		ug/Kg		94	70 - 130	2	30
2,2-Dichloropropane			20.0	19.68		ug/Kg		98	70 - 130	3	30
1,1-Dichloropropene			20.0	18.85		ug/Kg		94	70 - 130	4	30
cis-1,3-Dichloropropene			20.0	17.33		ug/Kg		87	70 - 130	0	30
trans-1,3-Dichloropropene			20.0	18.93		ug/Kg		95	70 - 130	1	30
Ethylbenzene			20.0	20.54		ug/Kg		103	70 - 130	3	30
Hexachlorobutadiene			20.0	18.45		ug/Kg		92	70 - 130	3	30
2-Hexanone (MBK)			20.0	16.34		ug/Kg		82	70 - 130	1	30
Isopropylbenzene			20.0	19.84		ug/Kg		99	70 - 130	3	30
4-Isopropyltoluene			20.0	19.97		ug/Kg		100	70 - 130	4	30
Methyl tert-butyl ether			20.0	17.93		ug/Kg		90	70 - 130	2	30
4-Methyl-2-pentanone (MIBK)			20.0	17.56		ug/Kg		88	70 - 130	0	30
Methylene Chloride			20.0	19.93		ug/Kg		100	70 - 130	0	30
Naphthalene			20.0	17.94		ug/Kg		90	70 - 130	1	30
N-Propylbenzene			20.0	21.27		ug/Kg		106	70 - 130	4	30
Styrene			20.0	19.27		ug/Kg		96	70 - 130	2	30
1,1,1,2-Tetrachloroethane			20.0	20.32		ug/Kg		102	70 - 130	1	30
1,1,2,2-Tetrachloroethane			20.0	20.96		ug/Kg		105	70 - 130	1	30
Tetrachloroethene			20.0	17.14		ug/Kg		86	70 - 130	2	30
Toluene			20.0	18.76		ug/Kg		94	70 - 130	0	30
1,2,3-Trichlorobenzene			20.0	17.84		ug/Kg		89	70 - 130	1	30
1,2,4-Trichlorobenzene			20.0	17.34		ug/Kg		87	70 - 130	4	30
1,3,5-Trichlorobenzene			20.0	18.40		ug/Kg		92	70 - 130	3	30
1,1,1-Trichloroethane			20.0	19.98		ug/Kg		100	70 - 130	2	30
1,1,2-Trichloroethane			20.0	19.20		ug/Kg		96	70 - 130	0	30
Trichloroethene			20.0	19.09		ug/Kg		95	70 - 130	3	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11494/2-A
Matrix: Solid
Analysis Batch: 11495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11494

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	20.27		ug/Kg		101	70 - 130	4	30
1,2,3-Trichloropropane			20.0	21.84		ug/Kg		109	70 - 130	1	30
1,2,4-Trimethylbenzene			20.0	20.51		ug/Kg		103	70 - 130	3	30
1,3,5-Trimethylbenzene			20.0	20.61		ug/Kg		103	70 - 130	4	30
Vinyl chloride			20.0	21.32		ug/Kg		107	70 - 130	4	30
m,p-Xylene			20.0	20.12		ug/Kg		101	70 - 130	3	30
o-Xylene			20.0	19.55		ug/Kg		98	70 - 130	2	30
Tetrahydrofuran			20.0	17.06		ug/Kg		85	70 - 130	1	30
Ethyl ether			20.0	18.54		ug/Kg		93	70 - 130	2	30
Tert-amyl methyl ether			20.0	17.89		ug/Kg		89	70 - 130	0	30
Ethyl tert-butyl ether			20.0	17.43		ug/Kg		87	70 - 130	1	30
di-Isopropyl ether			20.0	18.06		ug/Kg		90	70 - 130	2	30
tert-Butanol			200	179.9		ug/Kg		90	70 - 130	6	30
1,4-Dioxane			200	147.8		ug/Kg		74	70 - 130	8	30
trans-1,4-Dichloro-2-butene			20.0	21.18	J	ug/Kg		106	70 - 130	1	30
Ethanol			400	401.3	J	ug/Kg		100	70 - 130	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

Method: Moisture - Percent Moisture

Lab Sample ID: 620-4760-1 DU
Matrix: Solid
Analysis Batch: 11455

Client Sample ID: B107 (2)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	3.0			4.2	F3	%				34	5
Percent Solids	97.0			95.8		%				1	5

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4760-1

GC/MS VOA

Pre Prep Batch: 11301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4760-1	B107 (2)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 11494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4760-1	B107 (2)	Total/NA	Solid	5035	11301
MB 620-11494/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-11494/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-11494/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 11495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4760-1	B107 (2)	Total/NA	Solid	8260C	11494
MB 620-11494/3-A	Method Blank	Total/NA	Solid	8260C	11494
LCS 620-11494/1-A	Lab Control Sample	Total/NA	Solid	8260C	11494
LCSD 620-11494/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	11494

General Chemistry

Analysis Batch: 11455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4760-1	B107 (2)	Total/NA	Solid	Moisture	
620-4760-1 DU	B107 (2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4760-1

Client Sample ID: B107 (2)
Date Collected: 05/26/22 12:50
Date Received: 05/27/22 16:38

Lab Sample ID: 620-4760-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11455	06/02/22 14:52	JMF	ENE

Client Sample ID: B107 (2)
Date Collected: 05/26/22 12:50
Date Received: 05/27/22 16:38

Lab Sample ID: 620-4760-1
Matrix: Solid
Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11301	05/27/22 18:07	KFS	ENE
Total/NA	Prep	5035			11494	06/03/22 09:46	CLR	ENE
Total/NA	Analysis	8260C		1	11495	06/03/22 16:03	CLR	ENE

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4760-1
Project/Site: I295/Rt 37 - Cranston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4760-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
5035	Closed System Purge and Trap	SW846	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4760-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4760-1	B107 (2)	Solid	05/26/22 12:50	05/27/22 16:38

W760

620-4760 Chain of Custody

ıment Testing
New England

CHAIN OF CUSTODY RECORD

Page ____ of ____

Special Handling:

☒ Standard TAT ~~7 to 10~~ 5 business days
☐ Rush TAT - Date Needed. ____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell, AECOM, 10 Orms Street Suite 400, Providence, RI 02904
Telephone #: 401 850 2808
Project Mgr: Richard Prior

Invoice To: Richard Prior, AECOM
P O No. ____ Quote #: ____

Project No: 60680132
Site Name: 295/37 Interchange
Location: Cranston State: RI
Sampler(s): E. daSilva

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= ____ 12= ____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= ____ X2= ____ X3= ____

List Preservative Code below:

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC								Check if chlorinated
01	B107 (2)	5/26/22	12.50	G	SO	3		1		X								☐
																		☐
																		☐
																		☐
																		☐
																		☐
																		☐
																		☐
																		☐
																		☐

G= Grab C=Composite

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC
☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: ____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp °C
[signature]	[signature]	5/26/22	2 00	Observed 5.4
[signature]	[signature]	5/27/22	4 38	Correction Factor +0.2
				Corrected 5.6
				IR ID # 6

☐ EDD format: ____
☐ E-mail to ____

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4760-1

Login Number: 4760
List Number: 1
Creator: McAdams, Nicole L

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4857-1
Client Project/Site: I295/Rt 37 - Cranston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
6/9/2022 9:30:53 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-4857-1
Project/Site: I295/Rt 37 - Cranston, RI

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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)
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 ID: 620-4857-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4857-1

Comments
No additional comments.

Receipt
The sample was received on 6/3/2022 11:22 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 11.2º C.

GC/MS VOA
Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: 2-Methyl-2-propanol, Naphthalene, and 1,2-Dibromo-3-Chloropropane.
(CCVIS 620-11663/3)

Methods 8260, 8260C: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 620-11662 and analytical batch 620-11663 recovered outside control limits for the following analyte: 1,4-Dioxane, which has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Methods 8260, 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for preparation batch 620-11662 and analytical batch 620-11663 recovered outside control limits for the following analytes: Chloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

General Chemistry
Method Moisture: The sample duplicate precision for the following sample associated with analytical batch 620-11583 was outside control limits: (620-4822-B-3 DU).

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4857-1

Client Sample ID: ~~B107 (2)~~ B110 (2) **Lab Sample ID: 620-4857-1**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4857-1

Client Sample ID: ~~B107 (2)~~ B110 (2)
Date Collected: 06/01/22 11:30
Date Received: 06/03/22 11:22

Lab Sample ID: 620-4857-1
Matrix: Solid
Percent Solids: 94.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Acetone	ND		42.6		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Acrylonitrile	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Benzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Bromobenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Bromochloromethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Bromodichloromethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Bromoform	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Bromomethane	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
2-Butanone (MEK)	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
n-Butylbenzene	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
sec-Butylbenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
tert-Butylbenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Carbon disulfide	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Carbon tetrachloride	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Chlorobenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Chloroethane	ND	*+	8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Chloroform	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Chloromethane	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
2-Chlorotoluene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
4-Chlorotoluene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2-Dibromo-3-Chloropropane	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Dibromochloromethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2-Dibromoethane (EDB)	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Dibromomethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2-Dichlorobenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,3-Dichlorobenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,4-Dichlorobenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Dichlorodifluoromethane (Freon 12)	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,1-Dichloroethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2-Dichloroethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,1-Dichloroethene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
cis-1,2-Dichloroethene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
trans-1,2-Dichloroethene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2-Dichloropropane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,3-Dichloropropane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
2,2-Dichloropropane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,1-Dichloropropene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
cis-1,3-Dichloropropene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
trans-1,3-Dichloropropene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Ethylbenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Hexachlorobutadiene	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
2-Hexanone (MBK)	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Isopropylbenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
4-Isopropyltoluene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Methyl tert-butyl ether	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
4-Methyl-2-pentanone (MIBK)	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Methylene Chloride	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Naphthalene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1

Client Sample ID: ~~B107 (2)~~ B110 (2)
Date Collected: 06/01/22 11:30
Date Received: 06/03/22 11:22

Lab Sample ID: 620-4857-1
Matrix: Solid
Percent Solids: 94.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Styrene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,1,1,2-Tetrachloroethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,1,2,2-Tetrachloroethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Tetrachloroethene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Toluene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2,3-Trichlorobenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2,4-Trichlorobenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,3,5-Trichlorobenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,1,1-Trichloroethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,1,2-Trichloroethane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Trichloroethene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Trichlorofluoromethane (Freon 11)	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2,3-Trichloropropane	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,2,4-Trimethylbenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,3,5-Trimethylbenzene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Vinyl chloride	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
m,p-Xylene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
o-Xylene	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Tetrahydrofuran	ND		8.51		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Ethyl ether	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Tert-amyl methyl ether	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Ethyl tert-butyl ether	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
di-Isopropyl ether	ND		4.26		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
tert-Butanol	ND		85.1		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
1,4-Dioxane	ND	*-	85.1		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
trans-1,4-Dichloro-2-butene	ND		21.3		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1
Ethanol	ND		851		ug/Kg	☼	06/08/22 09:10	06/08/22 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*06/08/22 09:10*	*06/08/22 17:38*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/08/22 09:10*	*06/08/22 17:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*	*06/08/22 09:10*	*06/08/22 17:38*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*06/08/22 09:10*	*06/08/22 17:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.7**		0.1		%			06/06/22 16:57	1
Percent Solids	**94.3**		0.1		%			06/06/22 16:57	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4857-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4857-1	B107 (2)	97	98	115	103
LCS 620-11662/1-A	Lab Control Sample	103	101	112	102
LCSD 620-11662/2-A	Lab Control Sample Dup	102	101	112	102
MB 620-11662/3-A	Method Blank	99	98	112	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-11662/3-A
Matrix: Solid
Analysis Batch: 11663

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11662

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Acetone	ND		50.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Acrylonitrile	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Benzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Bromobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Bromochloromethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Bromodichloromethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Bromoform	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Bromomethane	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
2-Butanone (MEK)	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
n-Butylbenzene	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
sec-Butylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
tert-Butylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Carbon disulfide	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Carbon tetrachloride	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Chlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Chloroethane	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Chloroform	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Chloromethane	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
2-Chlorotoluene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
4-Chlorotoluene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Dibromochloromethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Dibromomethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,1-Dichloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2-Dichloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,1-Dichloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2-Dichloropropane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,3-Dichloropropane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
2,2-Dichloropropane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,1-Dichloropropene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Ethylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Hexachlorobutadiene	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Isopropylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
4-Isopropyltoluene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Methylene Chloride	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11662/3-A
Matrix: Solid
Analysis Batch: 11663

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11662

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
N-Propylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Styrene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Tetrachloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Toluene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Trichloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Vinyl chloride	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
m,p-Xylene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
o-Xylene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Tetrahydrofuran	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Ethyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
di-Isopropyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
tert-Butanol	ND		100		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
1,4-Dioxane	ND		100		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		06/08/22 09:10	06/08/22 12:23	1
Ethanol	ND		1000		ug/Kg		06/08/22 09:10	06/08/22 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/08/22 09:10*	*06/08/22 12:23*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/08/22 09:10*	*06/08/22 12:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*06/08/22 09:10*	*06/08/22 12:23*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*06/08/22 09:10*	*06/08/22 12:23*	*1*

Lab Sample ID: LCS 620-11662/1-A
Matrix: Solid
Analysis Batch: 11663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	23.16		ug/Kg		116	70 - 130
Acetone	20.0	19.27	J	ug/Kg		96	70 - 130
Acrylonitrile	20.0	17.78		ug/Kg		89	70 - 130
Benzene	20.0	20.24		ug/Kg		101	70 - 130
Bromobenzene	20.0	18.64		ug/Kg		93	70 - 130
Bromochloromethane	20.0	18.87		ug/Kg		94	70 - 130
Bromodichloromethane	20.0	20.43		ug/Kg		102	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11662/1-A
Matrix: Solid
Analysis Batch: 11663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	18.25		ug/Kg		91	70 - 130
Bromomethane	20.0	23.12		ug/Kg		116	70 - 130
2-Butanone (MEK)	20.0	19.38		ug/Kg		97	70 - 130
n-Butylbenzene	20.0	22.61		ug/Kg		113	70 - 130
sec-Butylbenzene	20.0	22.39		ug/Kg		112	70 - 130
tert-Butylbenzene	20.0	19.47		ug/Kg		97	70 - 130
Carbon disulfide	20.0	22.16		ug/Kg		111	70 - 130
Carbon tetrachloride	20.0	21.11		ug/Kg		106	70 - 130
Chlorobenzene	20.0	20.75		ug/Kg		104	70 - 130
Chloroethane	20.0	26.67	*+	ug/Kg		133	70 - 130
Chloroform	20.0	21.17		ug/Kg		106	70 - 130
Chloromethane	20.0	22.85		ug/Kg		114	70 - 130
2-Chlorotoluene	20.0	21.68		ug/Kg		108	70 - 130
4-Chlorotoluene	20.0	22.44		ug/Kg		112	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	15.30		ug/Kg		77	70 - 130
Dibromochloromethane	20.0	18.74		ug/Kg		94	70 - 130
1,2-Dibromoethane (EDB)	20.0	18.53		ug/Kg		93	70 - 130
Dibromomethane	20.0	19.70		ug/Kg		98	70 - 130
1,2-Dichlorobenzene	20.0	19.48		ug/Kg		97	70 - 130
1,3-Dichlorobenzene	20.0	20.69		ug/Kg		103	70 - 130
1,4-Dichlorobenzene	20.0	21.08		ug/Kg		105	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	23.51		ug/Kg		118	70 - 130
1,1-Dichloroethane	20.0	20.88		ug/Kg		104	70 - 130
1,2-Dichloroethane	20.0	21.76		ug/Kg		109	70 - 130
1,1-Dichloroethene	20.0	19.44		ug/Kg		97	70 - 130
cis-1,2-Dichloroethene	20.0	18.20		ug/Kg		91	70 - 130
trans-1,2-Dichloroethene	20.0	19.20		ug/Kg		96	70 - 130
1,2-Dichloropropane	20.0	19.91		ug/Kg		100	70 - 130
1,3-Dichloropropane	20.0	19.34		ug/Kg		97	70 - 130
2,2-Dichloropropane	20.0	21.11		ug/Kg		106	70 - 130
1,1-Dichloropropene	20.0	20.36		ug/Kg		102	70 - 130
cis-1,3-Dichloropropene	20.0	17.68		ug/Kg		88	70 - 130
trans-1,3-Dichloropropene	20.0	19.96		ug/Kg		100	70 - 130
Ethylbenzene	20.0	21.70		ug/Kg		108	70 - 130
Hexachlorobutadiene	20.0	18.45		ug/Kg		92	70 - 130
2-Hexanone (MBK)	20.0	16.20		ug/Kg		81	70 - 130
Isopropylbenzene	20.0	20.27		ug/Kg		101	70 - 130
4-Isopropyltoluene	20.0	20.64		ug/Kg		103	70 - 130
Methyl tert-butyl ether	20.0	17.77		ug/Kg		89	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.28		ug/Kg		91	70 - 130
Methylene Chloride	20.0	20.61		ug/Kg		103	70 - 130
Naphthalene	20.0	17.51		ug/Kg		88	70 - 130
N-Propylbenzene	20.0	22.77		ug/Kg		114	70 - 130
Styrene	20.0	19.75		ug/Kg		99	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.15		ug/Kg		101	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.51		ug/Kg		108	70 - 130
Tetrachloroethene	20.0	17.60		ug/Kg		88	70 - 130
Toluene	20.0	19.98		ug/Kg		100	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11662/1-A
Matrix: Solid
Analysis Batch: 11663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	20.0	17.99		ug/Kg		90	70 - 130
1,2,4-Trichlorobenzene	20.0	18.73		ug/Kg		94	70 - 130
1,3,5-Trichlorobenzene	20.0	19.23		ug/Kg		96	70 - 130
1,1,1-Trichloroethane	20.0	21.43		ug/Kg		107	70 - 130
1,1,2-Trichloroethane	20.0	19.96		ug/Kg		100	70 - 130
Trichloroethene	20.0	20.38		ug/Kg		102	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	22.08		ug/Kg		110	70 - 130
1,2,3-Trichloropropane	20.0	22.13		ug/Kg		111	70 - 130
1,2,4-Trimethylbenzene	20.0	21.46		ug/Kg		107	70 - 130
1,3,5-Trimethylbenzene	20.0	21.85		ug/Kg		109	70 - 130
Vinyl chloride	20.0	23.17		ug/Kg		116	70 - 130
m,p-Xylene	20.0	20.90		ug/Kg		105	70 - 130
o-Xylene	20.0	19.66		ug/Kg		98	70 - 130
Tetrahydrofuran	20.0	17.04		ug/Kg		85	70 - 130
Ethyl ether	20.0	19.21		ug/Kg		96	70 - 130
Tert-amyl methyl ether	20.0	18.08		ug/Kg		90	70 - 130
Ethyl tert-butyl ether	20.0	17.66		ug/Kg		88	70 - 130
di-Isopropyl ether	20.0	19.08		ug/Kg		95	70 - 130
tert-Butanol	200	140.1		ug/Kg		70	70 - 130
1,4-Dioxane	200	117.5	*-	ug/Kg		59	70 - 130
trans-1,4-Dichloro-2-butene	20.0	22.03	J	ug/Kg		110	70 - 130
Ethanol	400	419.8	J	ug/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 620-11662/2-A
Matrix: Solid
Analysis Batch: 11663

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11662

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	22.41		ug/Kg		112	70 - 130	3	30
Acetone	20.0	19.32	J	ug/Kg		97	70 - 130	0	30
Acrylonitrile	20.0	18.54		ug/Kg		93	70 - 130	4	30
Benzene	20.0	20.33		ug/Kg		102	70 - 130	0	30
Bromobenzene	20.0	18.55		ug/Kg		93	70 - 130	0	30
Bromochloromethane	20.0	19.48		ug/Kg		97	70 - 130	3	30
Bromodichloromethane	20.0	20.81		ug/Kg		104	70 - 130	2	30
Bromoform	20.0	18.50		ug/Kg		93	70 - 130	1	30
Bromomethane	20.0	21.96		ug/Kg		110	70 - 130	5	30
2-Butanone (MEK)	20.0	18.51		ug/Kg		93	70 - 130	5	30
n-Butylbenzene	20.0	22.43		ug/Kg		112	70 - 130	1	30
sec-Butylbenzene	20.0	21.61		ug/Kg		108	70 - 130	4	30
tert-Butylbenzene	20.0	19.40		ug/Kg		97	70 - 130	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11662/2-A
Matrix: Solid
Analysis Batch: 11663

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	21.81		ug/Kg		109	70 - 130	2	30
Carbon tetrachloride			20.0	21.23		ug/Kg		106	70 - 130	1	30
Chlorobenzene			20.0	20.73		ug/Kg		104	70 - 130	0	30
Chloroethane			20.0	26.33	*+	ug/Kg		132	70 - 130	1	30
Chloroform			20.0	21.23		ug/Kg		106	70 - 130	0	30
Chloromethane			20.0	21.92		ug/Kg		110	70 - 130	4	30
2-Chlorotoluene			20.0	21.38		ug/Kg		107	70 - 130	1	30
4-Chlorotoluene			20.0	21.55		ug/Kg		108	70 - 130	4	30
1,2-Dibromo-3-Chloropropane			20.0	15.37		ug/Kg		77	70 - 130	0	30
Dibromochloromethane			20.0	19.06		ug/Kg		95	70 - 130	2	30
1,2-Dibromoethane (EDB)			20.0	18.60		ug/Kg		93	70 - 130	0	30
Dibromomethane			20.0	19.72		ug/Kg		99	70 - 130	0	30
1,2-Dichlorobenzene			20.0	19.89		ug/Kg		99	70 - 130	2	30
1,3-Dichlorobenzene			20.0	20.39		ug/Kg		102	70 - 130	1	30
1,4-Dichlorobenzene			20.0	21.00		ug/Kg		105	70 - 130	0	30
Dichlorodifluoromethane (Freon 12)			20.0	23.07		ug/Kg		115	70 - 130	2	30
1,1-Dichloroethane			20.0	21.21		ug/Kg		106	70 - 130	2	30
1,2-Dichloroethane			20.0	21.80		ug/Kg		109	70 - 130	0	30
1,1-Dichloroethene			20.0	19.30		ug/Kg		96	70 - 130	1	30
cis-1,2-Dichloroethene			20.0	18.29		ug/Kg		91	70 - 130	0	30
trans-1,2-Dichloroethene			20.0	19.25		ug/Kg		96	70 - 130	0	30
1,2-Dichloropropane			20.0	19.81		ug/Kg		99	70 - 130	1	30
1,3-Dichloropropane			20.0	19.42		ug/Kg		97	70 - 130	0	30
2,2-Dichloropropane			20.0	21.19		ug/Kg		106	70 - 130	0	30
1,1-Dichloropropene			20.0	20.31		ug/Kg		102	70 - 130	0	30
cis-1,3-Dichloropropene			20.0	18.19		ug/Kg		91	70 - 130	3	30
trans-1,3-Dichloropropene			20.0	20.38		ug/Kg		102	70 - 130	2	30
Ethylbenzene			20.0	21.39		ug/Kg		107	70 - 130	1	30
Hexachlorobutadiene			20.0	18.31		ug/Kg		92	70 - 130	1	30
2-Hexanone (MBK)			20.0	16.47		ug/Kg		82	70 - 130	2	30
Isopropylbenzene			20.0	20.12		ug/Kg		101	70 - 130	1	30
4-Isopropyltoluene			20.0	20.46		ug/Kg		102	70 - 130	1	30
Methyl tert-butyl ether			20.0	18.86		ug/Kg		94	70 - 130	6	30
4-Methyl-2-pentanone (MIBK)			20.0	18.17		ug/Kg		91	70 - 130	1	30
Methylene Chloride			20.0	20.76		ug/Kg		104	70 - 130	1	30
Naphthalene			20.0	17.62		ug/Kg		88	70 - 130	1	30
N-Propylbenzene			20.0	22.03		ug/Kg		110	70 - 130	3	30
Styrene			20.0	19.76		ug/Kg		99	70 - 130	0	30
1,1,1,2-Tetrachloroethane			20.0	20.40		ug/Kg		102	70 - 130	1	30
1,1,2,2-Tetrachloroethane			20.0	21.17		ug/Kg		106	70 - 130	2	30
Tetrachloroethene			20.0	17.63		ug/Kg		88	70 - 130	0	30
Toluene			20.0	20.22		ug/Kg		101	70 - 130	1	30
1,2,3-Trichlorobenzene			20.0	18.13		ug/Kg		91	70 - 130	1	30
1,2,4-Trichlorobenzene			20.0	18.03		ug/Kg		90	70 - 130	4	30
1,3,5-Trichlorobenzene			20.0	18.98		ug/Kg		95	70 - 130	1	30
1,1,1-Trichloroethane			20.0	21.53		ug/Kg		108	70 - 130	0	30
1,1,2-Trichloroethane			20.0	19.76		ug/Kg		99	70 - 130	1	30
Trichloroethene			20.0	20.40		ug/Kg		102	70 - 130	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11662/2-A
Matrix: Solid
Analysis Batch: 11663

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	21.52		ug/Kg		108	70 - 130	3	30
1,2,3-Trichloropropane			20.0	21.53		ug/Kg		108	70 - 130	3	30
1,2,4-Trimethylbenzene			20.0	21.33		ug/Kg		107	70 - 130	1	30
1,3,5-Trimethylbenzene			20.0	21.29		ug/Kg		106	70 - 130	3	30
Vinyl chloride			20.0	22.99		ug/Kg		115	70 - 130	1	30
m,p-Xylene			20.0	20.80		ug/Kg		104	70 - 130	1	30
o-Xylene			20.0	19.50		ug/Kg		98	70 - 130	1	30
Tetrahydrofuran			20.0	17.64		ug/Kg		88	70 - 130	4	30
Ethyl ether			20.0	19.80		ug/Kg		99	70 - 130	3	30
Tert-amyl methyl ether			20.0	18.91		ug/Kg		95	70 - 130	4	30
Ethyl tert-butyl ether			20.0	18.44		ug/Kg		92	70 - 130	4	30
di-Isopropyl ether			20.0	19.56		ug/Kg		98	70 - 130	2	30
tert-Butanol			200	149.1		ug/Kg		75	70 - 130	6	30
1,4-Dioxane			200	137.6	*-	ug/Kg		69	70 - 130	16	30
trans-1,4-Dichloro-2-butene			20.0	21.79	J	ug/Kg		109	70 - 130	1	30
Ethanol			400	371.6	J	ug/Kg		93	70 - 130	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

Method: Moisture - Percent Moisture

Lab Sample ID: 620-4857-1 DU
Matrix: Solid
Analysis Batch: 11583

Client Sample ID: B107 (2)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	5.7			6.0		%				5	5
Percent Solids	94.3			94.0		%				0.3	5

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4857-1

GC/MS VOA

Pre Prep Batch: 11630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4857-1	~~B107 (2)~~ B110 (2)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 11662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4857-1	~~B107 (2)~~ B110 (2)	Total/NA	Solid	5035	11630
MB 620-11662/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-11662/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-11662/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 11663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4857-1	~~B107 (2)~~ B110 (2)	Total/NA	Solid	8260C	11662
MB 620-11662/3-A	Method Blank	Total/NA	Solid	8260C	11662
LCS 620-11662/1-A	Lab Control Sample	Total/NA	Solid	8260C	11662
LCSD 620-11662/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	11662

General Chemistry

Analysis Batch: 11583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4857-1	~~B107 (2)~~ B110 (2)	Total/NA	Solid	Moisture	
620-4857-1 DU	~~B107 (2)~~ B110 (2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4857-1

Client Sample ID: ~~B107 (2)~~ B110 (2)
Date Collected: 06/01/22 11:30
Date Received: 06/03/22 11:22

Lab Sample ID: 620-4857-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11583	06/06/22 16:57	JMF	ENE

Client Sample ID: ~~B107 (2)~~ B110 (2)
Date Collected: 06/01/22 11:30
Date Received: 06/03/22 11:22

Lab Sample ID: 620-4857-1
Matrix: Solid
Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11630	06/03/22 11:25	KFS	ENE
Total/NA	Prep	5035			11662	06/08/22 09:10	CLR	ENE
Total/NA	Analysis	8260C		1	11663	06/08/22 17:38	CLR	ENE

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4857-1
Project/Site: I295/Rt 37 - Cranston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4857-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
5035	Closed System Purge and Trap	SW846	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4857-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4857-1	~~B107 (2)~~ B110 (2)	Solid	06/01/22 11:30	06/03/22 11:22

620-4857 Chain of Custody

Testing

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- [x] Standard TAT - ~~7 to~~ 5 10 business days
- [ ] Rush TAT - Date Needed.

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell, AECOM, 10 Orms Street Suite, Providence RI 02904
Telephone #: 401 354 2303
Project Mgr: Richard Prior

Invoice To: Richard Prior, AECOM
PO No.:
Quote #:

Project No: 60680132
Site Name: 295/37 Interchange
Location: Cranston
State: RI
Sampler(s): E. deSilva

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= 12=

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= X2= X3=

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	Analysis								Check if chlorinated
	~~B107 (2)~~ B110 (2)	6/1/22	11:30			3				X									☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC
☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp °C
Emma DeSilva	Pat Haskell	6-1-22	1:25	Observed 10.8
Pat Haskell	[signature]	6-3-22	11:22	Correction Factor 0.4
				Corrected 11.2
				IR ID # 6

☐ EDD format:
☐ E-mail to:

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4857-1

Login Number: 4857
List Number: 1
Creator: McAdams, Nicole L

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4927-1
Client Project/Site: I295/Rt 37 - Cranston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
6/14/2022 3:42:10 PM
Becky Mason, Project Manager II
(413)572-4000
Becky.Mason@et.eurofinsus.com

Designee for

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-4927-1
Project/Site: I295/Rt 37 - Cranston, RI

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

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.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
^3-	Reporting Limit Check Standard is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit

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)
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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 ID: 620-4927-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4927-1

Receipt
The samples were received on 6/7/2022 4:59 PM. 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 was 1.6º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The VOC preservative codes and the field sampler's info are missing from the CoC

GC/MS VOA
Method 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: Vinyl Chloride.
(CCVIS 620-11697/3)

Method 8260C: The laboratory control sample and laboratory control sample duplicate (LCS/LCSD) for preparation batch 620-11662 and analytical batch 620-11697 recovered outside control limits for the following analytes: Chloroethane. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 620-11662 and analytical batch 620-11697 recovered outside control limits for the following analyte: 1,4-Dioxane, which has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 620-11819 and analytical batch 620-11796 recovered outside control limits for the following analytes: Naphthalene. The LCSD recovered within acceptance limits; therefore, demonstrates the extraction was within control. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

Method 8270D: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: B107 (0-4) (620-4927-3). These results have been reported and qualified.

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

GC Semi VOA
Method 8081B: Surrogate precision for the following sample was outside control limits: B107 (0-4) (620-4927-3). Evidence of matrix interference is present; 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.

Metals
Method 6010D: The matrix spike (MS) recoveries for preparation batch 620-11654 and analytical batch 620-11674 were outside control limits for antimony and selenium. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010D: The matrix spike duplicate (MSD) recoveries for preparation batch 620-11654 and analytical batch 620-11674 were outside control limits for silver, arsenic, cadmium, chromium, nickel, lead, antimony, selenium, and zinc. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010D: The continuing calibration blank (CCB) for analytical batch 620-11674 contained zinc above the reporting limit (RL). All

Job ID: 620-4927-1 (Continued)

Laboratory: Eurofins New England (Continued)

reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010D: The sample duplicate precision for the following sample associated with preparation batch 620-11654 and analytical batch 620-11674 was outside control limits for manganese and nickel: B100/B108 (0-4) (620-4927-1). Non-homogeneity of the sample matrix is suspected. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Method 7471B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-11664 and analytical batch 620-11747 were outside control limits for mercury. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B110/B108 (0-4) — Lab Sample ID: 620-4927-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	83.2		14.3		mg/Kg	1	☼	8100	Total/NA
Arsenic	1.56	F1	1.55		mg/Kg	1	☼	6010D	Total/NA
Barium	17.9		1.03		mg/Kg	1	☼	6010D	Total/NA
Chromium	11.3	F1	1.03		mg/Kg	1	☼	6010D	Total/NA
Copper	31.8	^3-	1.03		mg/Kg	1	☼	6010D	Total/NA
Lead	28.2	F1	1.55		mg/Kg	1	☼	6010D	Total/NA
Manganese	102	^3-	1.03		mg/Kg	1	☼	6010D	Total/NA
Nickel	5.11	F1	1.03		mg/Kg	1	☼	6010D	Total/NA
Vanadium	7.38		1.55		mg/Kg	1	☼	6010D	Total/NA
Zinc	35.5	F1 ^3- ^2	3.09		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: B108 (1) — Lab Sample ID: 620-4927-2

No Detections.

Client Sample ID: B107 (0-4) — Lab Sample ID: 620-4927-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	86.4		71.2		ug/Kg	1	☼	8270D	Total/NA
PCB-1254	188		21.4		ug/Kg	1	☼	8082A	Total/NA
TEPH (C9-C36)	92.5		13.8		mg/Kg	1	☼	8100	Total/NA
Barium	27.1		1.03		mg/Kg	1	☼	6010D	Total/NA
Chromium	11.0		1.03		mg/Kg	1	☼	6010D	Total/NA
Copper	10.1	^3-	1.03		mg/Kg	1	☼	6010D	Total/NA
Lead	28.4		1.54		mg/Kg	1	☼	6010D	Total/NA
Manganese	146	^3-	1.03		mg/Kg	1	☼	6010D	Total/NA
Nickel	6.47		1.03		mg/Kg	1	☼	6010D	Total/NA
Vanadium	6.87		1.54		mg/Kg	1	☼	6010D	Total/NA
Zinc	34.5	^3- ^2	3.09		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B110/B108 (0-4)

Date Collected: 06/06/22 15:45
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-1

Matrix: Solid
Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
2-Methylnaphthalene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Acenaphthene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Acenaphthylene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Anthracene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Benzo[a]anthracene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Benzo[a]pyrene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Benzo[b]fluoranthene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Benzo[g,h,i]perylene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Benzo[k]fluoranthene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Chrysene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Dibenz(a,h)anthracene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Fluoranthene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Fluorene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Indeno[1,2,3-cd]pyrene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Naphthalene	ND	*-	72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Phenanthrene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1
Pyrene	ND		72.7		ug/Kg	☼	06/13/22 11:06	06/13/22 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*35*		*30 - 130*	*06/13/22 11:06*	*06/13/22 19:20*	*1*
2-Fluorobiphenyl (Surr)	*53*		*30 - 130*	*06/13/22 11:06*	*06/13/22 19:20*	*1*
Terphenyl-d14 (Surr)	*77*		*30 - 130*	*06/13/22 11:06*	*06/13/22 19:20*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
beta-BHC	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
delta-BHC	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
gamma-BHC (Lindane)	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Heptachlor	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Aldrin	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Heptachlor epoxide	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Endosulfan I	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Dieldrin	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
4,4'-DDE	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Endrin	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Endosulfan II	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
4,4'-DDD	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Endosulfan sulfate	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
4,4'-DDT	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Methoxychlor	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Endrin ketone	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Endrin aldehyde	ND		8.91		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
cis-Chlordane	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
trans-Chlordane	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Toxaphene	ND		111		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1
Alachlor	ND		5.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:48	1

Client Sample ID: B110/B108 (0-4)

Date Collected: 06/06/22 15:45
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-1

Matrix: Solid
Percent Solids: 89.3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*30 - 150*	*06/09/22 10:03*	*06/13/22 14:48*	*1*
Tetrachloro-m-xylene	*56*		*30 - 150*	*06/09/22 10:03*	*06/13/22 14:48*	*1*
DCB Decachlorobiphenyl (Surr)	*59*		*30 - 150*	*06/09/22 10:03*	*06/13/22 14:48*	*1*
DCB Decachlorobiphenyl (Surr)	*45*		*30 - 150*	*06/09/22 10:03*	*06/13/22 14:48*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1
PCB-1221	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1
PCB-1232	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1
PCB-1242	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1
PCB-1248	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1
PCB-1254	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1
PCB-1260	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1
PCB-1262	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1
PCB-1268	ND		22.3	ug/Kg	☼	06/09/22 10:03	06/13/22 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*60*		*30 - 150*	*06/09/22 10:03*	*06/13/22 15:18*	*1*
Tetrachloro-m-xylene	*57*		*30 - 150*	*06/09/22 10:03*	*06/13/22 15:18*	*1*
DCB Decachlorobiphenyl (Surr)	*53*		*30 - 150*	*06/09/22 10:03*	*06/13/22 15:18*	*1*
DCB Decachlorobiphenyl (Surr)	*50*		*30 - 150*	*06/09/22 10:03*	*06/13/22 15:18*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**83.2**		14.3	mg/Kg	☼	06/08/22 15:19	06/09/22 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*62*		*40 - 140*	*06/08/22 15:19*	*06/09/22 16:11*	*1*
o-Terphenyl (Surr)	*67*		*40 - 140*	*06/08/22 15:19*	*06/09/22 16:11*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	F1	5.15	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Arsenic	**1.56**	**F1**	1.55	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Barium	**17.9**		1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Beryllium	ND		0.515	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Cadmium	ND	F1	0.515	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Chromium	**11.3**	**F1**	1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Copper	**31.8**	**^3-**	1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Lead	**28.2**	**F1**	1.55	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Manganese	**102**	**^3-**	1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Nickel	**5.11**	**F1**	1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Selenium	ND	F1	1.55	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Silver	ND	F1	1.55	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Thallium	ND	^3-	3.09	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Vanadium	**7.38**		1.55	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1
Zinc	**35.5**	**F1 ^3- ^2**	3.09	mg/Kg	☼	06/08/22 09:06	06/08/22 18:05	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B100/B108 (0-4)
Date Collected: 06/06/22 15:45
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-1
Matrix: Solid
Percent Solids: 89.3

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F2 F1	0.0538		mg/Kg	☼	06/08/22 09:15	06/09/22 15:53	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.7		0.1		%			06/10/22 10:55	1
Percent Solids	89.3		0.1		%			06/10/22 10:55	1

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B108 (1)
Date Collected: 06/06/22 09:30
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-2
Matrix: Solid
Percent Solids: 96.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Acetone	ND		45.4		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Acrylonitrile	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Benzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Bromobenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Bromochloromethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Bromodichloromethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Bromoform	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Bromomethane	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
2-Butanone (MEK)	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
n-Butylbenzene	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
sec-Butylbenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
tert-Butylbenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Carbon disulfide	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Carbon tetrachloride	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Chlorobenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Chloroethane	ND	*+	9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Chloroform	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Chloromethane	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
2-Chlorotoluene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
4-Chlorotoluene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2-Dibromo-3-Chloropropane	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Dibromochloromethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2-Dibromoethane (EDB)	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Dibromomethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2-Dichlorobenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,3-Dichlorobenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,4-Dichlorobenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Dichlorodifluoromethane (Freon 12)	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,1-Dichloroethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2-Dichloroethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,1-Dichloroethene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
cis-1,2-Dichloroethene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
trans-1,2-Dichloroethene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2-Dichloropropane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,3-Dichloropropane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
2,2-Dichloropropane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,1-Dichloropropene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
cis-1,3-Dichloropropene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
trans-1,3-Dichloropropene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Ethylbenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Hexachlorobutadiene	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
2-Hexanone (MBK)	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Isopropylbenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
4-Isopropyltoluene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Methyl tert-butyl ether	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
4-Methyl-2-pentanone (MIBK)	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Methylene Chloride	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Naphthalene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B108 (1)
Date Collected: 06/06/22 09:30
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-2
Matrix: Solid
Percent Solids: 96.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Styrene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,1,1,2-Tetrachloroethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,1,2,2-Tetrachloroethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Tetrachloroethene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Toluene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2,3-Trichlorobenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2,4-Trichlorobenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,3,5-Trichlorobenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,1,1-Trichloroethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,1,2-Trichloroethane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Trichloroethene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Trichlorofluoromethane (Freon 11)	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2,3-Trichloropropane	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,2,4-Trimethylbenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,3,5-Trimethylbenzene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Vinyl chloride	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
m,p-Xylene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
o-Xylene	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Tetrahydrofuran	ND		9.08		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Ethyl ether	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Tert-amyl methyl ether	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Ethyl tert-butyl ether	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
di-Isopropyl ether	ND		4.54		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
tert-Butanol	ND		90.8		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
1,4-Dioxane	ND	*-	90.8		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
trans-1,4-Dichloro-2-butene	ND		22.7		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1
Ethanol	ND		908		ug/Kg	☼	06/08/22 15:45	06/09/22 03:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/08/22 15:45*	*06/09/22 03:32*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/08/22 15:45*	*06/09/22 03:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*	*06/08/22 15:45*	*06/09/22 03:32*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*06/08/22 15:45*	*06/09/22 03:32*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**3.7**		0.1		%			06/10/22 10:55	1
Percent Solids	**96.3**		0.1		%			06/10/22 10:55	1

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B107 (0-4)
Date Collected: 06/06/22 16:15
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-3
Matrix: Solid
Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
2-Methylnaphthalene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Acenaphthene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Acenaphthylene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Anthracene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Benzo[a]anthracene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Benzo[a]pyrene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Benzo[b]fluoranthene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Benzo[g,h,i]perylene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Benzo[k]fluoranthene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Chrysene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Dibenz(a,h)anthracene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Fluoranthene	**86.4**		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Fluorene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Indeno[1,2,3-cd]pyrene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Naphthalene	ND	*-	71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Phenanthrene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1
Pyrene	ND		71.2		ug/Kg	☼	06/13/22 11:06	06/13/22 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*28*	*S1-*	*30 - 130*	*06/13/22 11:06*	*06/13/22 21:43*	*1*
2-Fluorobiphenyl (Surr)	*44*		*30 - 130*	*06/13/22 11:06*	*06/13/22 21:43*	*1*
Terphenyl-d14 (Surr)	*75*		*30 - 130*	*06/13/22 11:06*	*06/13/22 21:43*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
beta-BHC	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
delta-BHC	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
gamma-BHC (Lindane)	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Heptachlor	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Aldrin	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Heptachlor epoxide	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Endosulfan I	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Dieldrin	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
4,4'-DDE	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Endrin	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Endosulfan II	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
4,4'-DDD	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Endosulfan sulfate	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
4,4'-DDT	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Methoxychlor	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Endrin ketone	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Endrin aldehyde	ND		8.57		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
cis-Chlordane	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
trans-Chlordane	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Toxaphene	ND		107		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1
Alachlor	ND		5.36		ug/Kg	☼	06/09/22 10:03	06/13/22 14:32	1

Client Sample ID: B107 (0-4)
Date Collected: 06/06/22 16:15
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-3
Matrix: Solid
Percent Solids: 92.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		30 - 150	06/09/22 10:03	06/13/22 14:32	1
Tetrachloro-m-xylene	70		30 - 150	06/09/22 10:03	06/13/22 14:32	1
DCB Decachlorobiphenyl (Surr)	62		30 - 150	06/09/22 10:03	06/13/22 14:32	1
DCB Decachlorobiphenyl (Surr)	36	p	30 - 150	06/09/22 10:03	06/13/22 14:32	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1
PCB-1221	ND		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1
PCB-1232	ND		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1
PCB-1242	ND		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1
PCB-1248	ND		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1
PCB-1254	**188**		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1
PCB-1260	ND		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1
PCB-1262	ND		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1
PCB-1268	ND		21.4	ug/Kg	☼	06/09/22 10:03	06/13/22 15:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	62		30 - 150	06/09/22 10:03	06/13/22 15:01	1
Tetrachloro-m-xylene	59		30 - 150	06/09/22 10:03	06/13/22 15:01	1
DCB Decachlorobiphenyl (Surr)	53		30 - 150	06/09/22 10:03	06/13/22 15:01	1
DCB Decachlorobiphenyl (Surr)	50		30 - 150	06/09/22 10:03	06/13/22 15:01	1

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**92.5**		13.8	mg/Kg	☼	06/08/22 15:19	06/09/22 15:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane (Surr)	68		40 - 140	06/08/22 15:19	06/09/22 15:45	1
o-Terphenyl (Surr)	66		40 - 140	06/08/22 15:19	06/09/22 15:45	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.14	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Arsenic	ND		1.54	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Barium	**27.1**		1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Beryllium	ND		0.514	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Cadmium	ND		0.514	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Chromium	**11.0**		1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Copper	**10.1**	**^3-**	1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Lead	**28.4**		1.54	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Manganese	**146**	**^3-**	1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Nickel	**6.47**		1.03	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Selenium	ND		1.54	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Silver	ND		1.54	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Thallium	ND	^3-	3.09	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Vanadium	**6.87**		1.54	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1
Zinc	**34.5**	**^3- ^2**	3.09	mg/Kg	☼	06/08/22 09:06	06/08/22 18:34	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B107 (0-4)

Date Collected: 06/06/22 16:15
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-3

Matrix: Solid
Percent Solids: 92.6

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	^-	0.0485		mg/Kg	☼	06/08/22 09:15	06/09/22 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.4		0.1		%			06/10/22 10:55	1
Percent Solids	92.6		0.1		%			06/10/22 10:55	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4927-2	B108 (1)	99	98	103	101
LCS 620-11662/1-A	Lab Control Sample	103	101	114	102
LCSD 620-11662/2-A	Lab Control Sample Dup	102	100	113	102
MB 620-11662/3-A	Method Blank	100	98	111	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(30-130)	(30-130)
620-4927-1	B110/B108 (0-4)	35	53	77
620-4927-3	B107 (0-4)	28 S1-	44	75
LCS 620-11819/2-A	Lab Control Sample	36	43	85
LCSD 620-11819/3-A	Lab Control Sample Dup	41	53	81
MB 620-11819/1-A	Method Blank	34	38	75

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4927-1	B110/B108 (0-4)	63	56	59	45
620-4927-3	B107 (0-4)	67	70	62	36 p
LCS 620-11716/4-A	Lab Control Sample	55	56	61	53
LCSD 620-11716/5-A	Lab Control Sample Dup	64	65	63	53
MB 620-11716/1-A	Method Blank	54	52	68	58

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-4927-1	B100/B108 (0-4)	60	57	53	50
620-4927-3	B107 (0-4)	62	59	53	50

Surrogate Summary

Client: AECOM
Job ID: 620-4927-1
Project/Site: I295/Rt 37 - Cranston, RI

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
LCS 620-11716/2-A	Lab Control Sample	62	61	75	71
LCSD 620-11716/3-A	Lab Control Sample Dup	71	69	76	73
MB 620-11716/1-A	Method Blank	55	54	66	63

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	OTPH
Lab Sample ID	Client Sample ID	(40-140)	(40-140)
620-4927-1	B110/B108 (0-4)	62	67
620-4927-3	B107 (0-4)	68	66
LCS 620-11693/2-A	Lab Control Sample	94	103
LCSD 620-11693/3-A	Lab Control Sample Dup	89	78
MB 620-11693/1-A	Method Blank	71	50

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)

OTPH = o-Terphenyl (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-11662/3-A
Matrix: Solid
Analysis Batch: 11697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11662

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Acetone	ND		50.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Acrylonitrile	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Benzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Bromobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Bromochloromethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Bromodichloromethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Bromoform	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Bromomethane	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
2-Butanone (MEK)	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
n-Butylbenzene	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
sec-Butylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
tert-Butylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Carbon disulfide	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Carbon tetrachloride	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Chlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Chloroethane	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Chloroform	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Chloromethane	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
2-Chlorotoluene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
4-Chlorotoluene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Dibromochloromethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Dibromomethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,1-Dichloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2-Dichloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,1-Dichloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2-Dichloropropane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,3-Dichloropropane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
2,2-Dichloropropane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,1-Dichloropropene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Ethylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Hexachlorobutadiene	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Isopropylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
4-Isopropyltoluene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Methylene Chloride	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11662/3-A
Matrix: Solid
Analysis Batch: 11697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11662

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
N-Propylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Styrene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Tetrachloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Toluene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Trichloroethene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Vinyl chloride	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
m,p-Xylene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
o-Xylene	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Tetrahydrofuran	ND		10.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Ethyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
di-Isopropyl ether	ND		5.00		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
tert-Butanol	ND		100		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
1,4-Dioxane	ND		100		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		06/08/22 09:10	06/08/22 20:39	1
Ethanol	ND		1000		ug/Kg		06/08/22 09:10	06/08/22 20:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*06/08/22 09:10*	*06/08/22 20:39*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/08/22 09:10*	*06/08/22 20:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*	*06/08/22 09:10*	*06/08/22 20:39*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*06/08/22 09:10*	*06/08/22 20:39*	*1*

Lab Sample ID: LCS 620-11662/1-A
Matrix: Solid
Analysis Batch: 11697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	22.97		ug/Kg		115	70 - 130
Acetone	20.0	20.34	J	ug/Kg		102	70 - 130
Acrylonitrile	20.0	20.19		ug/Kg		101	70 - 130
Benzene	20.0	21.54		ug/Kg		108	70 - 130
Bromobenzene	20.0	19.48		ug/Kg		97	70 - 130
Bromochloromethane	20.0	20.54		ug/Kg		103	70 - 130
Bromodichloromethane	20.0	21.60		ug/Kg		108	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11662/1-A
Matrix: Solid
Analysis Batch: 11697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	20.02		ug/Kg		100	70 - 130
Bromomethane	20.0	23.77		ug/Kg		119	70 - 130
2-Butanone (MEK)	20.0	20.31		ug/Kg		102	70 - 130
n-Butylbenzene	20.0	22.80		ug/Kg		114	70 - 130
sec-Butylbenzene	20.0	22.43		ug/Kg		112	70 - 130
tert-Butylbenzene	20.0	20.36		ug/Kg		102	70 - 130
Carbon disulfide	20.0	22.73		ug/Kg		114	70 - 130
Carbon tetrachloride	20.0	22.69		ug/Kg		113	70 - 130
Chlorobenzene	20.0	21.60		ug/Kg		108	70 - 130
Chloroethane	20.0	29.32	*+	ug/Kg		147	70 - 130
Chloroform	20.0	22.25		ug/Kg		111	70 - 130
Chloromethane	20.0	22.80		ug/Kg		114	70 - 130
2-Chlorotoluene	20.0	21.79		ug/Kg		109	70 - 130
4-Chlorotoluene	20.0	22.07		ug/Kg		110	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	16.53		ug/Kg		83	70 - 130
Dibromochloromethane	20.0	20.26		ug/Kg		101	70 - 130
1,2-Dibromoethane (EDB)	20.0	19.57		ug/Kg		98	70 - 130
Dibromomethane	20.0	20.99		ug/Kg		105	70 - 130
1,2-Dichlorobenzene	20.0	20.40		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	20.0	20.92		ug/Kg		105	70 - 130
1,4-Dichlorobenzene	20.0	21.40		ug/Kg		107	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	24.32		ug/Kg		122	70 - 130
1,1-Dichloroethane	20.0	22.30		ug/Kg		111	70 - 130
1,2-Dichloroethane	20.0	23.08		ug/Kg		115	70 - 130
1,1-Dichloroethene	20.0	20.86		ug/Kg		104	70 - 130
cis-1,2-Dichloroethene	20.0	19.27		ug/Kg		96	70 - 130
trans-1,2-Dichloroethene	20.0	20.21		ug/Kg		101	70 - 130
1,2-Dichloropropane	20.0	20.62		ug/Kg		103	70 - 130
1,3-Dichloropropane	20.0	20.93		ug/Kg		105	70 - 130
2,2-Dichloropropane	20.0	21.99		ug/Kg		110	70 - 130
1,1-Dichloropropene	20.0	21.21		ug/Kg		106	70 - 130
cis-1,3-Dichloropropene	20.0	19.13		ug/Kg		96	70 - 130
trans-1,3-Dichloropropene	20.0	21.52		ug/Kg		108	70 - 130
Ethylbenzene	20.0	22.33		ug/Kg		112	70 - 130
Hexachlorobutadiene	20.0	18.63		ug/Kg		93	70 - 130
2-Hexanone (MBK)	20.0	17.47		ug/Kg		87	70 - 130
Isopropylbenzene	20.0	20.71		ug/Kg		104	70 - 130
4-Isopropyltoluene	20.0	20.88		ug/Kg		104	70 - 130
Methyl tert-butyl ether	20.0	19.84		ug/Kg		99	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	19.05		ug/Kg		95	70 - 130
Methylene Chloride	20.0	22.23		ug/Kg		111	70 - 130
Naphthalene	20.0	19.09		ug/Kg		95	70 - 130
N-Propylbenzene	20.0	22.74		ug/Kg		114	70 - 130
Styrene	20.0	20.20		ug/Kg		101	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.63		ug/Kg		108	70 - 130
1,1,2,2-Tetrachloroethane	20.0	22.69		ug/Kg		113	70 - 130
Tetrachloroethene	20.0	18.19		ug/Kg		91	70 - 130
Toluene	20.0	21.26		ug/Kg		106	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11662/1-A
Matrix: Solid
Analysis Batch: 11697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11662

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichlorobenzene			20.0	18.69		ug/Kg		93	70 - 130		
1,2,4-Trichlorobenzene			20.0	18.20		ug/Kg		91	70 - 130		
1,3,5-Trichlorobenzene			20.0	19.01		ug/Kg		95	70 - 130		
1,1,1-Trichloroethane			20.0	22.80		ug/Kg		114	70 - 130		
1,1,2-Trichloroethane			20.0	21.46		ug/Kg		107	70 - 130		
Trichloroethene			20.0	21.48		ug/Kg		107	70 - 130		
Trichlorofluoromethane (Freon 11)			20.0	22.76		ug/Kg		114	70 - 130		
1,2,3-Trichloropropane			20.0	23.44		ug/Kg		117	70 - 130		
1,2,4-Trimethylbenzene			20.0	21.64		ug/Kg		108	70 - 130		
1,3,5-Trimethylbenzene			20.0	22.15		ug/Kg		111	70 - 130		
Vinyl chloride			20.0	24.69		ug/Kg		123	70 - 130		
m,p-Xylene			20.0	21.35		ug/Kg		107	70 - 130		
o-Xylene			20.0	20.37		ug/Kg		102	70 - 130		
Tetrahydrofuran			20.0	19.10		ug/Kg		96	70 - 130		
Ethyl ether			20.0	20.38		ug/Kg		102	70 - 130		
Tert-amyl methyl ether			20.0	19.68		ug/Kg		98	70 - 130		
Ethyl tert-butyl ether			20.0	19.45		ug/Kg		97	70 - 130		
di-Isopropyl ether			20.0	20.54		ug/Kg		103	70 - 130		
tert-Butanol			200	162.5		ug/Kg		81	70 - 130		
1,4-Dioxane			200	153.3		ug/Kg		77	70 - 130		
trans-1,4-Dichloro-2-butene			20.0	23.44	J	ug/Kg		117	70 - 130		
Ethanol			400	444.2	J	ug/Kg		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 620-11662/2-A
Matrix: Solid
Analysis Batch: 11697

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	20.80		ug/Kg		104	70 - 130	10	30
Acetone			20.0	19.89	J	ug/Kg		99	70 - 130	2	30
Acrylonitrile			20.0	19.85		ug/Kg		99	70 - 130	2	30
Benzene			20.0	20.16		ug/Kg		101	70 - 130	7	30
Bromobenzene			20.0	18.41		ug/Kg		92	70 - 130	6	30
Bromochloromethane			20.0	19.47		ug/Kg		97	70 - 130	5	30
Bromodichloromethane			20.0	20.75		ug/Kg		104	70 - 130	4	30
Bromoform			20.0	19.21		ug/Kg		96	70 - 130	4	30
Bromomethane			20.0	22.79		ug/Kg		114	70 - 130	4	30
2-Butanone (MEK)			20.0	19.81		ug/Kg		99	70 - 130	3	30
n-Butylbenzene			20.0	21.09		ug/Kg		105	70 - 130	8	30
sec-Butylbenzene			20.0	21.02		ug/Kg		105	70 - 130	7	30
tert-Butylbenzene			20.0	19.22		ug/Kg		96	70 - 130	6	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11662/2-A
Matrix: Solid
Analysis Batch: 11697

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	21.39		ug/Kg		107	70 - 130	6	30
Carbon tetrachloride			20.0	21.10		ug/Kg		106	70 - 130	7	30
Chlorobenzene			20.0	20.59		ug/Kg		103	70 - 130	5	30
Chloroethane			20.0	27.72	*+	ug/Kg		139	70 - 130	6	30
Chloroform			20.0	21.33		ug/Kg		107	70 - 130	4	30
Chloromethane			20.0	21.99		ug/Kg		110	70 - 130	4	30
2-Chlorotoluene			20.0	20.82		ug/Kg		104	70 - 130	5	30
4-Chlorotoluene			20.0	20.93		ug/Kg		105	70 - 130	5	30
1,2-Dibromo-3-Chloropropane			20.0	16.90		ug/Kg		85	70 - 130	2	30
Dibromochloromethane			20.0	19.11		ug/Kg		96	70 - 130	6	30
1,2-Dibromoethane (EDB)			20.0	19.01		ug/Kg		95	70 - 130	3	30
Dibromomethane			20.0	20.08		ug/Kg		100	70 - 130	4	30
1,2-Dichlorobenzene			20.0	19.63		ug/Kg		98	70 - 130	4	30
1,3-Dichlorobenzene			20.0	19.45		ug/Kg		97	70 - 130	7	30
1,4-Dichlorobenzene			20.0	20.15		ug/Kg		101	70 - 130	6	30
Dichlorodifluoromethane (Freon 12)			20.0	22.09		ug/Kg		110	70 - 130	10	30
1,1-Dichloroethane			20.0	20.81		ug/Kg		104	70 - 130	7	30
1,2-Dichloroethane			20.0	21.88		ug/Kg		109	70 - 130	5	30
1,1-Dichloroethene			20.0	19.00		ug/Kg		95	70 - 130	9	30
cis-1,2-Dichloroethene			20.0	18.40		ug/Kg		92	70 - 130	5	30
trans-1,2-Dichloroethene			20.0	18.79		ug/Kg		94	70 - 130	7	30
1,2-Dichloropropane			20.0	20.10		ug/Kg		101	70 - 130	3	30
1,3-Dichloropropane			20.0	19.75		ug/Kg		99	70 - 130	6	30
2,2-Dichloropropane			20.0	20.53		ug/Kg		103	70 - 130	7	30
1,1-Dichloropropene			20.0	19.81		ug/Kg		99	70 - 130	7	30
cis-1,3-Dichloropropene			20.0	18.09		ug/Kg		90	70 - 130	6	30
trans-1,3-Dichloropropene			20.0	20.25		ug/Kg		101	70 - 130	6	30
Ethylbenzene			20.0	21.00		ug/Kg		105	70 - 130	6	30
Hexachlorobutadiene			20.0	17.56		ug/Kg		88	70 - 130	6	30
2-Hexanone (MBK)			20.0	15.12		ug/Kg		76	70 - 130	14	30
Isopropylbenzene			20.0	19.86		ug/Kg		99	70 - 130	4	30
4-Isopropyltoluene			20.0	19.67		ug/Kg		98	70 - 130	6	30
Methyl tert-butyl ether			20.0	18.96		ug/Kg		95	70 - 130	5	30
4-Methyl-2-pentanone (MIBK)			20.0	17.89		ug/Kg		89	70 - 130	6	30
Methylene Chloride			20.0	20.95		ug/Kg		105	70 - 130	6	30
Naphthalene			20.0	18.24		ug/Kg		91	70 - 130	5	30
N-Propylbenzene			20.0	21.43		ug/Kg		107	70 - 130	6	30
Styrene			20.0	19.51		ug/Kg		98	70 - 130	3	30
1,1,1,2-Tetrachloroethane			20.0	20.53		ug/Kg		103	70 - 130	5	30
1,1,2,2-Tetrachloroethane			20.0	21.77		ug/Kg		109	70 - 130	4	30
Tetrachloroethene			20.0	17.35		ug/Kg		87	70 - 130	5	30
Toluene			20.0	19.63		ug/Kg		98	70 - 130	8	30
1,2,3-Trichlorobenzene			20.0	17.64		ug/Kg		88	70 - 130	6	30
1,2,4-Trichlorobenzene			20.0	16.66		ug/Kg		83	70 - 130	9	30
1,3,5-Trichlorobenzene			20.0	17.84		ug/Kg		89	70 - 130	6	30
1,1,1-Trichloroethane			20.0	21.41		ug/Kg		107	70 - 130	6	30
1,1,2-Trichloroethane			20.0	20.06		ug/Kg		100	70 - 130	7	30
Trichloroethene			20.0	20.24		ug/Kg		101	70 - 130	6	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11662/2-A
Matrix: Solid
Analysis Batch: 11697

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	20.87		ug/Kg		104	70 - 130	9	30
1,2,3-Trichloropropane			20.0	22.53		ug/Kg		113	70 - 130	4	30
1,2,4-Trimethylbenzene			20.0	20.64		ug/Kg		103	70 - 130	5	30
1,3,5-Trimethylbenzene			20.0	20.76		ug/Kg		104	70 - 130	6	30
Vinyl chloride			20.0	22.80		ug/Kg		114	70 - 130	8	30
m,p-Xylene			20.0	20.47		ug/Kg		102	70 - 130	4	30
o-Xylene			20.0	19.42		ug/Kg		97	70 - 130	5	30
Tetrahydrofuran			20.0	16.74		ug/Kg		84	70 - 130	13	30
Ethyl ether			20.0	19.42		ug/Kg		97	70 - 130	5	30
Tert-amyl methyl ether			20.0	18.83		ug/Kg		94	70 - 130	4	30
Ethyl tert-butyl ether			20.0	18.56		ug/Kg		93	70 - 130	5	30
di-Isopropyl ether			20.0	19.79		ug/Kg		99	70 - 130	4	30
tert-Butanol			200	147.3		ug/Kg		74	70 - 130	10	30
1,4-Dioxane			200	138.2	*-	ug/Kg		69	70 - 130	10	30
trans-1,4-Dichloro-2-butene			20.0	22.02	J	ug/Kg		110	70 - 130	6	30
Ethanol			400	395.6	J	ug/Kg		99	70 - 130	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 620-11819/1-A
Matrix: Solid
Analysis Batch: 11796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11819

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
2-Methylnaphthalene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Acenaphthene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Acenaphthylene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Anthracene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[a]anthracene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[a]pyrene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[b]fluoranthene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[g,h,i]perylene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[k]fluoranthene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Chrysene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Dibenz(a,h)anthracene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Fluoranthene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Fluorene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Indeno[1,2,3-cd]pyrene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Naphthalene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Phenanthrene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Pyrene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	34		30 - 130	06/13/22 11:06	06/13/22 17:26	1
2-Fluorobiphenyl (Surr)	38		30 - 130	06/13/22 11:06	06/13/22 17:26	1
Terphenyl-d14 (Surr)	75		30 - 130	06/13/22 11:06	06/13/22 17:26	1

Lab Sample ID: LCS 620-11819/2-A
Matrix: Solid
Analysis Batch: 11796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1670	677.1		ug/Kg		41	40 - 140
2-Methylnaphthalene	1670	831.7		ug/Kg		50	40 - 140
Acenaphthene	1670	816.6		ug/Kg		49	40 - 140
Acenaphthylene	1670	816.3		ug/Kg		49	40 - 140
Anthracene	1670	1264		ug/Kg		76	40 - 140
Benzo[a]anthracene	1670	1442		ug/Kg		87	40 - 140
Benzo[a]pyrene	1670	1379		ug/Kg		83	40 - 140
Benzo[b]fluoranthene	1670	1459		ug/Kg		88	40 - 140
Benzo[g,h,i]perylene	1670	1449		ug/Kg		87	40 - 140
Benzo[k]fluoranthene	1670	1326		ug/Kg		80	40 - 140
Chrysene	1670	1390		ug/Kg		83	40 - 140
Dibenz(a,h)anthracene	1670	1380		ug/Kg		83	40 - 140
Fluoranthene	1670	1401		ug/Kg		84	40 - 140
Fluorene	1670	1020		ug/Kg		61	40 - 140
Indeno[1,2,3-cd]pyrene	1670	1436		ug/Kg		86	40 - 140
Naphthalene	1670	614.5	*-	ug/Kg		37	40 - 140
Phenanthrene	1670	1208		ug/Kg		72	40 - 140
Pyrene	1670	1322		ug/Kg		79	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	36		30 - 130
2-Fluorobiphenyl (Surr)	43		30 - 130
Terphenyl-d14 (Surr)	85		30 - 130

Lab Sample ID: LCSD 620-11819/3-A
Matrix: Solid
Analysis Batch: 11796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11819

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1670	821.9		ug/Kg		49	40 - 140	19	30
2-Methylnaphthalene	1670	986.2		ug/Kg		59	40 - 140	17	30
Acenaphthene	1670	981.3		ug/Kg		59	40 - 140	18	30
Acenaphthylene	1670	992.0		ug/Kg		60	40 - 140	19	30
Anthracene	1670	1295		ug/Kg		78	40 - 140	2	30
Benzo[a]anthracene	1670	1413		ug/Kg		85	40 - 140	2	30
Benzo[a]pyrene	1670	1355		ug/Kg		81	40 - 140	2	30
Benzo[b]fluoranthene	1670	1349		ug/Kg		81	40 - 140	8	30
Benzo[g,h,i]perylene	1670	1429		ug/Kg		86	40 - 140	1	30
Benzo[k]fluoranthene	1670	1437		ug/Kg		86	40 - 140	8	30
Chrysene	1670	1339		ug/Kg		80	40 - 140	4	30
Dibenz(a,h)anthracene	1670	1352		ug/Kg		81	40 - 140	2	30
Fluoranthene	1670	1378		ug/Kg		83	40 - 140	2	30

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

Lab Sample ID: LCSD 620-11819/3-A
Matrix: Solid
Analysis Batch: 11796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11819

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			1670	1166		ug/Kg		70	40 - 140	13	30
Indeno[1,2,3-cd]pyrene			1670	1400		ug/Kg		84	40 - 140	3	30
Naphthalene			1670	706.3		ug/Kg		42	40 - 140	14	30
Phenanthrene			1670	1239		ug/Kg		74	40 - 140	2	30
Pyrene			1670	1298		ug/Kg		78	40 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*41*		*30 - 130*
2-Fluorobiphenyl (Surr)	*53*		*30 - 130*
Terphenyl-d14 (Surr)	*81*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-11716/1-A
Matrix: Solid
Analysis Batch: 11809

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11716

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
beta-BHC	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
delta-BHC	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
gamma-BHC (Lindane)	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Heptachlor	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Aldrin	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Heptachlor epoxide	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Endosulfan I	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Dieldrin	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
4,4'-DDE	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Endrin	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Endosulfan II	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
4,4'-DDD	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Endosulfan sulfate	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
4,4'-DDT	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Methoxychlor	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Endrin ketone	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Endrin aldehyde	ND		8.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
cis-Chlordane	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
trans-Chlordane	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Toxaphene	ND		100		ug/Kg		06/09/22 10:03	06/13/22 12:57	1
Alachlor	ND		5.00		ug/Kg		06/09/22 10:03	06/13/22 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*54*		*30 - 150*	*06/09/22 10:03*	*06/13/22 12:57*	*1*
Tetrachloro-m-xylene	*52*		*30 - 150*	*06/09/22 10:03*	*06/13/22 12:57*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*30 - 150*	*06/09/22 10:03*	*06/13/22 12:57*	*1*
DCB Decachlorobiphenyl (Surr)	*58*		*30 - 150*	*06/09/22 10:03*	*06/13/22 12:57*	*1*

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

Lab Sample ID: LCS 620-11716/4-A
Matrix: Solid
Analysis Batch: 11809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
alpha-BHC			13.4	7.515		ug/Kg		56	27 - 108		
alpha-BHC			13.4	7.762		ug/Kg		58	27 - 108		
beta-BHC			13.3	8.632		ug/Kg		65	50 - 114		
beta-BHC			13.3	8.514		ug/Kg		64	50 - 114		
delta-BHC			13.4	7.629		ug/Kg		57	41 - 101		
delta-BHC			13.4	8.273		ug/Kg		62	41 - 101		
gamma-BHC (Lindane)			13.5	8.198		ug/Kg		61	40 - 110		
gamma-BHC (Lindane)			13.5	7.960		ug/Kg		59	40 - 110		
Heptachlor			13.4	8.622		ug/Kg		65	30 - 101		
Heptachlor			13.4	8.873		ug/Kg		66	30 - 101		
Aldrin			13.4	7.628		ug/Kg		57	21 - 113		
Aldrin			13.4	7.676		ug/Kg		57	21 - 113		
Heptachlor epoxide			13.3	8.145		ug/Kg		61	46 - 106		
Heptachlor epoxide			13.3	8.628		ug/Kg		65	46 - 106		
Endosulfan I			13.3	8.343		ug/Kg		63	45 - 115		
Endosulfan I			13.3	8.714		ug/Kg		65	45 - 115		
Dieldrin			13.4	8.837		ug/Kg		66	48 - 117		
Dieldrin			13.4	9.218		ug/Kg		69	48 - 117		
4,4'-DDE			13.4	7.770	J	ug/Kg		58	40 - 136		
4,4'-DDE			13.4	8.031		ug/Kg		60	40 - 136		
Endrin			13.4	11.43		ug/Kg		85	58 - 148		
Endrin			13.4	11.55		ug/Kg		86	58 - 148		
Endosulfan II			13.3	8.878		ug/Kg		67	54 - 120		
Endosulfan II			13.3	8.643		ug/Kg		65	54 - 120		
4,4'-DDD			13.4	9.304		ug/Kg		69	55 - 133		
4,4'-DDD			13.4	9.332		ug/Kg		70	55 - 133		
Endosulfan sulfate			13.4	10.79		ug/Kg		80	55 - 119		
Endosulfan sulfate			13.4	10.57		ug/Kg		79	55 - 119		
4,4'-DDT			13.5	9.876		ug/Kg		73	43 - 140		
4,4'-DDT			13.5	10.16		ug/Kg		75	43 - 140		
Methoxychlor			13.3	11.32		ug/Kg		85	45 - 156		
Methoxychlor			13.3	11.07		ug/Kg		83	45 - 156		
Endrin ketone			13.4	8.404		ug/Kg		63	56 - 107		
Endrin ketone			13.4	8.804		ug/Kg		66	56 - 107		
Endrin aldehyde			13.4	9.527		ug/Kg		71	23 - 145		
Endrin aldehyde			13.4	9.444		ug/Kg		70	23 - 145		
cis-Chlordane			13.4	8.167		ug/Kg		61	44 - 111		
cis-Chlordane			13.4	8.431		ug/Kg		63	44 - 111		
trans-Chlordane			13.4	8.717		ug/Kg		65	50 - 109		
trans-Chlordane			13.4	8.652		ug/Kg		65	50 - 109		
Alachlor			13.4	9.831		ug/Kg		74	53 - 114		
Alachlor			13.4	9.098		ug/Kg		68	53 - 114		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*55*		*30 - 150*
Tetrachloro-m-xylene	*56*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*61*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*53*		*30 - 150*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LCSD 620-11716/5-A
Matrix: Solid
Analysis Batch: 11809

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11716

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	8.988		ug/Kg		67	27 - 108	18	30
alpha-BHC			13.4	9.147		ug/Kg		68	27 - 108	16	30
beta-BHC			13.3	9.968		ug/Kg		75	50 - 114	14	30
beta-BHC			13.3	10.03		ug/Kg		75	50 - 114	16	30
delta-BHC			13.4	9.051		ug/Kg		67	41 - 101	17	30
delta-BHC			13.4	9.508		ug/Kg		71	41 - 101	14	30
gamma-BHC (Lindane)			13.5	9.649		ug/Kg		72	40 - 110	16	30
gamma-BHC (Lindane)			13.5	9.279		ug/Kg		69	40 - 110	15	30
Heptachlor			13.4	10.35		ug/Kg		77	30 - 101	18	30
Heptachlor			13.4	10.24		ug/Kg		77	30 - 101	14	30
Aldrin			13.4	8.913		ug/Kg		67	21 - 113	16	30
Aldrin			13.4	9.102		ug/Kg		68	21 - 113	17	30
Heptachlor epoxide			13.3	9.472		ug/Kg		71	46 - 106	15	30
Heptachlor epoxide			13.3	10.05		ug/Kg		75	46 - 106	15	30
Endosulfan I			13.3	9.651		ug/Kg		72	45 - 115	15	30
Endosulfan I			13.3	10.01		ug/Kg		75	45 - 115	14	30
Dieldrin			13.4	10.18		ug/Kg		76	48 - 117	14	30
Dieldrin			13.4	10.48		ug/Kg		78	48 - 117	13	30
4,4'-DDE			13.4	8.667		ug/Kg		65	40 - 136	11	30
4,4'-DDE			13.4	8.991		ug/Kg		67	40 - 136	11	30
Endrin			13.4	13.14		ug/Kg		98	58 - 148	14	30
Endrin			13.4	13.61		ug/Kg		102	58 - 148	16	30
Endosulfan II			13.3	9.864		ug/Kg		74	54 - 120	11	30
Endosulfan II			13.3	9.525		ug/Kg		71	54 - 120	10	30
4,4'-DDD			13.4	10.17		ug/Kg		76	55 - 133	9	30
4,4'-DDD			13.4	10.56		ug/Kg		79	55 - 133	12	30
Endosulfan sulfate			13.4	12.26		ug/Kg		91	55 - 119	13	30
Endosulfan sulfate			13.4	11.56		ug/Kg		86	55 - 119	9	30
4,4'-DDT			13.5	11.45		ug/Kg		85	43 - 140	15	30
4,4'-DDT			13.5	10.58		ug/Kg		79	43 - 140	4	30
Methoxychlor			13.3	14.53		ug/Kg		109	45 - 156	25	30
Methoxychlor			13.3	11.75		ug/Kg		88	45 - 156	6	30
Endrin ketone			13.4	9.307		ug/Kg		69	56 - 107	10	30
Endrin ketone			13.4	9.516		ug/Kg		71	56 - 107	8	30
Endrin aldehyde			13.4	9.326		ug/Kg		69	23 - 145	2	30
Endrin aldehyde			13.4	9.526		ug/Kg		71	23 - 145	1	30
cis-Chlordane			13.4	9.408		ug/Kg		70	44 - 111	14	30
cis-Chlordane			13.4	9.645		ug/Kg		72	44 - 111	13	30
trans-Chlordane			13.4	10.00		ug/Kg		75	50 - 109	14	30
trans-Chlordane			13.4	10.06		ug/Kg		75	50 - 109	15	30
Alachlor			13.4	11.67		ug/Kg		87	53 - 114	17	30
Alachlor			13.4	10.64		ug/Kg		80	53 - 114	16	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*64*		*30 - 150*
Tetrachloro-m-xylene	*65*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*63*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*53*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-11716/1-A
Matrix: Solid
Analysis Batch: 11813

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11716

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1
PCB-1221	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1
PCB-1232	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1
PCB-1242	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1
PCB-1248	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1
PCB-1254	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1
PCB-1260	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1
PCB-1262	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1
PCB-1268	ND		20.0		ug/Kg		06/09/22 10:03	06/13/22 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*55*		*30 - 150*	*06/09/22 10:03*	*06/13/22 13:03*	*1*
Tetrachloro-m-xylene	*54*		*30 - 150*	*06/09/22 10:03*	*06/13/22 13:03*	*1*
DCB Decachlorobiphenyl (Surr)	*66*		*30 - 150*	*06/09/22 10:03*	*06/13/22 13:03*	*1*
DCB Decachlorobiphenyl (Surr)	*63*		*30 - 150*	*06/09/22 10:03*	*06/13/22 13:03*	*1*

Lab Sample ID: LCS 620-11716/2-A
Matrix: Solid
Analysis Batch: 11813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	114.3		ug/Kg		69	61 - 112		
PCB-1016			167	118.9		ug/Kg		71	61 - 112		
PCB-1260			167	134.2		ug/Kg		81	63 - 105		
PCB-1260			167	126.9		ug/Kg		76	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*62*		*30 - 150*
Tetrachloro-m-xylene	*61*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*75*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*71*		*30 - 150*

Lab Sample ID: LCSD 620-11716/3-A
Matrix: Solid
Analysis Batch: 11813

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11716

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	124.2		ug/Kg		75	61 - 112	8	30
PCB-1016			167	127.4		ug/Kg		76	61 - 112	7	30
PCB-1260			167	139.2		ug/Kg		84	63 - 105	4	30
PCB-1260			167	131.2		ug/Kg		79	63 - 105	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*30 - 150*
Tetrachloro-m-xylene	*69*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*76*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*73*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-11693/1-A
Matrix: Solid
Analysis Batch: 11703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11693

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		06/08/22 15:19	06/09/22 09:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*71*		*40 - 140*	*06/08/22 15:19*	*06/09/22 09:00*	*1*
o-Terphenyl (Surr)	*50*		*40 - 140*	*06/08/22 15:19*	*06/09/22 09:00*	*1*

Lab Sample ID: LCS 620-11693/2-A
Matrix: Solid
Analysis Batch: 11703

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11693

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	152.3		mg/Kg		46	22 - 93		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*94*		*40 - 140*
o-Terphenyl (Surr)	*103*		*40 - 140*

Lab Sample ID: LCSD 620-11693/3-A
Matrix: Solid
Analysis Batch: 11703

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11693

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	152.4		mg/Kg		46	22 - 93	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*89*		*40 - 140*
o-Terphenyl (Surr)	*78*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-11654/1-A
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11654

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.69		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Arsenic	ND		1.41		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Barium	ND		0.938		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Beryllium	ND		0.469		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Cadmium	ND		0.469		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Chromium	ND		0.938		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Copper	ND	^3-	0.938		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Lead	ND		1.41		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Manganese	ND	^3-	0.938		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Nickel	ND		0.938		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Selenium	ND		1.41		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Silver	ND		1.41		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Thallium	ND	^3-	2.81		mg/Kg		06/08/22 09:06	06/08/22 17:43	1

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

Lab Sample ID: MB 620-11654/1-A
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11654

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		1.41		mg/Kg		06/08/22 09:06	06/08/22 17:43	1
Zinc	ND	^3-	2.81		mg/Kg		06/08/22 09:06	06/08/22 17:43	1

Lab Sample ID: LCDSRM 620-11654/3-A
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11654

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			244	74.20		mg/Kg		30.4	10.0 - 123.0	1	20
Arsenic			109	93.94		mg/Kg		86.2	75.1 - 106.4	1	20
Barium			364	329.3		mg/Kg		90.5	76.9 - 110.2	1	20
Beryllium			57.0	53.92		mg/Kg		94.6	76.5 - 108.1	3	20
Cadmium			48.7	44.16		mg/Kg		90.7	74.7 - 106.0	3	20
Chromium			173	157.1		mg/Kg		90.8	76.3 - 109.8	3	20
Copper			179	174.2	^3-	mg/Kg		97.3	79.3 - 110.1	2	20
Lead			101	97.62		mg/Kg		96.7	81.3 - 114.9	2	20
Manganese			370	349.7	^3-	mg/Kg		94.5	78.4 - 113.0	1	20
Nickel			52.2	46.56		mg/Kg		89.2	74.7 - 106.7	3	20
Selenium			104	83.36		mg/Kg		80.2	71.4 - 109.6	1	20
Silver			29.9	27.00		mg/Kg		90.3	74.6 - 112.7	0	20
Thallium			101	94.76	^3-	mg/Kg		93.8	72.6 - 107.9	2	20
Vanadium			194	177.4		mg/Kg		91.5	73.2 - 112.4	1	20
Zinc			431	394.5	^3-	mg/Kg		91.5	74.9 - 111.4	1	20

Lab Sample ID: LCSSRM 620-11654/2-A
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11654

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			244	73.79		mg/Kg		30.2	10.0 - 123.0		
Arsenic			109	95.03		mg/Kg		87.2	75.1 - 106.4		
Barium			364	325.2		mg/Kg		89.4	76.9 - 110.2		
Beryllium			57.0	52.23		mg/Kg		91.6	76.5 - 108.1		
Cadmium			48.7	42.78		mg/Kg		87.9	74.7 - 106.0		

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

Lab Sample ID: LCSSRM 620-11654/2-A
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11654

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	173	153.1		mg/Kg		88.5	76.3 - 109.8
Copper	179	170.5	^3-	mg/Kg		95.3	79.3 - 110.1
Lead	101	99.17		mg/Kg		98.2	81.3 - 114.9
Manganese	370	351.6	^3-	mg/Kg		95.0	78.4 - 113.0
Nickel	52.2	45.31		mg/Kg		86.8	74.7 - 106.7
Selenium	104	82.49		mg/Kg		79.3	71.4 - 109.6
Silver	29.9	27.11		mg/Kg		90.7	74.6 - 112.7
Thallium	101	93.23	^3-	mg/Kg		92.3	72.6 - 107.9
Vanadium	194	175.3		mg/Kg		90.3	73.2 - 112.4
Zinc	431	390.3	^3-	mg/Kg		90.6	74.9 - 111.4

Lab Sample ID: 620-4927-1 MS
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: B110/B108 (0-4)
Prep Type: Total/NA
Prep Batch: 11654

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND	F1	135	90.83	F1	mg/Kg	☼	67	75 - 125
Arsenic	1.56	F1	135	103.6		mg/Kg	☼	76	75 - 125
Barium	17.9		135	129.4		mg/Kg	☼	83	75 - 125
Beryllium	ND		135	110.0		mg/Kg	☼	81	75 - 125
Cadmium	ND	F1	135	106.0		mg/Kg	☼	79	75 - 125
Chromium	11.3	F1	135	118.0		mg/Kg	☼	79	75 - 125
Copper	31.8	^3-	135	153.8	^3-	mg/Kg	☼	91	75 - 125
Lead	28.2	F1	135	135.9		mg/Kg	☼	80	75 - 125
Manganese	102	^3-	135	237.6	^3-	mg/Kg	☼	101	75 - 125
Nickel	5.11	F1	135	107.1		mg/Kg	☼	76	75 - 125
Selenium	ND	F1	135	97.90	F1	mg/Kg	☼	73	75 - 125
Silver	ND	F1	135	106.7		mg/Kg	☼	79	75 - 125
Thallium	ND	^3-	135	122.0	^3-	mg/Kg	☼	90	75 - 125
Vanadium	7.38		135	117.4		mg/Kg	☼	82	75 - 125
Zinc	35.5	F1 ^3- ^2	135	140.9	^3-	mg/Kg	☼	78	75 - 125

Lab Sample ID: 620-4927-1 MSD
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: B110/B108 (0-4)
Prep Type: Total/NA
Prep Batch: 11654

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND	F1	139	87.85	F1	mg/Kg	☼	63	75 - 125	3	20
Arsenic	1.56	F1	139	101.7	F1	mg/Kg	☼	72	75 - 125	2	20
Barium	17.9		139	126.7		mg/Kg	☼	79	75 - 125	2	20
Beryllium	ND		139	106.5		mg/Kg	☼	77	75 - 125	3	20
Cadmium	ND	F1	139	102.8	F1	mg/Kg	☼	74	75 - 125	3	20

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

Lab Sample ID: 620-4927-1 MSD
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: B110/B108 (0-4)
Prep Type: Total/NA
Prep Batch: 11654

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	11.3	F1	139	112.4	F1	mg/Kg	☼	73	75 - 125	5	20
Copper	31.8	^3-	139	141.0	^3-	mg/Kg	☼	79	75 - 125	9	20
Lead	28.2	F1	139	125.3	F1	mg/Kg	☼	70	75 - 125	8	20
Manganese	102	^3-	139	225.1	^3-	mg/Kg	☼	89	75 - 125	5	20
Nickel	5.11	F1	139	104.5	F1	mg/Kg	☼	72	75 - 125	2	20
Selenium	ND	F1	139	95.78	F1	mg/Kg	☼	69	75 - 125	2	20
Silver	ND	F1	139	102.4	F1	mg/Kg	☼	74	75 - 125	4	20
Thallium	ND	^3-	139	120.8	^3-	mg/Kg	☼	87	75 - 125	1	20
Vanadium	7.38		139	115.1		mg/Kg	☼	78	75 - 125	2	20
Zinc	35.5	F1 ^3- ^2	139	136.2	^3- F1	mg/Kg	☼	73	75 - 125	3	20

Lab Sample ID: 620-4927-1 DU
Matrix: Solid
Analysis Batch: 11674

Client Sample ID: B110/B108 (0-4)
Prep Type: Total/NA
Prep Batch: 11654

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND	F1	ND		mg/Kg	☼	NC	20
Arsenic	1.56	F1	1.769		mg/Kg	☼	12	20
Barium	17.9		19.13		mg/Kg	☼	7	20
Beryllium	ND		ND		mg/Kg	☼	NC	20
Cadmium	ND	F1	ND		mg/Kg	☼	NC	20
Chromium	11.3	F1	11.23		mg/Kg	☼	0.5	20
Copper	31.8	^3-	30.44	^3-	mg/Kg	☼	4	20
Lead	28.2	F1	29.85		mg/Kg	☼	6	20
Manganese	102	^3-	131.3	^3- F3	mg/Kg	☼	25	20
Nickel	5.11	F1	6.394	F3	mg/Kg	☼	22	20
Selenium	ND	F1	ND		mg/Kg	☼	NC	20
Silver	ND	F1	ND		mg/Kg	☼	NC	20
Thallium	ND	^3-	ND	^3-	mg/Kg	☼	NC	20
Vanadium	7.38		8.492		mg/Kg	☼	14	20
Zinc	35.5	F1 ^3- ^2	34.13	^3-	mg/Kg	☼	4	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-11664/1-A
Matrix: Solid
Analysis Batch: 11747

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11664

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0489		mg/Kg		06/08/22 09:15	06/09/22 15:49	1

Lab Sample ID: LCSSRM 620-11664/2-A ^20
Matrix: Solid
Analysis Batch: 11747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11664

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			11.0	7.164		mg/Kg		65.1	64.3 - 118.2		

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 620-4927-1 MS
Matrix: Solid
Analysis Batch: 11747

Client Sample ID: B110/B108 (0-4)
Prep Type: Total/NA
Prep Batch: 11664

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	F2 F1	0.201	0.1015	F1	mg/Kg	☼	51	75 - 125

Lab Sample ID: 620-4927-1 MSD
Matrix: Solid
Analysis Batch: 11747

Client Sample ID: B110/B108 (0-4)
Prep Type: Total/NA
Prep Batch: 11664

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F2 F1	0.213	0.1839	F2 ^-	mg/Kg	☼	86	75 - 125	58	20

Lab Sample ID: 620-4927-1 DU
Matrix: Solid
Analysis Batch: 11747

Client Sample ID: B110/B108 (0-4)
Prep Type: Total/NA
Prep Batch: 11664

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND	F2 F1	ND		mg/Kg	☼	NC	20

GC/MS VOA

Pre Prep Batch: 11647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-2	B108 (1)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 11662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-11662/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-11662/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-11662/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 11696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-2	B108 (1)	Total/NA	Solid	5035	11647

Analysis Batch: 11697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-2	B108 (1)	Total/NA	Solid	8260C	11696
MB 620-11662/3-A	Method Blank	Total/NA	Solid	8260C	11662
LCS 620-11662/1-A	Lab Control Sample	Total/NA	Solid	8260C	11662
LCSD 620-11662/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	11662

GC/MS Semi VOA

Analysis Batch: 11796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B110/B108 (0-4)	Total/NA	Solid	8270D	11819
620-4927-3	B107 (0-4)	Total/NA	Solid	8270D	11819
MB 620-11819/1-A	Method Blank	Total/NA	Solid	8270D	11819
LCS 620-11819/2-A	Lab Control Sample	Total/NA	Solid	8270D	11819
LCSD 620-11819/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	11819

Prep Batch: 11819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B110/B108 (0-4)	Total/NA	Solid	3546	
620-4927-3	B107 (0-4)	Total/NA	Solid	3546	
MB 620-11819/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11819/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11819/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

GC Semi VOA

Prep Batch: 11693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B110/B108 (0-4)	Total/NA	Solid	3546	
620-4927-3	B107 (0-4)	Total/NA	Solid	3546	
MB 620-11693/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11693/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11693/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 11703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B100/B108 (0-4)	Total/NA	Solid	8100	11693
620-4927-3	B107 (0-4)	Total/NA	Solid	8100	11693

GC Semi VOA (Continued)

Analysis Batch: 11703 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-11693/1-A	Method Blank	Total/NA	Solid	8100	11693
LCS 620-11693/2-A	Lab Control Sample	Total/NA	Solid	8100	11693
LCSD 620-11693/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	11693

Prep Batch: 11716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B110/B108 (0-4)	Total/NA	Solid	3546	
620-4927-3	B107 (0-4)	Total/NA	Solid	3546	
MB 620-11716/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11716/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-11716/4-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11716/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
LCSD 620-11716/5-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 11809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B110/B108 (0-4)	Total/NA	Solid	8081B	11716
620-4927-3	B107 (0-4)	Total/NA	Solid	8081B	11716
MB 620-11716/1-A	Method Blank	Total/NA	Solid	8081B	11716
LCS 620-11716/4-A	Lab Control Sample	Total/NA	Solid	8081B	11716
LCSD 620-11716/5-A	Lab Control Sample Dup	Total/NA	Solid	8081B	11716

Analysis Batch: 11813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B110/B108 (0-4)	Total/NA	Solid	8082A	11716
620-4927-3	B107 (0-4)	Total/NA	Solid	8082A	11716
MB 620-11716/1-A	Method Blank	Total/NA	Solid	8082A	11716
LCS 620-11716/2-A	Lab Control Sample	Total/NA	Solid	8082A	11716
LCSD 620-11716/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	11716

Metals

Prep Batch: 11654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B110/B108 (0-4)	Total/NA	Solid	3050B	
620-4927-3	B107 (0-4)	Total/NA	Solid	3050B	
MB 620-11654/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 620-11654/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 620-11654/2-A	Lab Control Sample	Total/NA	Solid	3050B	
620-4927-1 MS	B110/B108 (0-4)	Total/NA	Solid	3050B	
620-4927-1 MSD	B110/B108 (0-4)	Total/NA	Solid	3050B	
620-4927-1 DU	B110/B108 (0-4)	Total/NA	Solid	3050B	

Prep Batch: 11664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B110/B108 (0-4)	Total/NA	Solid	7471B	
620-4927-3	B107 (0-4)	Total/NA	Solid	7471B	
MB 620-11664/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-11664/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	
620-4927-1 MS	B110/B108 (0-4)	Total/NA	Solid	7471B	
620-4927-1 MSD	B110/B108 (0-4)	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 11664 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1 DU	B100/B108 (0-4)	Total/NA	Solid	7471B	

Analysis Batch: 11674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B100/B108 (0-4)	Total/NA	Solid	6010D	11654
620-4927-3	B107 (0-4)	Total/NA	Solid	6010D	11654
MB 620-11654/1-A	Method Blank	Total/NA	Solid	6010D	11654
LCDSRM 620-11654/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	11654
LCSSRM 620-11654/2-A	Lab Control Sample	Total/NA	Solid	6010D	11654
620-4927-1 MS	B100/B108 (0-4)	Total/NA	Solid	6010D	11654
620-4927-1 MSD	B100/B108 (0-4)	Total/NA	Solid	6010D	11654
620-4927-1 DU	B100/B108 (0-4)	Total/NA	Solid	6010D	11654

Analysis Batch: 11747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B100/B108 (0-4)	Total/NA	Solid	7471B	11664
620-4927-3	B107 (0-4)	Total/NA	Solid	7471B	11664
MB 620-11664/1-A	Method Blank	Total/NA	Solid	7471B	11664
LCSSRM 620-11664/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	11664
620-4927-1 MS	B100/B108 (0-4)	Total/NA	Solid	7471B	11664
620-4927-1 MSD	B100/B108 (0-4)	Total/NA	Solid	7471B	11664
620-4927-1 DU	B100/B108 (0-4)	Total/NA	Solid	7471B	11664

General Chemistry

Analysis Batch: 11768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4927-1	B100/B108 (0-4)	Total/NA	Solid	Moisture	
620-4927-2	B108 (1)	Total/NA	Solid	Moisture	
620-4927-3	B107 (0-4)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B110/B108 (0-4)
Date Collected: 06/06/22 15:45
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11768	06/10/22 10:55	PN	ENE

Client Sample ID: B110/B108 (0-4)
Date Collected: 06/06/22 15:45
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-1
Matrix: Solid
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			11819	06/13/22 11:06	BJJ	ENE
Total/NA	Analysis	8270D		1	11796	06/13/22 19:20	BJJ	ENE
Total/NA	Prep	3546			11716	06/09/22 10:03	PRB	ENE
Total/NA	Analysis	8081B		1	11809	06/13/22 14:48	JS	ENE
Total/NA	Prep	3546			11716	06/09/22 10:03	PRB	ENE
Total/NA	Analysis	8082A		1	11813	06/13/22 15:18	JS	ENE
Total/NA	Prep	3546			11693	06/08/22 15:19	PRB	ENE
Total/NA	Analysis	8100		1	11703	06/09/22 16:11	BJJ	ENE
Total/NA	Prep	3050B			11654	06/08/22 09:06	CAJ	ENE
Total/NA	Analysis	6010D		1	11674	06/08/22 18:05	CEV	ENE
Total/NA	Prep	7471B			11664	06/08/22 09:15	CAJ	ENE
Total/NA	Analysis	7471B		1	11747	06/09/22 15:53	CAJ	ENE

Client Sample ID: B108 (1)
Date Collected: 06/06/22 09:30
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11768	06/10/22 10:55	PN	ENE

Client Sample ID: B108 (1)
Date Collected: 06/06/22 09:30
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-2
Matrix: Solid
Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11647	06/07/22 18:32	KFS	ENE
Total/NA	Prep	5035			11696	06/08/22 15:45	CLR	ENE
Total/NA	Analysis	8260C		1	11697	06/09/22 03:32	CLR	ENE

Client Sample ID: B107 (0-4)
Date Collected: 06/06/22 16:15
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11768	06/10/22 10:55	PN	ENE

Lab Chronicle

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Client Sample ID: B107 (0-4)

Date Collected: 06/06/22 16:15
Date Received: 06/07/22 16:59

Lab Sample ID: 620-4927-3

Matrix: Solid
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			11819	06/13/22 11:06	BJJ	ENE
Total/NA	Analysis	8270D		1	11796	06/13/22 21:43	BJJ	ENE
Total/NA	Prep	3546			11716	06/09/22 10:03	PRB	ENE
Total/NA	Analysis	8081B		1	11809	06/13/22 14:32	JS	ENE
Total/NA	Prep	3546			11716	06/09/22 10:03	PRB	ENE
Total/NA	Analysis	8082A		1	11813	06/13/22 15:01	JS	ENE
Total/NA	Prep	3546			11693	06/08/22 15:19	PRB	ENE
Total/NA	Analysis	8100		1	11703	06/09/22 15:45	BJJ	ENE
Total/NA	Prep	3050B			11654	06/08/22 09:06	CAJ	ENE
Total/NA	Analysis	6010D		1	11674	06/08/22 18:34	CEV	ENE
Total/NA	Prep	7471B			11664	06/08/22 09:15	CAJ	ENE
Total/NA	Analysis	7471B		1	11747	06/09/22 16:05	CAJ	ENE

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4927-1
Project/Site: I295/Rt 37 - Cranston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
6010D	3050B	Solid	Antimony
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Beryllium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Copper
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Manganese
6010D	3050B	Solid	Nickel
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
6010D	3050B	Solid	Thallium
6010D	3050B	Solid	Vanadium
6010D	3050B	Solid	Zinc
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260

Laboratory: Eurofins New England (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
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-4927-1
Project/Site: I295/Rt 37 - Cranston, RI

Laboratory: Eurofins New England (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
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Pyrene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Job ID: 620-4927-1
Project/Site: I295/Rt 37 - Cranston, RI

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ENE
8081B	Organochlorine Pesticides (GC)	SW846	ENE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ENE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	ENE
6010D	Metals (ICP)	SW846	ENE
7471B	Mercury (CVAA)	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
3050B	Preparation, Metals	SW846	ENE
3546	Microwave Extraction	SW846	ENE
5035	Closed System Purge and Trap	SW846	ENE
7471B	Preparation, Mercury	SW846	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-4927-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4927-1	B100/B108 (0-4)	Solid	06/06/22 15:45	06/07/22 16:59
620-4927-2	B108 (1)	Solid	06/06/22 09:30	06/07/22 16:59
620-4927-3	B107 (0-4)	Solid	06/06/22 16:15	06/07/22 16:59

4927

620-4927 Chain of Custody

ment Testing
New England

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- [x] Standard TAT - ~~7 to 10~~ 5 business days
- [ ] Rush TAT - Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell
AECOM
10 orms St Suite 400
Providence RI. 02904
Telephone #: 401 054 2808
Project Mgr: Richard Prior

Invoice To: Richard Prior

PO No. _____ Quote #: _____

Project No: 60680132
Site Name: 295/37 Interchange
Location: Cranston State: RI
Sampler(s): _____

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	TPH	PAHs	PP Metals	MnO2	PCB's	Pesticides	Check if chlorinated
01	B100/B108 (0-4)	6/6/22	3 45	C							X	X	X	X	X	X	
02	B108 (1)	6/6/22	9 30	G		3	1			X							
03	B107 (0-4)	6/6/22	4.15								X	X	X	X	X	X	

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? Yes No
CT DPH RCP Report? Yes No
Standard No QC DQA*
ASP A* ASP B*
NJ Reduced* NJ Full*
Tier II* Tier IV*
Other _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	6/6/22	4 20
[signature]	[signature]	6/7/22	16:59

Temp °C
Observed 1.2
Correction Factor +0.4
Corrected 1.6
IR ID # 6

- [ ] EDD format: _____
- [ ] E-mail to _____

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [ ] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

6/14/2022

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-4927-1

Login Number: 4927
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-5061-1
Client Project/Site: I295/Rt 37 - Cranston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
6/17/2022 2:14:00 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-5061-1
Project/Site: I295/Rt 37 - Cranston, RI

Qualifiers

GC/MS VOA

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

Metals

Qualifier	Qualifier Description
^3-	Reporting Limit Check Standard is outside acceptance limits, low biased.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

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)
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 ID: 620-5061-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-5061-1

Comments
No additional comments.

Receipt
The samples were received on 6/10/2022 3:22 PM. 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 was 4.2º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. COC incorrectly states the number of containers and provided container type. There is one soil jar each for the first three samples, and no voa vials. For the fourth sample there are 3 soil jars.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 620-11795 exhibited % difference of > 20% for the following analytes: 1,2-Dibromo-3-Chloropropane and 2-Methyl-2-propanol; however, the results of the LCSD were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 620-11819 and analytical batch 620-11796 recovered outside control limits for the following analytes: Naphthalene. The LCSD recovered within acceptance limits; therefore, demonstrates the extraction was within control. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

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

GC Semi VOA
Method 8100: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 620-11852 and analytical batch 620-11895 recovered outside control limits for the following analytes: TEPH (C9-C36).

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

Metals
Methods 7471A, 7471B: The matrix spike duplicate (MSD) recoveries and precision for preparation batch 620-11826 and analytical batch 620-11875 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

General Chemistry
Method Moisture: The sample duplicate (DUP) precision for analytical batch 620-11857 was outside control limits. Sample non-homogeneity is suspected.

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

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Client Sample ID: RW3 (1) — Lab Sample ID: 620-5061-1

No Detections.

Client Sample ID: RW4 (2.5) — Lab Sample ID: 620-5061-2

No Detections.

Client Sample ID: B102 (2) — Lab Sample ID: 620-5061-3

No Detections.

Client Sample ID: B102/RW3/RW4 (0-4) — Lab Sample ID: 620-5061-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	22.8	*1	13.8		mg/Kg	1	☼	8100	Total/NA
Barium	17.6		0.961		mg/Kg	1	☼	6010D	Total/NA
Chromium	7.40		0.961		mg/Kg	1	☼	6010D	Total/NA
Copper	7.67		0.961		mg/Kg	1	☼	6010D	Total/NA
Lead	5.53		1.44		mg/Kg	1	☼	6010D	Total/NA
Manganese	98.3		0.961		mg/Kg	1	☼	6010D	Total/NA
Nickel	4.54	^3-	0.961		mg/Kg	1	☼	6010D	Total/NA
Vanadium	7.18		1.44		mg/Kg	1	☼	6010D	Total/NA
Zinc	17.5		2.88		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Client Sample ID: RW3 (1)
Date Collected: 06/10/22 08:30
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-1
Matrix: Solid
Percent Solids: 95.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Acetone	ND		40.9		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Acrylonitrile	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Benzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Bromobenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Bromochloromethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Bromodichloromethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Bromoform	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Bromomethane	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
2-Butanone (MEK)	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
n-Butylbenzene	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
sec-Butylbenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
tert-Butylbenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Carbon disulfide	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Carbon tetrachloride	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Chlorobenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Chloroethane	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Chloroform	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Chloromethane	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
2-Chlorotoluene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
4-Chlorotoluene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2-Dibromo-3-Chloropropane	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Dibromochloromethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2-Dibromoethane (EDB)	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Dibromomethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2-Dichlorobenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,3-Dichlorobenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,4-Dichlorobenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Dichlorodifluoromethane (Freon 12)	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,1-Dichloroethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2-Dichloroethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,1-Dichloroethene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
cis-1,2-Dichloroethene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
trans-1,2-Dichloroethene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2-Dichloropropane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,3-Dichloropropane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
2,2-Dichloropropane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,1-Dichloropropene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
cis-1,3-Dichloropropene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
trans-1,3-Dichloropropene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Ethylbenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Hexachlorobutadiene	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
2-Hexanone (MBK)	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Isopropylbenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
4-Isopropyltoluene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Methyl tert-butyl ether	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
4-Methyl-2-pentanone (MIBK)	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Methylene Chloride	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Naphthalene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Client Sample ID: RW3 (1)
Date Collected: 06/10/22 08:30
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-1
Matrix: Solid
Percent Solids: 95.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Styrene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,1,1,2-Tetrachloroethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,1,2,2-Tetrachloroethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Tetrachloroethene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Toluene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2,3-Trichlorobenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2,4-Trichlorobenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,3,5-Trichlorobenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,1,1-Trichloroethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,1,2-Trichloroethane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Trichloroethene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Trichlorofluoromethane (Freon 11)	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2,3-Trichloropropane	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,2,4-Trimethylbenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,3,5-Trimethylbenzene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Vinyl chloride	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
m,p-Xylene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
o-Xylene	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Tetrahydrofuran	ND		8.18		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Ethyl ether	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Tert-amyl methyl ether	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Ethyl tert-butyl ether	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
di-Isopropyl ether	ND		4.09		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
tert-Butanol	ND		81.8		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
1,4-Dioxane	ND		81.8		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
trans-1,4-Dichloro-2-butene	ND		20.5		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1
Ethanol	ND		818		ug/Kg	☼	06/13/22 08:44	06/13/22 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*06/13/22 08:44*	*06/13/22 17:37*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*06/13/22 08:44*	*06/13/22 17:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*06/13/22 08:44*	*06/13/22 17:37*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*06/13/22 08:44*	*06/13/22 17:37*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.5**		0.1		%			06/14/22 11:01	1
Percent Solids	**95.5**		0.1		%			06/14/22 11:01	1

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Client Sample ID: RW4 (2.5)
Date Collected: 06/10/22 10:15
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-2
Matrix: Solid
Percent Solids: 99.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Acetone	ND		33.8		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Acrylonitrile	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Benzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Bromobenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Bromochloromethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Bromodichloromethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Bromoform	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Bromomethane	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
2-Butanone (MEK)	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
n-Butylbenzene	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
sec-Butylbenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
tert-Butylbenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Carbon disulfide	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Carbon tetrachloride	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Chlorobenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Chloroethane	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Chloroform	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Chloromethane	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
2-Chlorotoluene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
4-Chlorotoluene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2-Dibromo-3-Chloropropane	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Dibromochloromethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2-Dibromoethane (EDB)	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Dibromomethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2-Dichlorobenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,3-Dichlorobenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,4-Dichlorobenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Dichlorodifluoromethane (Freon 12)	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,1-Dichloroethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2-Dichloroethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,1-Dichloroethene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
cis-1,2-Dichloroethene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
trans-1,2-Dichloroethene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2-Dichloropropane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,3-Dichloropropane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
2,2-Dichloropropane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,1-Dichloropropene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
cis-1,3-Dichloropropene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
trans-1,3-Dichloropropene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Ethylbenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Hexachlorobutadiene	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
2-Hexanone (MBK)	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Isopropylbenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
4-Isopropyltoluene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Methyl tert-butyl ether	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
4-Methyl-2-pentanone (MIBK)	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Methylene Chloride	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Naphthalene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1

Client Sample ID: RW4 (2.5)
Date Collected: 06/10/22 10:15
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-2
Matrix: Solid
Percent Solids: 99.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Styrene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,1,1,2-Tetrachloroethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,1,2,2-Tetrachloroethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Tetrachloroethene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Toluene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2,3-Trichlorobenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2,4-Trichlorobenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,3,5-Trichlorobenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,1,1-Trichloroethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,1,2-Trichloroethane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Trichloroethene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Trichlorofluoromethane (Freon 11)	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2,3-Trichloropropane	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,2,4-Trimethylbenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,3,5-Trimethylbenzene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Vinyl chloride	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
m,p-Xylene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
o-Xylene	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Tetrahydrofuran	ND		6.76		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Ethyl ether	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Tert-amyl methyl ether	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Ethyl tert-butyl ether	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
di-Isopropyl ether	ND		3.38		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
tert-Butanol	ND		67.6		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
1,4-Dioxane	ND		67.6		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
trans-1,4-Dichloro-2-butene	ND		16.9		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1
Ethanol	ND		676		ug/Kg	☼	06/13/22 08:44	06/13/22 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/13/22 08:44*	*06/13/22 18:03*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/13/22 08:44*	*06/13/22 18:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*06/13/22 08:44*	*06/13/22 18:03*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*06/13/22 08:44*	*06/13/22 18:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**0.3**		0.1		%			06/14/22 11:35	1
Percent Solids	**99.7**		0.1		%			06/14/22 11:35	1

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Client Sample ID: B102 (2)
Date Collected: 06/10/22 11:20
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-3
Matrix: Solid
Percent Solids: 95.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Acetone	ND		39.3		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Acrylonitrile	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Benzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Bromobenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Bromochloromethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Bromodichloromethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Bromoform	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Bromomethane	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
2-Butanone (MEK)	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
n-Butylbenzene	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
sec-Butylbenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
tert-Butylbenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Carbon disulfide	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Carbon tetrachloride	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Chlorobenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Chloroethane	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Chloroform	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Chloromethane	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
2-Chlorotoluene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
4-Chlorotoluene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2-Dibromo-3-Chloropropane	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Dibromochloromethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2-Dibromoethane (EDB)	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Dibromomethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2-Dichlorobenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,3-Dichlorobenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,4-Dichlorobenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Dichlorodifluoromethane (Freon 12)	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,1-Dichloroethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2-Dichloroethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,1-Dichloroethene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
cis-1,2-Dichloroethene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
trans-1,2-Dichloroethene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2-Dichloropropane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,3-Dichloropropane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
2,2-Dichloropropane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,1-Dichloropropene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
cis-1,3-Dichloropropene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
trans-1,3-Dichloropropene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Ethylbenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Hexachlorobutadiene	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
2-Hexanone (MBK)	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Isopropylbenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
4-Isopropyltoluene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Methyl tert-butyl ether	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
4-Methyl-2-pentanone (MIBK)	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Methylene Chloride	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Naphthalene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1

Client Sample ID: B102 (2)
Date Collected: 06/10/22 11:20
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-3
Matrix: Solid
Percent Solids: 95.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Styrene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,1,1,2-Tetrachloroethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,1,2,2-Tetrachloroethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Tetrachloroethene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Toluene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2,3-Trichlorobenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2,4-Trichlorobenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,3,5-Trichlorobenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,1,1-Trichloroethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,1,2-Trichloroethane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Trichloroethene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Trichlorofluoromethane (Freon 11)	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2,3-Trichloropropane	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,2,4-Trimethylbenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,3,5-Trimethylbenzene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Vinyl chloride	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
m,p-Xylene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
o-Xylene	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Tetrahydrofuran	ND		7.85		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Ethyl ether	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Tert-amyl methyl ether	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Ethyl tert-butyl ether	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
di-Isopropyl ether	ND		3.93		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
tert-Butanol	ND		78.5		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
1,4-Dioxane	ND		78.5		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
trans-1,4-Dichloro-2-butene	ND		19.6		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1
Ethanol	ND		785		ug/Kg	☼	06/13/22 08:44	06/13/22 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/13/22 08:44*	*06/13/22 18:29*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*06/13/22 08:44*	*06/13/22 18:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*06/13/22 08:44*	*06/13/22 18:29*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*06/13/22 08:44*	*06/13/22 18:29*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.1**		0.1		%			06/14/22 11:37	1
Percent Solids	**95.9**		0.1		%			06/14/22 11:37	1

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Client Sample ID: B102/RW3/RW4 (0-4)

Date Collected: 06/10/22 12:25
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-4

Matrix: Solid
Percent Solids: 95.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
2-Methylnaphthalene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Acenaphthene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Acenaphthylene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Anthracene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Benzo[a]anthracene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Benzo[a]pyrene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Benzo[b]fluoranthene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Benzo[g,h,i]perylene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Benzo[k]fluoranthene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Chrysene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Dibenz(a,h)anthracene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Fluoranthene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Fluorene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Indeno[1,2,3-cd]pyrene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Naphthalene	ND	*-	68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Phenanthrene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1
Pyrene	ND		68.7		ug/Kg	☼	06/13/22 11:06	06/13/22 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*33*		*30 - 130*	*06/13/22 11:06*	*06/13/22 20:46*	*1*
2-Fluorobiphenyl (Surr)	*51*		*30 - 130*	*06/13/22 11:06*	*06/13/22 20:46*	*1*
Terphenyl-d14 (Surr)	*68*		*30 - 130*	*06/13/22 11:06*	*06/13/22 20:46*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
beta-BHC	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
delta-BHC	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
gamma-BHC (Lindane)	ND		2.06		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Heptachlor	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Aldrin	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Heptachlor epoxide	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Endosulfan I	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Dieldrin	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
4,4'-DDE	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Endrin	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Endosulfan II	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
4,4'-DDD	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Endosulfan sulfate	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
4,4'-DDT	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Methoxychlor	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Endrin ketone	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Endrin aldehyde	ND		8.26		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
cis-Chlordane	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
trans-Chlordane	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Toxaphene	ND		103		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1
Alachlor	ND		5.16		ug/Kg	☼	06/15/22 16:47	06/16/22 20:04	1

Client Sample ID: B102/RW3/RW4 (0-4)

Date Collected: 06/10/22 12:25
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-4

Matrix: Solid
Percent Solids: 95.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*06/15/22 16:47*	*06/16/22 20:04*	*1*
Tetrachloro-m-xylene	*80*		*30 - 150*	*06/15/22 16:47*	*06/16/22 20:04*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*30 - 150*	*06/15/22 16:47*	*06/16/22 20:04*	*1*
DCB Decachlorobiphenyl (Surr)	*63*		*30 - 150*	*06/15/22 16:47*	*06/16/22 20:04*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1
PCB-1221	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1
PCB-1232	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1
PCB-1242	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1
PCB-1248	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1
PCB-1254	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1
PCB-1260	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1
PCB-1262	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1
PCB-1268	ND		20.6	ug/Kg	☼	06/15/22 16:47	06/16/22 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*95*		*30 - 150*	*06/15/22 16:47*	*06/16/22 20:06*	*1*
Tetrachloro-m-xylene	*90*		*30 - 150*	*06/15/22 16:47*	*06/16/22 20:06*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*30 - 150*	*06/15/22 16:47*	*06/16/22 20:06*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*30 - 150*	*06/15/22 16:47*	*06/16/22 20:06*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**22.8**	***1**	13.8	mg/Kg	☼	06/14/22 10:05	06/15/22 11:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*82*		*40 - 140*	*06/14/22 10:05*	*06/15/22 11:04*	*1*
o-Terphenyl (Surr)	*86*		*40 - 140*	*06/14/22 10:05*	*06/15/22 11:04*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	^3+	4.81	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Arsenic	ND		1.44	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Barium	**17.6**		0.961	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Beryllium	ND		0.481	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Cadmium	ND		0.481	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Chromium	**7.40**		0.961	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Copper	**7.67**		0.961	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Lead	**5.53**		1.44	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Manganese	**98.3**		0.961	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Nickel	**4.54**	**^3-**	0.961	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Selenium	ND		1.44	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Silver	ND		1.44	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Thallium	ND		2.88	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Vanadium	**7.18**		1.44	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1
Zinc	**17.5**		2.88	mg/Kg	☼	06/13/22 13:49	06/15/22 13:56	1

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Client Sample ID: B102/RW3/RW4 (0-4)

Date Collected: 06/10/22 12:25
Date Received: 06/10/22 15:22

Lab Sample ID: 620-5061-4

Matrix: Solid
Percent Solids: 95.5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0460		mg/Kg	☼	06/13/22 14:00	06/14/22 14:05	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.5		0.1		%			06/14/22 11:37	1
Percent Solids	95.5		0.1		%			06/14/22 11:37	1

Surrogate Summary

Client: AECOM
Job ID: 620-5061-1
Project/Site: I295/Rt 37 - Cranston, RI

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-5061-1	RW3 (1)	97	97	113	101
620-5061-2	RW4 (2.5)	99	98	114	100
620-5061-3	B102 (2)	99	97	114	101
LCS 620-11794/1-A	Lab Control Sample	102	99	110	100
LCSD 620-11794/2-A	Lab Control Sample Dup	102	99	110	99
MB 620-11794/3-A	Method Blank	100	97	109	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(30-130)	(30-130)
620-5061-4	B102/RW3/RW4 (0-4)	33	51	68
LCS 620-11819/2-A	Lab Control Sample	36	43	85
LCSD 620-11819/3-A	Lab Control Sample Dup	41	53	81
MB 620-11819/1-A	Method Blank	34	38	75

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-5061-4	B102/RW3/RW4 (0-4)	84	80	77	63
LCS 620-11954/4-A	Lab Control Sample	69	66	63	53
LCSD 620-11954/5-A	Lab Control Sample Dup	78	72	70	57
MB 620-11954/1-A	Method Blank	76	73	66	57

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-5061-4	B102/RW3/RW4 (0-4)	95	90	82	90
LCS 620-11954/2-A	Lab Control Sample	79	78	83	93

Surrogate Summary

Client: AECOM
Job ID: 620-5061-1
Project/Site: I295/Rt 37 - Cranston, RI

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
LCSD 620-11954/3-A	Lab Control Sample Dup	81	81	81	90
MB 620-11954/1-A	Method Blank	83	79	78	90

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	OTPH
Lab Sample ID	Client Sample ID	(40-140)	(40-140)
620-5061-4	B102/RW3/RW4 (0-4)	82	86
LCS 620-11852/2-A	Lab Control Sample	98	86
LCSD 620-11852/3-A	Lab Control Sample Dup	134	113
MB 620-11852/1-A	Method Blank	80	67

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)

OTPH = o-Terphenyl (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-11794/3-A
Matrix: Solid
Analysis Batch: 11795

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11794

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Acetone	ND		50.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Acrylonitrile	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Benzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Bromobenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Bromochloromethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Bromodichloromethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Bromoform	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Bromomethane	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
2-Butanone (MEK)	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
n-Butylbenzene	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
sec-Butylbenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
tert-Butylbenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Carbon disulfide	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Carbon tetrachloride	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Chlorobenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Chloroethane	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Chloroform	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Chloromethane	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
2-Chlorotoluene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
4-Chlorotoluene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Dibromochloromethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Dibromomethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,1-Dichloroethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2-Dichloroethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,1-Dichloroethene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2-Dichloropropane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,3-Dichloropropane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
2,2-Dichloropropane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,1-Dichloropropene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Ethylbenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Hexachlorobutadiene	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Isopropylbenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
4-Isopropyltoluene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Methylene Chloride	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11794/3-A
Matrix: Solid
Analysis Batch: 11795

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11794

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
N-Propylbenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Styrene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Tetrachloroethene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Toluene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Trichloroethene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Vinyl chloride	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
m,p-Xylene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
o-Xylene	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Tetrahydrofuran	ND		10.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Ethyl ether	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
di-Isopropyl ether	ND		5.00		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
tert-Butanol	ND		100		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
1,4-Dioxane	ND		100		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		06/13/22 08:44	06/13/22 11:54	1
Ethanol	ND		1000		ug/Kg		06/13/22 08:44	06/13/22 11:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*06/13/22 08:44*	*06/13/22 11:54*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*06/13/22 08:44*	*06/13/22 11:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*	*06/13/22 08:44*	*06/13/22 11:54*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*06/13/22 08:44*	*06/13/22 11:54*	*1*

Lab Sample ID: LCS 620-11794/1-A
Matrix: Solid
Analysis Batch: 11795

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.60		ug/Kg		98	70 - 130
Acetone	20.0	18.67	J	ug/Kg		93	70 - 130
Acrylonitrile	20.0	17.62		ug/Kg		88	70 - 130
Benzene	20.0	18.81		ug/Kg		94	70 - 130
Bromobenzene	20.0	18.74		ug/Kg		94	70 - 130
Bromochloromethane	20.0	17.93		ug/Kg		90	70 - 130
Bromodichloromethane	20.0	19.48		ug/Kg		97	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11794/1-A
Matrix: Solid
Analysis Batch: 11795

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	18.63		ug/Kg		93	70 - 130
Bromomethane	20.0	18.58		ug/Kg		93	70 - 130
2-Butanone (MEK)	20.0	17.47		ug/Kg		87	70 - 130
n-Butylbenzene	20.0	22.10		ug/Kg		111	70 - 130
sec-Butylbenzene	20.0	21.62		ug/Kg		108	70 - 130
tert-Butylbenzene	20.0	19.16		ug/Kg		96	70 - 130
Carbon disulfide	20.0	19.09		ug/Kg		95	70 - 130
Carbon tetrachloride	20.0	19.18		ug/Kg		96	70 - 130
Chlorobenzene	20.0	20.29		ug/Kg		101	70 - 130
Chloroethane	20.0	22.21		ug/Kg		111	70 - 130
Chloroform	20.0	19.40		ug/Kg		97	70 - 130
Chloromethane	20.0	18.17		ug/Kg		91	70 - 130
2-Chlorotoluene	20.0	20.94		ug/Kg		105	70 - 130
4-Chlorotoluene	20.0	21.52		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	16.32		ug/Kg		82	70 - 130
Dibromochloromethane	20.0	18.32		ug/Kg		92	70 - 130
1,2-Dibromoethane (EDB)	20.0	17.52		ug/Kg		88	70 - 130
Dibromomethane	20.0	18.29		ug/Kg		91	70 - 130
1,2-Dichlorobenzene	20.0	19.91		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	20.0	20.26		ug/Kg		101	70 - 130
1,4-Dichlorobenzene	20.0	21.00		ug/Kg		105	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	16.81		ug/Kg		84	70 - 130
1,1-Dichloroethane	20.0	19.05		ug/Kg		95	70 - 130
1,2-Dichloroethane	20.0	19.76		ug/Kg		99	70 - 130
1,1-Dichloroethene	20.0	17.60		ug/Kg		88	70 - 130
cis-1,2-Dichloroethene	20.0	17.31		ug/Kg		87	70 - 130
trans-1,2-Dichloroethene	20.0	17.81		ug/Kg		89	70 - 130
1,2-Dichloropropane	20.0	18.36		ug/Kg		92	70 - 130
1,3-Dichloropropane	20.0	18.54		ug/Kg		93	70 - 130
2,2-Dichloropropane	20.0	19.29		ug/Kg		96	70 - 130
1,1-Dichloropropene	20.0	18.43		ug/Kg		92	70 - 130
cis-1,3-Dichloropropene	20.0	17.35		ug/Kg		87	70 - 130
trans-1,3-Dichloropropene	20.0	19.14		ug/Kg		96	70 - 130
Ethylbenzene	20.0	21.01		ug/Kg		105	70 - 130
Hexachlorobutadiene	20.0	18.31		ug/Kg		92	70 - 130
2-Hexanone (MBK)	20.0	16.56		ug/Kg		83	70 - 130
Isopropylbenzene	20.0	20.04		ug/Kg		100	70 - 130
4-Isopropyltoluene	20.0	20.80		ug/Kg		104	70 - 130
Methyl tert-butyl ether	20.0	17.61		ug/Kg		88	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.74		ug/Kg		89	70 - 130
Methylene Chloride	20.0	18.34		ug/Kg		92	70 - 130
Naphthalene	20.0	17.88		ug/Kg		89	70 - 130
N-Propylbenzene	20.0	21.89		ug/Kg		109	70 - 130
Styrene	20.0	19.62		ug/Kg		98	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.60		ug/Kg		98	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.62		ug/Kg		103	70 - 130
Tetrachloroethene	20.0	17.01		ug/Kg		85	70 - 130
Toluene	20.0	18.99		ug/Kg		95	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11794/1-A
Matrix: Solid
Analysis Batch: 11795

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11794

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichlorobenzene			20.0	18.00		ug/Kg		90	70 - 130		
1,2,4-Trichlorobenzene			20.0	18.42		ug/Kg		92	70 - 130		
1,3,5-Trichlorobenzene			20.0	19.03		ug/Kg		95	70 - 130		
1,1,1-Trichloroethane			20.0	19.84		ug/Kg		99	70 - 130		
1,1,2-Trichloroethane			20.0	19.21		ug/Kg		96	70 - 130		
Trichloroethene			20.0	18.67		ug/Kg		93	70 - 130		
Trichlorofluoromethane (Freon 11)			20.0	19.53		ug/Kg		98	70 - 130		
1,2,3-Trichloropropane			20.0	20.97		ug/Kg		105	70 - 130		
1,2,4-Trimethylbenzene			20.0	21.22		ug/Kg		106	70 - 130		
1,3,5-Trimethylbenzene			20.0	21.42		ug/Kg		107	70 - 130		
Vinyl chloride			20.0	19.36		ug/Kg		97	70 - 130		
m,p-Xylene			20.0	20.53		ug/Kg		103	70 - 130		
o-Xylene			20.0	19.70		ug/Kg		99	70 - 130		
Tetrahydrofuran			20.0	17.05		ug/Kg		85	70 - 130		
Ethyl ether			20.0	17.61		ug/Kg		88	70 - 130		
Tert-amyl methyl ether			20.0	18.19		ug/Kg		91	70 - 130		
Ethyl tert-butyl ether			20.0	17.84		ug/Kg		89	70 - 130		
di-Isopropyl ether			20.0	18.62		ug/Kg		93	70 - 130		
tert-Butanol			200	154.9		ug/Kg		77	70 - 130		
1,4-Dioxane			200	141.8		ug/Kg		71	70 - 130		
trans-1,4-Dichloro-2-butene			20.0	20.74	J	ug/Kg		104	70 - 130		
Ethanol			400	378.7	J	ug/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 620-11794/2-A
Matrix: Solid
Analysis Batch: 11795

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11794

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	19.30		ug/Kg		97	70 - 130	2	30
Acetone			20.0	19.01	J	ug/Kg		95	70 - 130	2	30
Acrylonitrile			20.0	17.55		ug/Kg		88	70 - 130	0	30
Benzene			20.0	18.70		ug/Kg		94	70 - 130	1	30
Bromobenzene			20.0	18.61		ug/Kg		93	70 - 130	1	30
Bromochloromethane			20.0	18.26		ug/Kg		91	70 - 130	2	30
Bromodichloromethane			20.0	19.28		ug/Kg		96	70 - 130	1	30
Bromoform			20.0	18.98		ug/Kg		95	70 - 130	2	30
Bromomethane			20.0	20.15		ug/Kg		101	70 - 130	8	30
2-Butanone (MEK)			20.0	18.22		ug/Kg		91	70 - 130	4	30
n-Butylbenzene			20.0	21.29		ug/Kg		106	70 - 130	4	30
sec-Butylbenzene			20.0	20.99		ug/Kg		105	70 - 130	3	30
tert-Butylbenzene			20.0	18.74		ug/Kg		94	70 - 130	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11794/2-A
Matrix: Solid
Analysis Batch: 11795

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11794

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	18.88		ug/Kg		94	70 - 130	1	30
Carbon tetrachloride			20.0	19.24		ug/Kg		96	70 - 130	0	30
Chlorobenzene			20.0	20.04		ug/Kg		100	70 - 130	1	30
Chloroethane			20.0	21.72		ug/Kg		109	70 - 130	2	30
Chloroform			20.0	19.14		ug/Kg		96	70 - 130	1	30
Chloromethane			20.0	17.92		ug/Kg		90	70 - 130	1	30
2-Chlorotoluene			20.0	20.53		ug/Kg		103	70 - 130	2	30
4-Chlorotoluene			20.0	20.96		ug/Kg		105	70 - 130	3	30
1,2-Dibromo-3-Chloropropane			20.0	16.63		ug/Kg		83	70 - 130	2	30
Dibromochloromethane			20.0	18.40		ug/Kg		92	70 - 130	0	30
1,2-Dibromoethane (EDB)			20.0	17.70		ug/Kg		88	70 - 130	1	30
Dibromomethane			20.0	18.08		ug/Kg		90	70 - 130	1	30
1,2-Dichlorobenzene			20.0	19.31		ug/Kg		97	70 - 130	3	30
1,3-Dichlorobenzene			20.0	20.08		ug/Kg		100	70 - 130	1	30
1,4-Dichlorobenzene			20.0	20.51		ug/Kg		103	70 - 130	2	30
Dichlorodifluoromethane (Freon 12)			20.0	16.46		ug/Kg		82	70 - 130	2	30
1,1-Dichloroethane			20.0	18.67		ug/Kg		93	70 - 130	2	30
1,2-Dichloroethane			20.0	19.55		ug/Kg		98	70 - 130	1	30
1,1-Dichloroethene			20.0	17.84		ug/Kg		89	70 - 130	1	30
cis-1,2-Dichloroethene			20.0	17.22		ug/Kg		86	70 - 130	1	30
trans-1,2-Dichloroethene			20.0	17.54		ug/Kg		88	70 - 130	1	30
1,2-Dichloropropane			20.0	18.40		ug/Kg		92	70 - 130	0	30
1,3-Dichloropropane			20.0	18.59		ug/Kg		93	70 - 130	0	30
2,2-Dichloropropane			20.0	19.29		ug/Kg		96	70 - 130	0	30
1,1-Dichloropropene			20.0	18.54		ug/Kg		93	70 - 130	1	30
cis-1,3-Dichloropropene			20.0	17.49		ug/Kg		87	70 - 130	1	30
trans-1,3-Dichloropropene			20.0	19.27		ug/Kg		96	70 - 130	1	30
Ethylbenzene			20.0	20.46		ug/Kg		102	70 - 130	3	30
Hexachlorobutadiene			20.0	17.77		ug/Kg		89	70 - 130	3	30
2-Hexanone (MBK)			20.0	16.82		ug/Kg		84	70 - 130	2	30
Isopropylbenzene			20.0	19.99		ug/Kg		100	70 - 130	0	30
4-Isopropyltoluene			20.0	19.87		ug/Kg		99	70 - 130	5	30
Methyl tert-butyl ether			20.0	17.87		ug/Kg		89	70 - 130	1	30
4-Methyl-2-pentanone (MIBK)			20.0	18.34		ug/Kg		92	70 - 130	3	30
Methylene Chloride			20.0	18.34		ug/Kg		92	70 - 130	0	30
Naphthalene			20.0	18.58		ug/Kg		93	70 - 130	4	30
N-Propylbenzene			20.0	21.17		ug/Kg		106	70 - 130	3	30
Styrene			20.0	19.52		ug/Kg		98	70 - 130	1	30
1,1,1,2-Tetrachloroethane			20.0	19.62		ug/Kg		98	70 - 130	0	30
1,1,2,2-Tetrachloroethane			20.0	20.72		ug/Kg		104	70 - 130	0	30
Tetrachloroethene			20.0	16.99		ug/Kg		85	70 - 130	0	30
Toluene			20.0	18.85		ug/Kg		94	70 - 130	1	30
1,2,3-Trichlorobenzene			20.0	18.06		ug/Kg		90	70 - 130	0	30
1,2,4-Trichlorobenzene			20.0	18.06		ug/Kg		90	70 - 130	2	30
1,3,5-Trichlorobenzene			20.0	18.50		ug/Kg		92	70 - 130	3	30
1,1,1-Trichloroethane			20.0	19.66		ug/Kg		98	70 - 130	1	30
1,1,2-Trichloroethane			20.0	19.24		ug/Kg		96	70 - 130	0	30
Trichloroethene			20.0	18.99		ug/Kg		95	70 - 130	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11794/2-A
Matrix: Solid
Analysis Batch: 11795

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11794

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	19.28		ug/Kg		96	70 - 130	1	30
1,2,3-Trichloropropane			20.0	21.28		ug/Kg		106	70 - 130	1	30
1,2,4-Trimethylbenzene			20.0	20.78		ug/Kg		104	70 - 130	2	30
1,3,5-Trimethylbenzene			20.0	20.89		ug/Kg		104	70 - 130	3	30
Vinyl chloride			20.0	19.10		ug/Kg		95	70 - 130	1	30
m,p-Xylene			20.0	20.32		ug/Kg		102	70 - 130	1	30
o-Xylene			20.0	19.58		ug/Kg		98	70 - 130	1	30
Tetrahydrofuran			20.0	17.64		ug/Kg		88	70 - 130	3	30
Ethyl ether			20.0	17.66		ug/Kg		88	70 - 130	0	30
Tert-amyl methyl ether			20.0	18.53		ug/Kg		93	70 - 130	2	30
Ethyl tert-butyl ether			20.0	17.96		ug/Kg		90	70 - 130	1	30
di-Isopropyl ether			20.0	18.58		ug/Kg		93	70 - 130	0	30
tert-Butanol			200	159.4		ug/Kg		80	70 - 130	3	30
1,4-Dioxane			200	142.4		ug/Kg		71	70 - 130	0	30
trans-1,4-Dichloro-2-butene			20.0	20.57	J	ug/Kg		103	70 - 130	1	30
Ethanol			400	390.0	J	ug/Kg		97	70 - 130	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 620-11819/1-A
Matrix: Solid
Analysis Batch: 11796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11819

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
2-Methylnaphthalene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Acenaphthene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Acenaphthylene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Anthracene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[a]anthracene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[a]pyrene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[b]fluoranthene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[g,h,i]perylene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Benzo[k]fluoranthene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Chrysene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Dibenz(a,h)anthracene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Fluoranthene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Fluorene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Indeno[1,2,3-cd]pyrene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Naphthalene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Phenanthrene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1
Pyrene	ND		66.7		ug/Kg		06/13/22 11:06	06/13/22 17:26	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	34		30 - 130	06/13/22 11:06	06/13/22 17:26	1
2-Fluorobiphenyl (Surr)	38		30 - 130	06/13/22 11:06	06/13/22 17:26	1
Terphenyl-d14 (Surr)	75		30 - 130	06/13/22 11:06	06/13/22 17:26	1

Lab Sample ID: LCS 620-11819/2-A
Matrix: Solid
Analysis Batch: 11796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1670	677.1		ug/Kg		41	40 - 140
2-Methylnaphthalene	1670	831.7		ug/Kg		50	40 - 140
Acenaphthene	1670	816.6		ug/Kg		49	40 - 140
Acenaphthylene	1670	816.3		ug/Kg		49	40 - 140
Anthracene	1670	1264		ug/Kg		76	40 - 140
Benzo[a]anthracene	1670	1442		ug/Kg		87	40 - 140
Benzo[a]pyrene	1670	1379		ug/Kg		83	40 - 140
Benzo[b]fluoranthene	1670	1459		ug/Kg		88	40 - 140
Benzo[g,h,i]perylene	1670	1449		ug/Kg		87	40 - 140
Benzo[k]fluoranthene	1670	1326		ug/Kg		80	40 - 140
Chrysene	1670	1390		ug/Kg		83	40 - 140
Dibenz(a,h)anthracene	1670	1380		ug/Kg		83	40 - 140
Fluoranthene	1670	1401		ug/Kg		84	40 - 140
Fluorene	1670	1020		ug/Kg		61	40 - 140
Indeno[1,2,3-cd]pyrene	1670	1436		ug/Kg		86	40 - 140
Naphthalene	1670	614.5	*-	ug/Kg		37	40 - 140
Phenanthrene	1670	1208		ug/Kg		72	40 - 140
Pyrene	1670	1322		ug/Kg		79	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	36		30 - 130
2-Fluorobiphenyl (Surr)	43		30 - 130
Terphenyl-d14 (Surr)	85		30 - 130

Lab Sample ID: LCSD 620-11819/3-A
Matrix: Solid
Analysis Batch: 11796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11819

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1670	821.9		ug/Kg		49	40 - 140	19	30
2-Methylnaphthalene	1670	986.2		ug/Kg		59	40 - 140	17	30
Acenaphthene	1670	981.3		ug/Kg		59	40 - 140	18	30
Acenaphthylene	1670	992.0		ug/Kg		60	40 - 140	19	30
Anthracene	1670	1295		ug/Kg		78	40 - 140	2	30
Benzo[a]anthracene	1670	1413		ug/Kg		85	40 - 140	2	30
Benzo[a]pyrene	1670	1355		ug/Kg		81	40 - 140	2	30
Benzo[b]fluoranthene	1670	1349		ug/Kg		81	40 - 140	8	30
Benzo[g,h,i]perylene	1670	1429		ug/Kg		86	40 - 140	1	30
Benzo[k]fluoranthene	1670	1437		ug/Kg		86	40 - 140	8	30
Chrysene	1670	1339		ug/Kg		80	40 - 140	4	30
Dibenz(a,h)anthracene	1670	1352		ug/Kg		81	40 - 140	2	30
Fluoranthene	1670	1378		ug/Kg		83	40 - 140	2	30

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

Lab Sample ID: LCSD 620-11819/3-A
Matrix: Solid
Analysis Batch: 11796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11819

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			1670	1166		ug/Kg		70	40 - 140	13	30
Indeno[1,2,3-cd]pyrene			1670	1400		ug/Kg		84	40 - 140	3	30
Naphthalene			1670	706.3		ug/Kg		42	40 - 140	14	30
Phenanthrene			1670	1239		ug/Kg		74	40 - 140	2	30
Pyrene			1670	1298		ug/Kg		78	40 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*41*		*30 - 130*
2-Fluorobiphenyl (Surr)	*53*		*30 - 130*
Terphenyl-d14 (Surr)	*81*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-11954/1-A
Matrix: Solid
Analysis Batch: 11995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11954

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
beta-BHC	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
delta-BHC	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
gamma-BHC (Lindane)	ND		2.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Heptachlor	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Aldrin	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Heptachlor epoxide	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Endosulfan I	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Dieldrin	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
4,4'-DDE	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Endrin	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Endosulfan II	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
4,4'-DDD	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Endosulfan sulfate	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
4,4'-DDT	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Methoxychlor	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Endrin ketone	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Endrin aldehyde	ND		8.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
cis-Chlordane	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
trans-Chlordane	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Toxaphene	ND		100		ug/Kg		06/15/22 16:47	06/16/22 17:58	1
Alachlor	ND		5.00		ug/Kg		06/15/22 16:47	06/16/22 17:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*30 - 150*	*06/15/22 16:47*	*06/16/22 17:58*	*1*
Tetrachloro-m-xylene	*73*		*30 - 150*	*06/15/22 16:47*	*06/16/22 17:58*	*1*
DCB Decachlorobiphenyl (Surr)	*66*		*30 - 150*	*06/15/22 16:47*	*06/16/22 17:58*	*1*
DCB Decachlorobiphenyl (Surr)	*57*		*30 - 150*	*06/15/22 16:47*	*06/16/22 17:58*	*1*

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

Lab Sample ID: LCS 620-11954/4-A
Matrix: Solid
Analysis Batch: 11995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11954

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
alpha-BHC			13.4	9.359		ug/Kg		70	27 - 108		
alpha-BHC			13.4	9.668		ug/Kg		72	27 - 108		
beta-BHC			13.3	11.88		ug/Kg		89	50 - 114		
beta-BHC			13.3	10.70		ug/Kg		80	50 - 114		
delta-BHC			13.4	9.257		ug/Kg		69	41 - 101		
delta-BHC			13.4	10.01		ug/Kg		75	41 - 101		
gamma-BHC (Lindane)			13.5	10.69		ug/Kg		79	40 - 110		
gamma-BHC (Lindane)			13.5	9.980		ug/Kg		74	40 - 110		
Heptachlor			13.4	11.23		ug/Kg		84	30 - 101		
Heptachlor			13.4	11.67		ug/Kg		87	30 - 101		
Aldrin			13.4	9.645		ug/Kg		72	21 - 113		
Aldrin			13.4	10.38		ug/Kg		78	21 - 113		
Heptachlor epoxide			13.3	9.916		ug/Kg		74	46 - 106		
Heptachlor epoxide			13.3	11.04		ug/Kg		83	46 - 106		
Endosulfan I			13.3	9.843		ug/Kg		74	45 - 115		
Endosulfan I			13.3	10.83		ug/Kg		81	45 - 115		
Dieldrin			13.4	10.16		ug/Kg		76	48 - 117		
Dieldrin			13.4	11.14		ug/Kg		83	48 - 117		
4,4'-DDE			13.4	8.615		ug/Kg		64	40 - 136		
4,4'-DDE			13.4	9.646		ug/Kg		72	40 - 136		
Endrin			13.4	13.32		ug/Kg		99	58 - 148		
Endrin			13.4	14.31		ug/Kg		107	58 - 148		
Endosulfan II			13.3	9.688		ug/Kg		73	54 - 120		
Endosulfan II			13.3	9.857		ug/Kg		74	54 - 120		
4,4'-DDD			13.4	9.752		ug/Kg		73	55 - 133		
4,4'-DDD			13.4	10.80		ug/Kg		81	55 - 133		
Endosulfan sulfate			13.4	10.65		ug/Kg		79	55 - 119		
Endosulfan sulfate			13.4	11.01		ug/Kg		82	55 - 119		
4,4'-DDT			13.5	9.785		ug/Kg		73	43 - 140		
4,4'-DDT			13.5	10.04		ug/Kg		75	43 - 140		
Methoxychlor			13.3	11.74		ug/Kg		88	45 - 156		
Methoxychlor			13.3	11.69		ug/Kg		88	45 - 156		
Endrin ketone			13.4	8.710		ug/Kg		65	56 - 107		
Endrin ketone			13.4	8.928		ug/Kg		67	56 - 107		
Endrin aldehyde			13.4	8.996		ug/Kg		67	23 - 145		
Endrin aldehyde			13.4	9.261		ug/Kg		69	23 - 145		
cis-Chlordane			13.4	9.533		ug/Kg		71	44 - 111		
cis-Chlordane			13.4	10.43		ug/Kg		78	44 - 111		
trans-Chlordane			13.4	9.790		ug/Kg		73	50 - 109		
trans-Chlordane			13.4	11.02		ug/Kg		82	50 - 109		
Alachlor			13.4	13.00		ug/Kg		97	53 - 114		
Alachlor			13.4	12.91		ug/Kg		97	53 - 114		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*30 - 150*
Tetrachloro-m-xylene	*66*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*63*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*53*		*30 - 150*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LCSD 620-11954/5-A
Matrix: Solid
Analysis Batch: 11995

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11954

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	11.01		ug/Kg		82	27 - 108	16	30
alpha-BHC			13.4	10.53		ug/Kg		79	27 - 108	8	30
beta-BHC			13.3	12.16		ug/Kg		91	50 - 114	2	30
beta-BHC			13.3	11.28		ug/Kg		85	50 - 114	5	30
delta-BHC			13.4	10.50		ug/Kg		78	41 - 101	13	30
delta-BHC			13.4	10.90		ug/Kg		81	41 - 101	9	30
gamma-BHC (Lindane)			13.5	11.86		ug/Kg		88	40 - 110	10	30
gamma-BHC (Lindane)			13.5	10.82		ug/Kg		80	40 - 110	8	30
Heptachlor			13.4	12.66		ug/Kg		95	30 - 101	12	30
Heptachlor			13.4	12.19		ug/Kg		91	30 - 101	4	30
Aldrin			13.4	10.88		ug/Kg		81	21 - 113	12	30
Aldrin			13.4	10.55		ug/Kg		79	21 - 113	2	30
Heptachlor epoxide			13.3	11.29		ug/Kg		85	46 - 106	13	30
Heptachlor epoxide			13.3	11.67		ug/Kg		87	46 - 106	5	30
Endosulfan I			13.3	11.20		ug/Kg		84	45 - 115	13	30
Endosulfan I			13.3	11.29		ug/Kg		85	45 - 115	4	30
Dieldrin			13.4	11.58		ug/Kg		87	48 - 117	13	30
Dieldrin			13.4	11.70		ug/Kg		88	48 - 117	5	30
4,4'-DDE			13.4	9.729		ug/Kg		72	40 - 136	12	30
4,4'-DDE			13.4	10.01		ug/Kg		74	40 - 136	4	30
Endrin			13.4	15.23		ug/Kg		114	58 - 148	13	30
Endrin			13.4	15.00		ug/Kg		112	58 - 148	5	30
Endosulfan II			13.3	11.03		ug/Kg		83	54 - 120	13	30
Endosulfan II			13.3	10.47		ug/Kg		79	54 - 120	6	30
4,4'-DDD			13.4	11.06		ug/Kg		83	55 - 133	13	30
4,4'-DDD			13.4	11.24		ug/Kg		84	55 - 133	4	30
Endosulfan sulfate			13.4	12.57		ug/Kg		94	55 - 119	17	30
Endosulfan sulfate			13.4	12.12		ug/Kg		90	55 - 119	10	30
4,4'-DDT			13.5	11.53		ug/Kg		86	43 - 140	16	30
4,4'-DDT			13.5	10.97		ug/Kg		82	43 - 140	9	30
Methoxychlor			13.3	14.19		ug/Kg		106	45 - 156	19	30
Methoxychlor			13.3	13.46		ug/Kg		101	45 - 156	14	30
Endrin ketone			13.4	10.06		ug/Kg		75	56 - 107	14	30
Endrin ketone			13.4	9.758		ug/Kg		73	56 - 107	9	30
Endrin aldehyde			13.4	10.88		ug/Kg		81	23 - 145	19	30
Endrin aldehyde			13.4	10.40		ug/Kg		77	23 - 145	12	30
cis-Chlordane			13.4	10.73		ug/Kg		80	44 - 111	12	30
cis-Chlordane			13.4	10.80		ug/Kg		80	44 - 111	3	30
trans-Chlordane			13.4	11.21		ug/Kg		84	50 - 109	14	30
trans-Chlordane			13.4	11.46		ug/Kg		86	50 - 109	4	30
Alachlor			13.4	15.21		ug/Kg		114	53 - 114	16	30
Alachlor			13.4	13.27		ug/Kg		99	53 - 114	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*30 - 150*
Tetrachloro-m-xylene	*72*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*70*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*57*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-11954/1-A
Matrix: Solid
Analysis Batch: 11979

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11954

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1
PCB-1221	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1
PCB-1232	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1
PCB-1242	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1
PCB-1248	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1
PCB-1254	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1
PCB-1260	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1
PCB-1262	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1
PCB-1268	ND		20.0		ug/Kg		06/15/22 16:47	06/16/22 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*06/15/22 16:47*	*06/16/22 16:43*	*1*
Tetrachloro-m-xylene	*79*		*30 - 150*	*06/15/22 16:47*	*06/16/22 16:43*	*1*
DCB Decachlorobiphenyl (Surr)	*78*		*30 - 150*	*06/15/22 16:47*	*06/16/22 16:43*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*30 - 150*	*06/15/22 16:47*	*06/16/22 16:43*	*1*

Lab Sample ID: LCS 620-11954/2-A
Matrix: Solid
Analysis Batch: 11979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11954

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	150.0		ug/Kg		90	61 - 112		
PCB-1016			167	150.5		ug/Kg		90	61 - 112		
PCB-1260			167	169.6		ug/Kg		102	63 - 105		
PCB-1260			167	174.4		ug/Kg		105	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*79*		*30 - 150*
Tetrachloro-m-xylene	*78*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*83*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*93*		*30 - 150*

Lab Sample ID: LCSD 620-11954/3-A
Matrix: Solid
Analysis Batch: 11979

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11954

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	151.4		ug/Kg		91	61 - 112	1	30
PCB-1016			167	155.1		ug/Kg		93	61 - 112	3	30
PCB-1260			167	165.6		ug/Kg		99	63 - 105	2	30
PCB-1260			167	164.5		ug/Kg		99	63 - 105	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*30 - 150*
Tetrachloro-m-xylene	*81*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*81*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*90*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-11852/1-A
Matrix: Solid
Analysis Batch: 11895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11852

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		06/14/22 10:05	06/15/22 09:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*80*		*40 - 140*	*06/14/22 10:05*	*06/15/22 09:48*	*1*
o-Terphenyl (Surr)	*67*		*40 - 140*	*06/14/22 10:05*	*06/15/22 09:48*	*1*

Lab Sample ID: LCS 620-11852/2-A
Matrix: Solid
Analysis Batch: 11895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11852

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	168.8		mg/Kg		51	22 - 93		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*98*		*40 - 140*
o-Terphenyl (Surr)	*86*		*40 - 140*

Lab Sample ID: LCSD 620-11852/3-A
Matrix: Solid
Analysis Batch: 11895

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11852

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	239.6	*1	mg/Kg		72	22 - 93	35	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*134*		*40 - 140*
o-Terphenyl (Surr)	*113*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-11824/1-A
Matrix: Solid
Analysis Batch: 11930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11824

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	^3+	4.75		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Arsenic	ND		1.43		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Barium	ND		0.950		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Beryllium	ND		0.475		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Cadmium	ND		0.475		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Chromium	ND		0.950		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Copper	ND		0.950		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Lead	ND		1.43		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Manganese	ND		0.950		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Nickel	ND	^3-	0.950		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Selenium	ND		1.43		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Silver	ND		1.43		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Thallium	ND		2.85		mg/Kg		06/13/22 13:49	06/15/22 12:09	1

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

Lab Sample ID: MB 620-11824/1-A
Matrix: Solid
Analysis Batch: 11930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11824

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		1.43		mg/Kg		06/13/22 13:49	06/15/22 12:09	1
Zinc	ND		2.85		mg/Kg		06/13/22 13:49	06/15/22 12:09	1

Lab Sample ID: LCDSRM 620-11824/3-A
Matrix: Solid
Analysis Batch: 11930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11824

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			244	70.36	^3+	mg/Kg		28.8	10.0 - 123.0	4	20
Arsenic			109	96.28		mg/Kg		88.3	75.1 - 106.4	0	20
Barium			364	346.8		mg/Kg		95.3	76.9 - 110.2	1	20
Beryllium			57.0	51.64		mg/Kg		90.6	76.5 - 108.1	4	20
Cadmium			48.7	42.81		mg/Kg		87.9	74.7 - 106.0	1	20
Chromium			173	163.4		mg/Kg		94.4	76.3 - 109.8	3	20
Copper			179	176.1		mg/Kg		98.4	79.3 - 110.1	1	20
Lead			101	101.6		mg/Kg		100.6	81.3 - 114.9	13	20
Manganese			370	342.8		mg/Kg		92.6	78.4 - 113.0	5	20
Nickel			52.2	45.66	^3-	mg/Kg		87.5	74.7 - 106.7	2	20
Selenium			104	84.68		mg/Kg		81.4	71.4 - 109.6	1	20
Silver			29.9	25.06		mg/Kg		83.8	74.6 - 112.7	1	20
Thallium			101	93.24		mg/Kg		92.3	72.6 - 107.9	0	20
Vanadium			194	184.9		mg/Kg		95.3	73.2 - 112.4	2	20
Zinc			431	381.8		mg/Kg		88.6	74.9 - 111.4	3	20

Lab Sample ID: LCSSRM 620-11824/2-A
Matrix: Solid
Analysis Batch: 11930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11824

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Antimony			244	67.75	^3+	mg/Kg		27.8	10.0 - 123.0
Arsenic			109	96.74		mg/Kg		88.8	75.1 - 106.4
Barium			364	343.0		mg/Kg		94.2	76.9 - 110.2
Beryllium			57.0	49.82		mg/Kg		87.4	76.5 - 108.1
Cadmium			48.7	42.35		mg/Kg		87.0	74.7 - 106.0

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

Lab Sample ID: LCSSRM 620-11824/2-A
Matrix: Solid
Analysis Batch: 11930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11824

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	173	158.8		mg/Kg		91.8	76.3 - 109.8
Copper	179	175.0		mg/Kg		97.8	79.3 - 110.1
Lead	101	89.03		mg/Kg		88.2	81.3 - 114.9
Manganese	370	325.7		mg/Kg		88.0	78.4 - 113.0
Nickel	52.2	44.88	^3-	mg/Kg		86.0	74.7 - 106.7
Selenium	104	83.76		mg/Kg		80.5	71.4 - 109.6
Silver	29.9	24.74		mg/Kg		82.7	74.6 - 112.7
Thallium	101	93.04		mg/Kg		92.1	72.6 - 107.9
Vanadium	194	181.7		mg/Kg		93.6	73.2 - 112.4
Zinc	431	370.8		mg/Kg		86.0	74.9 - 111.4

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-11826/1-A
Matrix: Solid
Analysis Batch: 11875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11826

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0483	mg/Kg		06/13/22 14:00	06/14/22 13:34	1

Lab Sample ID: LCSSRM 620-11826/2-A
Matrix: Solid
Analysis Batch: 11875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11826

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	11.0	8.728		mg/Kg		79.3	64.3 - 118.2

Method: Moisture - Percent Moisture

Lab Sample ID: 620-5061-2 DU
Matrix: Solid
Analysis Batch: 11857

Client Sample ID: RW4 (2.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	0.3		2.8	F3	%		160	5
Percent Solids	99.7		97.2		%		3	5

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

GC/MS VOA

Pre Prep Batch: 11787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-1	RW3 (1)	Total/NA	Solid	Frozen Preserve	
620-5061-2	RW4 (2.5)	Total/NA	Solid	Frozen Preserve	
620-5061-3	B102 (2)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 11794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-1	RW3 (1)	Total/NA	Solid	5035	11787
620-5061-2	RW4 (2.5)	Total/NA	Solid	5035	11787
620-5061-3	B102 (2)	Total/NA	Solid	5035	11787
MB 620-11794/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-11794/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-11794/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 11795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-1	RW3 (1)	Total/NA	Solid	8260C	11794
620-5061-2	RW4 (2.5)	Total/NA	Solid	8260C	11794
620-5061-3	B102 (2)	Total/NA	Solid	8260C	11794
MB 620-11794/3-A	Method Blank	Total/NA	Solid	8260C	11794
LCS 620-11794/1-A	Lab Control Sample	Total/NA	Solid	8260C	11794
LCSD 620-11794/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	11794

GC/MS Semi VOA

Analysis Batch: 11796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	8270D	11819
MB 620-11819/1-A	Method Blank	Total/NA	Solid	8270D	11819
LCS 620-11819/2-A	Lab Control Sample	Total/NA	Solid	8270D	11819
LCSD 620-11819/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	11819

Prep Batch: 11819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	3546	
MB 620-11819/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11819/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11819/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

GC Semi VOA

Prep Batch: 11852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	3546	
MB 620-11852/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11852/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11852/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

GC Semi VOA

Analysis Batch: 11895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	8100	11852
MB 620-11852/1-A	Method Blank	Total/NA	Solid	8100	11852
LCS 620-11852/2-A	Lab Control Sample	Total/NA	Solid	8100	11852
LCSD 620-11852/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	11852

Prep Batch: 11954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	3546	
MB 620-11954/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-11954/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-11954/4-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-11954/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
LCSD 620-11954/5-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 11979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	8082A	11954
MB 620-11954/1-A	Method Blank	Total/NA	Solid	8082A	11954
LCS 620-11954/2-A	Lab Control Sample	Total/NA	Solid	8082A	11954
LCSD 620-11954/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	11954

Analysis Batch: 11995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	8081B	11954
MB 620-11954/1-A	Method Blank	Total/NA	Solid	8081B	11954
LCS 620-11954/4-A	Lab Control Sample	Total/NA	Solid	8081B	11954
LCSD 620-11954/5-A	Lab Control Sample Dup	Total/NA	Solid	8081B	11954

Metals

Prep Batch: 11824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	3050B	
MB 620-11824/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 620-11824/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 620-11824/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 11826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	7471B	
MB 620-11826/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-11826/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 11875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	7471B	11826
MB 620-11826/1-A	Method Blank	Total/NA	Solid	7471B	11826
LCSSRM 620-11826/2-A	Lab Control Sample	Total/NA	Solid	7471B	11826

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Metals

Analysis Batch: 11930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	6010D	11824
MB 620-11824/1-A	Method Blank	Total/NA	Solid	6010D	11824
LCDSRM 620-11824/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	11824
LCSSRM 620-11824/2-A	Lab Control Sample	Total/NA	Solid	6010D	11824

General Chemistry

Analysis Batch: 11857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5061-1	RW3 (1)	Total/NA	Solid	Moisture	
620-5061-2	RW4 (2.5)	Total/NA	Solid	Moisture	
620-5061-3	B102 (2)	Total/NA	Solid	Moisture	
620-5061-4	B102/RW3/RW4 (0-4)	Total/NA	Solid	Moisture	
620-5061-2 DU	RW4 (2.5)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Job ID: 620-5061-1
Project/Site: I295/Rt 37 - Cranston, RI

Client Sample ID: RW3 (1)
Lab Sample ID: 620-5061-1
Date Collected: 06/10/22 08:30
Matrix: Solid
Date Received: 06/10/22 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11857	06/14/22 11:01	PN	ENE

Client Sample ID: RW3 (1)
Lab Sample ID: 620-5061-1
Date Collected: 06/10/22 08:30
Matrix: Solid
Date Received: 06/10/22 15:22
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11787	06/10/22 19:25	KFS	ENE
Total/NA	Prep	5035			11794	06/13/22 08:44	CLR	ENE
Total/NA	Analysis	8260C		1	11795	06/13/22 17:37	CLR	ENE

Client Sample ID: RW4 (2.5)
Lab Sample ID: 620-5061-2
Date Collected: 06/10/22 10:15
Matrix: Solid
Date Received: 06/10/22 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11857	06/14/22 11:35	PN	ENE

Client Sample ID: RW4 (2.5)
Lab Sample ID: 620-5061-2
Date Collected: 06/10/22 10:15
Matrix: Solid
Date Received: 06/10/22 15:22
Percent Solids: 99.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11787	06/10/22 19:25	KFS	ENE
Total/NA	Prep	5035			11794	06/13/22 08:44	CLR	ENE
Total/NA	Analysis	8260C		1	11795	06/13/22 18:03	CLR	ENE

Client Sample ID: B102 (2)
Lab Sample ID: 620-5061-3
Date Collected: 06/10/22 11:20
Matrix: Solid
Date Received: 06/10/22 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11857	06/14/22 11:37	PN	ENE

Client Sample ID: B102 (2)
Lab Sample ID: 620-5061-3
Date Collected: 06/10/22 11:20
Matrix: Solid
Date Received: 06/10/22 15:22
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			11787	06/10/22 19:25	KFS	ENE
Total/NA	Prep	5035			11794	06/13/22 08:44	CLR	ENE
Total/NA	Analysis	8260C		1	11795	06/13/22 18:29	CLR	ENE

Lab Chronicle

Client: AECOM
Job ID: 620-5061-1
Project/Site: I295/Rt 37 - Cranston, RI

Client Sample ID: B102/RW3/RW4 (0-4)
Lab Sample ID: 620-5061-4
Date Collected: 06/10/22 12:25
Matrix: Solid
Date Received: 06/10/22 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	11857	06/14/22 11:37	PN	ENE

Client Sample ID: B102/RW3/RW4 (0-4)
Lab Sample ID: 620-5061-4
Date Collected: 06/10/22 12:25
Matrix: Solid
Date Received: 06/10/22 15:22
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			11819	06/13/22 11:06	BJJ	ENE
Total/NA	Analysis	8270D		1	11796	06/13/22 20:46	BJJ	ENE
Total/NA	Prep	3546			11954	06/15/22 16:47	EDJ	ENE
Total/NA	Analysis	8081B		1	11995	06/16/22 20:04	SFL	ENE
Total/NA	Prep	3546			11954	06/15/22 16:47	EDJ	ENE
Total/NA	Analysis	8082A		1	11979	06/16/22 20:06	SFL	ENE
Total/NA	Prep	3546			11852	06/14/22 10:05	EDJ	ENE
Total/NA	Analysis	8100		1	11895	06/15/22 11:04	JS	ENE
Total/NA	Prep	3050B			11824	06/13/22 13:49	CEV	ENE
Total/NA	Analysis	6010D		1	11930	06/15/22 13:56	CEV	ENE
Total/NA	Prep	7471B			11826	06/13/22 14:00	CEV	ENE
Total/NA	Analysis	7471B		1	11875	06/14/22 14:05	CAJ	ENE

Laboratory References:
ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-5061-1
Project/Site: I295/Rt 37 - Cranston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
6010D	3050B	Solid	Antimony
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Beryllium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Copper
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Manganese
6010D	3050B	Solid	Nickel
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
6010D	3050B	Solid	Thallium
6010D	3050B	Solid	Vanadium
6010D	3050B	Solid	Zinc
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260

Laboratory: Eurofins New England (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
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-5061-1
Project/Site: I295/Rt 37 - Cranston, RI

Laboratory: Eurofins New England (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
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Pyrene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ENE
8081B	Organochlorine Pesticides (GC)	SW846	ENE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ENE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	ENE
6010D	Metals (ICP)	SW846	ENE
7471B	Mercury (CVAA)	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
3050B	Preparation, Metals	SW846	ENE
3546	Microwave Extraction	SW846	ENE
5035	Closed System Purge and Trap	SW846	ENE
7471B	Preparation, Mercury	SW846	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Cranston, RI

Job ID: 620-5061-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-5061-1	RW3 (1)	Solid	06/10/22 08:30	06/10/22 15:22
620-5061-2	RW4 (2.5)	Solid	06/10/22 10:15	06/10/22 15:22
620-5061-3	B102 (2)	Solid	06/10/22 11:20	06/10/22 15:22
620-5061-4	B102/RW3/RW4 (0-4)	Solid	06/10/22 12:25	06/10/22 15:22

S061

620-5061 Chain of Custody

ment Testing
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CHAIN OF CUSTODY RECORD

Page ____ of ____

Special Handling:

☒ Standard TAT - ~~7 to 10~~ 5 business days

☐ Rush TAT - Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell
AECOM
10 Orms Street Suite 400
Providence RI 02904
Telephone #: 401-854-2808
Project Mgr: Richard Prior

Invoice To: Richard Prior
AECOM

PO No. _____ Quote #: _____

Project No: 60680132
Site Name: 295/37 Interchange
Location: Cranston State: RI
Sampler(s): E. daSilva
RM

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: TPH 8100M	PAH	PP Metals + Ba	Mn & V	PCBs	Pesticides	VOC's	Check if chlorinated
01	RW3 (1)	6/10/22	8:30	G	So	3										X	☐
02	RW4 (2.5)	6/10/22	10:15	G	So	3										X	☐
03	B102 (2)	6/10/22	11:20	G	So	3										X	☐
04	B102/RW3/RW4 (0-4)	6/10/22	12:25	C						X	X	X	X	X	X		☐
																	☐
																	☐
																	☐
																	☐
																	☐
																	☐

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp °C
Emma DeSilva	Patrick Haskell	6-10-22	2:45pm	Observed 3.8
Patrick Haskell	Tim Lee	6/10/22	15:22	Correction Factor +0.4
				Corrected 4.2
				IR ID # G

☐ EDD format: _____
☒ E-mail to: patrick.haskell@aecom.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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6/17/2022

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev. Jan 2020

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-5061-1

Login Number: 5061
List Number: 1
Creator: McAdams, Nicole L

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-5169-1
Client Project/Site: I-295

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
6/23/2022 5:36:21 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.

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)
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 ID: 620-5169-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-5169-1

Comments
No additional comments.

Receipt
The samples were received on 6/16/2022 4:49 PM. 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 was 0.6º C.

GC/MS VOA
Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: 2-Methyl-2-propanol, 1,2-Dibromo-3-Chloropropane, Hexachlorobutadiene, Tetrachloroethene, and Chloroethane.
(CCVIS 620-12057/3)

Methods 8260, 8260C: The laboratory control sample (LCS) for preparation batch 620-12056 and analytical batch 620-12057 recovered outside control limits for the following analytes: Chloroethane. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Methods 8260, 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 620-12056 and analytical batch 620-12057 recovered outside control limits for the following analytes: Chloroethane and Bromomethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: 2-Methyl-2-propanol and 1,2-Dibromo-3-Chloropropane.
(CCVIS 620-12130/3)

Methods 8260, 8260C: The continuing calibration verification (CCV) associated with batch 620-12130 exhibited % difference of > 20% for the following analyte: Tetrachloroethene; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

Methods 8260, 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 620-12129 and analytical batch 620-12130 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

Methods 8260, 8260C: The laboratory control sample (LCS) for preparation batch 620-12129 and analytical batch 620-12130 recovered outside control limits for the following analyte: 1,4-Dioxane, which has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Methods 8260, 8260C: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 620-12184 and analytical batch 620-12185 recovered outside control limits for the following analyte: 1,4-Dioxane, which has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Methods 8260, 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 620-12184 and analytical batch 620-12185 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more

Job ID: 620-5169-1 (Continued)

Laboratory: Eurofins New England (Continued)

than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: 2-Methyl-2-propanol, Tetrachloroethene, and n-Butylbenzene.
(CCVIS 620-12185/3)

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

GC/MS Semi VOA
Method 8270D: Surrogate recovery for the following samples were outside control limits: HA13,HA14(1.5) (620-5169-20) and HA15(1.5) (620-5169-21). Evidence of matrix interference was present in the extraction process; therefore, re-extraction and/or re-analysis was not performed.

Methods 8270, 8270D: The continuing calibration verification (CCV) associated with batch 620-12174 recovered above the upper control limit for 3,3'-Dichlorobenzidine, Hexachlorobenzene and Nitrobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 620-12174/4).

Methods 8270, 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (CCVIS 620-12174/4). These results have been reported and qualified.

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

GC Semi VOA
Method 8081B: The initial calibration verification (ICV) result for batch 620-12158 was above the upper control limit. Analytes Endrin and Alachlor were reported above acceptable limits. Analyte results were non-detects, and have been reported as qualified data.

Method 8081B: The %RPD between the primary and confirmation column exceeded 40% for DCB Decachlorobiphenyl (Surr) for the following samples: HA6, HA7, HA8(1) (620-5169-5) and HA11, HA12(1) (620-5169-11). The higher value(s) has been reported and qualified in accordance with the laboratory's SOP.

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

Metals
Methods 6010, 6010D: LCSSRM is low for silver, LCDSRM passed. Data is acceptable on one passing LCS.
HA6, HA7, HA8(1) (620-5169-5), HA9, HA10(1) (620-5169-8), HA11, HA12(1) (620-5169-11), HA1,HA2(1.5) (620-5169-14), HA3,HA4,HA5 (2) (620-5169-17), HA13,HA14(1.5) (620-5169-20) and HA15(1.5) (620-5169-21)

Method 6010D: The MS is out of recovery for antimony, the MSD is out for nickel and antimony. Data is acceptable based on the LCSSRM and LCDSRM recovery passing.

(620-5147-D-1-B)

Method 6010D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-12004 and analytical batch 620-12044 were outside control limits for copper and antimony. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

General Chemistry
Method Moisture: The sample duplicate precision for the following sample associated with analytical batch 620-12151 was outside control limits: (620-5147-D-1 DU).

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

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

Detection Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA3(1) — Lab Sample ID: 620-5169-1

No Detections.

Client Sample ID: HA6(1) — Lab Sample ID: 620-5169-2

No Detections.

Client Sample ID: HA7(1) — Lab Sample ID: 620-5169-3

No Detections.

Client Sample ID: HA8(1) — Lab Sample ID: 620-5169-4

No Detections.

Client Sample ID: HA6, HA7, HA8(1) — Lab Sample ID: 620-5169-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	660		155		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	594		155		ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	643		155		ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	456		155		ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	519		155		ug/Kg	1	☼	8270D	Total/NA
Chrysene	651		155		ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	158		155		ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	1170		155		ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	428		155		ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	512		155		ug/Kg	1	☼	8270D	Total/NA
Pyrene	976		155		ug/Kg	1	☼	8270D	Total/NA
PCB-1254	71.0		23.7		ug/Kg	1	☼	8082A	Total/NA
TEPH (C9-C36)	238		15.8		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.47		1.72		mg/Kg	1	☼	6010D	Total/NA
Barium	42.0		1.14		mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.688		0.572		mg/Kg	1	☼	6010D	Total/NA
Chromium	11.3		1.14		mg/Kg	1	☼	6010D	Total/NA
Copper	16.1		1.14		mg/Kg	1	☼	6010D	Total/NA
Lead	59.2		1.72		mg/Kg	1	☼	6010D	Total/NA
Manganese	189		1.14		mg/Kg	1	☼	6010D	Total/NA
Nickel	7.90		1.14		mg/Kg	1	☼	6010D	Total/NA
Vanadium	11.9		1.72		mg/Kg	1	☼	6010D	Total/NA
Zinc	66.6		3.43		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: HA9(1.5) — Lab Sample ID: 620-5169-6

No Detections.

Client Sample ID: HA10(1) — Lab Sample ID: 620-5169-7

No Detections.

Client Sample ID: HA9, HA10(1) — Lab Sample ID: 620-5169-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	14.4		9.03		ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	18.6		9.03		ug/Kg	1	☼	8081B	Total/NA
TEPH (C9-C36)	184		30.4		mg/Kg	1	☼	8100	Total/NA
Arsenic	1.66		1.63		mg/Kg	1	☼	6010D	Total/NA
Barium	45.0		1.09		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins New England

Client Sample ID: HA9, HA10(1) (Continued) — Lab Sample ID: 620-5169-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.726		0.545		mg/Kg	1	☼	6010D	Total/NA
Chromium	13.6		1.09		mg/Kg	1	☼	6010D	Total/NA
Copper	16.6		1.09		mg/Kg	1	☼	6010D	Total/NA
Lead	41.0		1.63		mg/Kg	1	☼	6010D	Total/NA
Manganese	198		1.09		mg/Kg	1	☼	6010D	Total/NA
Nickel	7.45		1.09		mg/Kg	1	☼	6010D	Total/NA
Vanadium	11.9		1.63		mg/Kg	1	☼	6010D	Total/NA
Zinc	53.5		3.27		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: HA11(1.5) — Lab Sample ID: 620-5169-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	13.5		10.2		ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HA12(1) — Lab Sample ID: 620-5169-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	13.2		9.51		ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HA11, HA12(1) — Lab Sample ID: 620-5169-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	74.6		14.5		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.89		1.53		mg/Kg	1	☼	6010D	Total/NA
Barium	28.7		1.02		mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.676		0.511		mg/Kg	1	☼	6010D	Total/NA
Chromium	8.89		1.02		mg/Kg	1	☼	6010D	Total/NA
Copper	10.5		1.02		mg/Kg	1	☼	6010D	Total/NA
Lead	19.5		1.53		mg/Kg	1	☼	6010D	Total/NA
Manganese	138		1.02		mg/Kg	1	☼	6010D	Total/NA
Nickel	5.25		1.02		mg/Kg	1	☼	6010D	Total/NA
Vanadium	10.9		1.53		mg/Kg	1	☼	6010D	Total/NA
Zinc	37.1		3.06		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: HA1(1.5) — Lab Sample ID: 620-5169-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	14.7		10.9		ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HA2(1.5) — Lab Sample ID: 620-5169-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	15.4		14.3		ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HA1,HA2(1.5) — Lab Sample ID: 620-5169-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	87.8		15.3		mg/Kg	1	☼	8100	Total/NA
Arsenic	1.80		1.70		mg/Kg	1	☼	6010D	Total/NA
Barium	56.9		11.3		mg/Kg	10	☼	6010D	Total/NA
Beryllium	2.02		0.566		mg/Kg	1	☼	6010D	Total/NA
Chromium	15.4		1.13		mg/Kg	1	☼	6010D	Total/NA
Copper	28.1		1.13		mg/Kg	1	☼	6010D	Total/NA
Lead	19.2		1.70		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA1,HA2(1.5) (Continued) — Lab Sample ID: 620-5169-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Manganese	187		1.13		mg/Kg	1	☼	6010D	Total/NA
Nickel	10.1		1.13		mg/Kg	1	☼	6010D	Total/NA
Vanadium	14.5		1.70		mg/Kg	1	☼	6010D	Total/NA
Zinc	63.1		3.40		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: HA4(2) — Lab Sample ID: 620-5169-15

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	17.6		8.21		ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HA5(2) — Lab Sample ID: 620-5169-16

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	34.8		21.7		ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HA3,HA4,HA5 (2) — Lab Sample ID: 620-5169-17

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	232		161		ug/Kg	1	☼	8270D	Total/NA
Pyrene	187		161		ug/Kg	1	☼	8270D	Total/NA
TEPH (C9-C36)	157		33.1		mg/Kg	1	☼	8100	Total/NA
Barium	66.8		1.13		mg/Kg	1	☼	6010D	Total/NA
Beryllium	0.753		0.565		mg/Kg	1	☼	6010D	Total/NA
Chromium	15.6		1.13		mg/Kg	1	☼	6010D	Total/NA
Copper	23.2		1.13		mg/Kg	1	☼	6010D	Total/NA
Lead	86.5		1.69		mg/Kg	1	☼	6010D	Total/NA
Manganese	285		1.13		mg/Kg	1	☼	6010D	Total/NA
Nickel	8.93		1.13		mg/Kg	1	☼	6010D	Total/NA
Vanadium	14.9		1.69		mg/Kg	1	☼	6010D	Total/NA
Zinc	59.1		3.39		mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: HA13 (1.5) — Lab Sample ID: 620-5169-18

No Detections.

Client Sample ID: HA14 (1.5) — Lab Sample ID: 620-5169-19

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	29.9		13.6		ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: HA13,HA14(1.5) — Lab Sample ID: 620-5169-20

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	101		15.6		mg/Kg	1	☼	8100	Total/NA
Arsenic	2.10		1.62		mg/Kg	1	☼	6010D	Total/NA
Barium	22.0		1.08		mg/Kg	1	☼	6010D	Total/NA
Beryllium	1.06		0.540		mg/Kg	1	☼	6010D	Total/NA
Chromium	6.66		1.08		mg/Kg	1	☼	6010D	Total/NA
Copper	8.11		1.08		mg/Kg	1	☼	6010D	Total/NA
Lead	11.9		1.62		mg/Kg	1	☼	6010D	Total/NA
Manganese	120		1.08		mg/Kg	1	☼	6010D	Total/NA
Nickel	5.32		1.08		mg/Kg	1	☼	6010D	Total/NA
Vanadium	7.65		1.62		mg/Kg	1	☼	6010D	Total/NA
Zinc	38.3		3.24		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA15(1.5)

Lab Sample ID: 620-5169-21

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	23.2		8.88		ug/Kg	1	☼	8260C	Total/NA
TEPH (C9-C36)	37.3		13.7		mg/Kg	1	☼	8100	Total/NA
Barium	14.0		0.951		mg/Kg	1	☼	6010D	Total/NA
Chromium	2.73		0.951		mg/Kg	1	☼	6010D	Total/NA
Copper	3.87		0.951		mg/Kg	1	☼	6010D	Total/NA
Lead	6.59		1.43		mg/Kg	1	☼	6010D	Total/NA
Manganese	105		0.951		mg/Kg	1	☼	6010D	Total/NA
Nickel	2.23		0.951		mg/Kg	1	☼	6010D	Total/NA
Vanadium	5.17		1.43		mg/Kg	1	☼	6010D	Total/NA
Zinc	19.9		2.85		mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA3(1)
Date Collected: 06/14/22 08:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-1
Matrix: Solid
Percent Solids: 84.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Acetone	ND		44.8		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Acrylonitrile	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Benzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Bromobenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Bromochloromethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Bromodichloromethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Bromoform	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Bromomethane	ND	*+	8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
2-Butanone (MEK)	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
n-Butylbenzene	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
sec-Butylbenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
tert-Butylbenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Carbon disulfide	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Carbon tetrachloride	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Chlorobenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Chloroethane	ND	*+	8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Chloroform	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Chloromethane	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
2-Chlorotoluene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
4-Chlorotoluene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2-Dibromo-3-Chloropropane	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Dibromochloromethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2-Dibromoethane (EDB)	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Dibromomethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2-Dichlorobenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,3-Dichlorobenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,4-Dichlorobenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Dichlorodifluoromethane (Freon 12)	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,1-Dichloroethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2-Dichloroethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,1-Dichloroethene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
cis-1,2-Dichloroethene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
trans-1,2-Dichloroethene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2-Dichloropropane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,3-Dichloropropane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
2,2-Dichloropropane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,1-Dichloropropene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
cis-1,3-Dichloropropene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
trans-1,3-Dichloropropene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Ethylbenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Hexachlorobutadiene	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
2-Hexanone (MBK)	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Isopropylbenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
4-Isopropyltoluene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Methyl tert-butyl ether	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
4-Methyl-2-pentanone (MIBK)	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Methylene Chloride	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Naphthalene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA3(1)
Date Collected: 06/14/22 08:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-1
Matrix: Solid
Percent Solids: 84.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Styrene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,1,1,2-Tetrachloroethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,1,2,2-Tetrachloroethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Tetrachloroethene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Toluene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2,3-Trichlorobenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2,4-Trichlorobenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,3,5-Trichlorobenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,1,1-Trichloroethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,1,2-Trichloroethane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Trichloroethene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Trichlorofluoromethane (Freon 11)	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2,3-Trichloropropane	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,2,4-Trimethylbenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,3,5-Trimethylbenzene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Vinyl chloride	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
m,p-Xylene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
o-Xylene	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Tetrahydrofuran	ND		8.96		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Ethyl ether	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Tert-amyl methyl ether	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Ethyl tert-butyl ether	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
di-Isopropyl ether	ND		4.48		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
tert-Butanol	ND		89.6		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
1,4-Dioxane	ND	*-	89.6		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
trans-1,4-Dichloro-2-butene	ND		22.4		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1
Ethanol	ND		896		ug/Kg	☼	06/17/22 15:52	06/18/22 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*06/17/22 15:52*	*06/18/22 00:42*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*06/17/22 15:52*	*06/18/22 00:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*	*06/17/22 15:52*	*06/18/22 00:42*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*06/17/22 15:52*	*06/18/22 00:42*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.3**		0.1		%			06/20/22 10:49	1
Percent Solids	**84.7**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA6(1)
Date Collected: 06/14/22 09:15
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-2
Matrix: Solid
Percent Solids: 73.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Acetone	ND		52.8		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Acrylonitrile	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Benzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Bromobenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Bromochloromethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Bromodichloromethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Bromoform	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Bromomethane	ND	*+	10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
2-Butanone (MEK)	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
n-Butylbenzene	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
sec-Butylbenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
tert-Butylbenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Carbon disulfide	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Carbon tetrachloride	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Chlorobenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Chloroethane	ND	*+	10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Chloroform	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Chloromethane	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
2-Chlorotoluene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
4-Chlorotoluene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2-Dibromo-3-Chloropropane	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Dibromochloromethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2-Dibromoethane (EDB)	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Dibromomethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2-Dichlorobenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,3-Dichlorobenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,4-Dichlorobenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Dichlorodifluoromethane (Freon 12)	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,1-Dichloroethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2-Dichloroethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,1-Dichloroethene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
cis-1,2-Dichloroethene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
trans-1,2-Dichloroethene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2-Dichloropropane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,3-Dichloropropane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
2,2-Dichloropropane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,1-Dichloropropene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
cis-1,3-Dichloropropene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
trans-1,3-Dichloropropene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Ethylbenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Hexachlorobutadiene	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
2-Hexanone (MBK)	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Isopropylbenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
4-Isopropyltoluene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Methyl tert-butyl ether	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
4-Methyl-2-pentanone (MIBK)	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Methylene Chloride	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Naphthalene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA6(1)
Date Collected: 06/14/22 09:15
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-2
Matrix: Solid
Percent Solids: 73.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Styrene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,1,1,2-Tetrachloroethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,1,2,2-Tetrachloroethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Tetrachloroethene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Toluene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2,3-Trichlorobenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2,4-Trichlorobenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,3,5-Trichlorobenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,1,1-Trichloroethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,1,2-Trichloroethane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Trichloroethene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Trichlorofluoromethane (Freon 11)	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2,3-Trichloropropane	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,2,4-Trimethylbenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,3,5-Trimethylbenzene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Vinyl chloride	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
m,p-Xylene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
o-Xylene	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Tetrahydrofuran	ND		10.6		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Ethyl ether	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Tert-amyl methyl ether	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Ethyl tert-butyl ether	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
di-Isopropyl ether	ND		5.28		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
tert-Butanol	ND		106		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
1,4-Dioxane	ND	*-	106		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
trans-1,4-Dichloro-2-butene	ND		26.4		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1
Ethanol	ND		1060		ug/Kg	☼	06/17/22 15:52	06/18/22 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/17/22 15:52*	*06/18/22 01:08*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*06/17/22 15:52*	*06/18/22 01:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*06/17/22 15:52*	*06/18/22 01:08*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*	*06/17/22 15:52*	*06/18/22 01:08*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**26.4**		0.1		%			06/20/22 10:49	1
Percent Solids	**73.6**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA7(1)
Date Collected: 06/14/22 10:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-3
Matrix: Solid
Percent Solids: 84.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Acetone	ND		40.5		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Acrylonitrile	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Benzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Bromobenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Bromochloromethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Bromodichloromethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Bromoform	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Bromomethane	ND	*+	8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
2-Butanone (MEK)	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
n-Butylbenzene	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
sec-Butylbenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
tert-Butylbenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Carbon disulfide	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Carbon tetrachloride	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Chlorobenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Chloroethane	ND	*+	8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Chloroform	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Chloromethane	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
2-Chlorotoluene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
4-Chlorotoluene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2-Dibromo-3-Chloropropane	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Dibromochloromethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2-Dibromoethane (EDB)	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Dibromomethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2-Dichlorobenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,3-Dichlorobenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,4-Dichlorobenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Dichlorodifluoromethane (Freon 12)	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,1-Dichloroethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2-Dichloroethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,1-Dichloroethene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
cis-1,2-Dichloroethene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
trans-1,2-Dichloroethene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2-Dichloropropane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,3-Dichloropropane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
2,2-Dichloropropane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,1-Dichloropropene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
cis-1,3-Dichloropropene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
trans-1,3-Dichloropropene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Ethylbenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Hexachlorobutadiene	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
2-Hexanone (MBK)	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Isopropylbenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
4-Isopropyltoluene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Methyl tert-butyl ether	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
4-Methyl-2-pentanone (MIBK)	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Methylene Chloride	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Naphthalene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA7(1)
Date Collected: 06/14/22 10:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-3
Matrix: Solid
Percent Solids: 84.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Styrene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,1,1,2-Tetrachloroethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,1,2,2-Tetrachloroethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Tetrachloroethene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Toluene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2,3-Trichlorobenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2,4-Trichlorobenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,3,5-Trichlorobenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,1,1-Trichloroethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,1,2-Trichloroethane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Trichloroethene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Trichlorofluoromethane (Freon 11)	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2,3-Trichloropropane	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,2,4-Trimethylbenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,3,5-Trimethylbenzene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Vinyl chloride	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
m,p-Xylene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
o-Xylene	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Tetrahydrofuran	ND		8.09		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Ethyl ether	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Tert-amyl methyl ether	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Ethyl tert-butyl ether	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
di-Isopropyl ether	ND		4.05		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
tert-Butanol	ND		80.9		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
1,4-Dioxane	ND	*-	80.9		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
trans-1,4-Dichloro-2-butene	ND		20.2		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1
Ethanol	ND		809		ug/Kg	☼	06/17/22 15:52	06/18/22 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*06/17/22 15:52*	*06/18/22 01:34*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/17/22 15:52*	*06/18/22 01:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*06/17/22 15:52*	*06/18/22 01:34*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*	*06/17/22 15:52*	*06/18/22 01:34*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.4**		0.1		%			06/20/22 10:49	1
Percent Solids	**84.6**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA8(1)
Date Collected: 06/14/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-4
Matrix: Solid
Percent Solids: 89.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Acetone	ND		51.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Acrylonitrile	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Benzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Bromobenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Bromochloromethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Bromodichloromethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Bromoform	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Bromomethane	ND	*+	10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
2-Butanone (MEK)	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
n-Butylbenzene	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
sec-Butylbenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
tert-Butylbenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Carbon disulfide	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Carbon tetrachloride	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Chlorobenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Chloroethane	ND	*+	10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Chloroform	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Chloromethane	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
2-Chlorotoluene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
4-Chlorotoluene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2-Dibromo-3-Chloropropane	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Dibromochloromethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2-Dibromoethane (EDB)	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Dibromomethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2-Dichlorobenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,3-Dichlorobenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,4-Dichlorobenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Dichlorodifluoromethane (Freon 12)	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,1-Dichloroethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2-Dichloroethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,1-Dichloroethene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
cis-1,2-Dichloroethene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
trans-1,2-Dichloroethene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2-Dichloropropane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,3-Dichloropropane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
2,2-Dichloropropane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,1-Dichloropropene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
cis-1,3-Dichloropropene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
trans-1,3-Dichloropropene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Ethylbenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Hexachlorobutadiene	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
2-Hexanone (MBK)	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Isopropylbenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
4-Isopropyltoluene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Methyl tert-butyl ether	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
4-Methyl-2-pentanone (MIBK)	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Methylene Chloride	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Naphthalene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA8(1)
Date Collected: 06/14/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-4
Matrix: Solid
Percent Solids: 89.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Styrene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,1,1,2-Tetrachloroethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,1,2,2-Tetrachloroethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Tetrachloroethene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Toluene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2,3-Trichlorobenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2,4-Trichlorobenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,3,5-Trichlorobenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,1,1-Trichloroethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,1,2-Trichloroethane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Trichloroethene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Trichlorofluoromethane (Freon 11)	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2,3-Trichloropropane	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,2,4-Trimethylbenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,3,5-Trimethylbenzene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Vinyl chloride	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
m,p-Xylene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
o-Xylene	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Tetrahydrofuran	ND		10.3		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Ethyl ether	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Tert-amyl methyl ether	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Ethyl tert-butyl ether	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
di-Isopropyl ether	ND		5.14		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
tert-Butanol	ND		103		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
1,4-Dioxane	ND	*-	103		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
trans-1,4-Dichloro-2-butene	ND		25.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1
Ethanol	ND		1030		ug/Kg	☼	06/17/22 15:52	06/18/22 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:00*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:00*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:00*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**10.3**		0.1		%			06/20/22 10:49	1
Percent Solids	**89.7**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA6, HA7, HA8(1)
Date Collected: 06/14/22 10:45
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-5
Matrix: Solid
Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
2-Methylnaphthalene	ND		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Acenaphthene	ND		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Acenaphthylene	ND		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Anthracene	ND		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Benzo[a]anthracene	**660**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Benzo[a]pyrene	**594**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Benzo[b]fluoranthene	**643**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Benzo[g,h,i]perylene	**456**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Benzo[k]fluoranthene	**519**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Chrysene	**651**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Dibenz(a,h)anthracene	**158**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Fluoranthene	**1170**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Fluorene	ND		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Indeno[1,2,3-cd]pyrene	**428**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Naphthalene	ND		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Phenanthrene	**512**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1
Pyrene	**976**		155		ug/Kg	☼	06/21/22 12:13	06/21/22 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*47*		*30 - 130*	*06/21/22 12:13*	*06/21/22 22:30*	*1*
2-Fluorobiphenyl (Surr)	*66*		*30 - 130*	*06/21/22 12:13*	*06/21/22 22:30*	*1*
Terphenyl-d14 (Surr)	*79*		*30 - 130*	*06/21/22 12:13*	*06/21/22 22:30*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
beta-BHC	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
delta-BHC	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
gamma-BHC (Lindane)	ND		2.37		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Heptachlor	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Aldrin	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Heptachlor epoxide	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Endosulfan I	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Dieldrin	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
4,4'-DDE	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Endrin	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Endosulfan II	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
4,4'-DDD	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Endosulfan sulfate	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
4,4'-DDT	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Methoxychlor	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Endrin ketone	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Endrin aldehyde	ND		9.48		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
cis-Chlordane	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
trans-Chlordane	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Toxaphene	ND		118		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1
Alachlor	ND		5.92		ug/Kg	☼	06/20/22 09:39	06/22/22 01:17	1

Client Sample ID: HA6, HA7, HA8(1)

Date Collected: 06/14/22 10:45
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-5

Matrix: Solid
Percent Solids: 83.8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*42*		*30 - 150*	*06/20/22 09:39*	*06/22/22 01:17*	*1*
Tetrachloro-m-xylene	*46*		*30 - 150*	*06/20/22 09:39*	*06/22/22 01:17*	*1*
DCB Decachlorobiphenyl (Surr)	*86*		*30 - 150*	*06/20/22 09:39*	*06/22/22 01:17*	*1*
DCB Decachlorobiphenyl (Surr)	*44*	*p*	*30 - 150*	*06/20/22 09:39*	*06/22/22 01:17*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1
PCB-1221	ND		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1
PCB-1232	ND		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1
PCB-1242	ND		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1
PCB-1248	ND		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1
PCB-1254	**71.0**		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1
PCB-1260	ND		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1
PCB-1262	ND		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1
PCB-1268	ND		23.7	ug/Kg	☼	06/20/22 09:39	06/21/22 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 150*	*06/20/22 09:39*	*06/21/22 13:33*	*1*
Tetrachloro-m-xylene	*71*		*30 - 150*	*06/20/22 09:39*	*06/21/22 13:33*	*1*
DCB Decachlorobiphenyl (Surr)	*67*		*30 - 150*	*06/20/22 09:39*	*06/21/22 13:33*	*1*
DCB Decachlorobiphenyl (Surr)	*55*		*30 - 150*	*06/20/22 09:39*	*06/21/22 13:33*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**238**		15.8	mg/Kg	☼	06/20/22 13:10	06/22/22 09:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*69*		*40 - 140*	*06/20/22 13:10*	*06/22/22 09:57*	*1*
o-Terphenyl (Surr)	*73*		*40 - 140*	*06/20/22 13:10*	*06/22/22 09:57*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.72	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Arsenic	**2.47**		1.72	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Barium	**42.0**		1.14	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Beryllium	**0.688**		0.572	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Cadmium	ND		0.572	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Chromium	**11.3**		1.14	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Copper	**16.1**		1.14	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Lead	**59.2**		1.72	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Manganese	**189**		1.14	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Nickel	**7.90**		1.14	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Selenium	ND		1.72	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Silver	ND	*-	1.72	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Thallium	ND		3.43	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Vanadium	**11.9**		1.72	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1
Zinc	**66.6**		3.43	mg/Kg	☼	06/17/22 08:54	06/17/22 19:22	1

Client Sample Results

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA6, HA7, HA8(1)

Date Collected: 06/14/22 10:45
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-5

Matrix: Solid
Percent Solids: 83.8

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0554		mg/Kg	☼	06/16/22 14:42	06/17/22 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.2		0.1		%			06/20/22 10:49	1
Percent Solids	83.8		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA9(1.5)
Date Collected: 06/14/22 11:15
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-6
Matrix: Solid
Percent Solids: 45.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Acetone	ND		167		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Acrylonitrile	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Benzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Bromobenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Bromochloromethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Bromodichloromethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Bromoform	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Bromomethane	ND	*+	33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
2-Butanone (MEK)	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
n-Butylbenzene	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
sec-Butylbenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
tert-Butylbenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Carbon disulfide	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Carbon tetrachloride	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Chlorobenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Chloroethane	ND	*+	33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Chloroform	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Chloromethane	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
2-Chlorotoluene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
4-Chlorotoluene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2-Dibromo-3-Chloropropane	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Dibromochloromethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2-Dibromoethane (EDB)	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Dibromomethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2-Dichlorobenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,3-Dichlorobenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,4-Dichlorobenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Dichlorodifluoromethane (Freon 12)	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,1-Dichloroethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2-Dichloroethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,1-Dichloroethene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
cis-1,2-Dichloroethene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
trans-1,2-Dichloroethene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2-Dichloropropane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,3-Dichloropropane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
2,2-Dichloropropane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,1-Dichloropropene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
cis-1,3-Dichloropropene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
trans-1,3-Dichloropropene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Ethylbenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Hexachlorobutadiene	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
2-Hexanone (MBK)	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Isopropylbenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
4-Isopropyltoluene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Methyl tert-butyl ether	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
4-Methyl-2-pentanone (MIBK)	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Methylene Chloride	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Naphthalene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1

Client Sample ID: HA9(1.5)
Date Collected: 06/14/22 11:15
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-6
Matrix: Solid
Percent Solids: 45.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Styrene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,1,1,2-Tetrachloroethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,1,2,2-Tetrachloroethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Tetrachloroethene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Toluene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2,3-Trichlorobenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2,4-Trichlorobenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,3,5-Trichlorobenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,1,1-Trichloroethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,1,2-Trichloroethane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Trichloroethene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Trichlorofluoromethane (Freon 11)	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2,3-Trichloropropane	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,2,4-Trimethylbenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,3,5-Trimethylbenzene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Vinyl chloride	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
m,p-Xylene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
o-Xylene	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Tetrahydrofuran	ND		33.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Ethyl ether	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Tert-amyl methyl ether	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Ethyl tert-butyl ether	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
di-Isopropyl ether	ND		16.7		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
tert-Butanol	ND		334		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
1,4-Dioxane	ND	*-	334		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
trans-1,4-Dichloro-2-butene	ND		83.5		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1
Ethanol	ND		3340		ug/Kg	☼	06/17/22 15:52	06/18/22 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:26*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:26*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:26*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**54.5**		0.1		%			06/20/22 10:49	1
Percent Solids	**45.5**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA10(1)
Date Collected: 06/14/22 11:50
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-7
Matrix: Solid
Percent Solids: 94.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Acetone	ND		57.2		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Acrylonitrile	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Benzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Bromobenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Bromochloromethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Bromodichloromethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Bromoform	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Bromomethane	ND	*+	11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
2-Butanone (MEK)	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
n-Butylbenzene	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
sec-Butylbenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
tert-Butylbenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Carbon disulfide	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Carbon tetrachloride	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Chlorobenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Chloroethane	ND	*+	11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Chloroform	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Chloromethane	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
2-Chlorotoluene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
4-Chlorotoluene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2-Dibromo-3-Chloropropane	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Dibromochloromethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2-Dibromoethane (EDB)	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Dibromomethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2-Dichlorobenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,3-Dichlorobenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,4-Dichlorobenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Dichlorodifluoromethane (Freon 12)	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,1-Dichloroethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2-Dichloroethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,1-Dichloroethene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
cis-1,2-Dichloroethene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
trans-1,2-Dichloroethene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2-Dichloropropane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,3-Dichloropropane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
2,2-Dichloropropane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,1-Dichloropropene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
cis-1,3-Dichloropropene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
trans-1,3-Dichloropropene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Ethylbenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Hexachlorobutadiene	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
2-Hexanone (MBK)	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Isopropylbenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
4-Isopropyltoluene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Methyl tert-butyl ether	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
4-Methyl-2-pentanone (MIBK)	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Methylene Chloride	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Naphthalene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA10(1)
Date Collected: 06/14/22 11:50
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-7
Matrix: Solid
Percent Solids: 94.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Styrene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,1,1,2-Tetrachloroethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,1,2,2-Tetrachloroethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Tetrachloroethene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Toluene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2,3-Trichlorobenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2,4-Trichlorobenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,3,5-Trichlorobenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,1,1-Trichloroethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,1,2-Trichloroethane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Trichloroethene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Trichlorofluoromethane (Freon 11)	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2,3-Trichloropropane	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,2,4-Trimethylbenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,3,5-Trimethylbenzene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Vinyl chloride	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
m,p-Xylene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
o-Xylene	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Tetrahydrofuran	ND		11.4		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Ethyl ether	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Tert-amyl methyl ether	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Ethyl tert-butyl ether	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
di-Isopropyl ether	ND		5.72		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
tert-Butanol	ND		114		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
1,4-Dioxane	ND	*-	114		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
trans-1,4-Dichloro-2-butene	ND		28.6		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1
Ethanol	ND		1140		ug/Kg	☼	06/17/22 15:52	06/18/22 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:52*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:52*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*	*06/17/22 15:52*	*06/18/22 02:52*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.6**		0.1		%			06/20/22 10:49	1
Percent Solids	**94.4**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA9, HA10(1)
Date Collected: 06/14/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-8
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
2-Methylnaphthalene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Acenaphthene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Acenaphthylene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Anthracene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Benzo[a]anthracene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Benzo[a]pyrene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Benzo[b]fluoranthene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Benzo[g,h,i]perylene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Benzo[k]fluoranthene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Chrysene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Dibenz(a,h)anthracene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Fluoranthene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Fluorene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Indeno[1,2,3-cd]pyrene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Naphthalene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Phenanthrene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5
Pyrene	ND		377		ug/Kg	☼	06/21/22 12:13	06/22/22 14:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*37*		*30 - 130*	*06/21/22 12:13*	*06/22/22 14:09*	*5*
2-Fluorobiphenyl (Surr)	*41*		*30 - 130*	*06/21/22 12:13*	*06/22/22 14:09*	*5*
Terphenyl-d14 (Surr)	*52*		*30 - 130*	*06/21/22 12:13*	*06/22/22 14:09*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
beta-BHC	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
delta-BHC	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
gamma-BHC (Lindane)	ND		2.26		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Heptachlor	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Aldrin	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Heptachlor epoxide	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Endosulfan I	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Dieldrin	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
4,4'-DDE	**14.4**		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Endrin	ND		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Endosulfan II	ND		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
4,4'-DDD	ND		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Endosulfan sulfate	ND		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
4,4'-DDT	**18.6**		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Methoxychlor	ND		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Endrin ketone	ND		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Endrin aldehyde	ND		9.03		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
cis-Chlordane	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
trans-Chlordane	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Toxaphene	ND		113		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1
Alachlor	ND		5.65		ug/Kg	☼	06/20/22 09:39	06/21/22 22:40	1

Client Sample ID: HA9, HA10(1)

Date Collected: 06/14/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-8

Matrix: Solid
Percent Solids: 87.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*55*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:40*	*1*
Tetrachloro-m-xylene	*58*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:40*	*1*
DCB Decachlorobiphenyl (Surr)	*74*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:40*	*1*
DCB Decachlorobiphenyl (Surr)	*57*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:40*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1
PCB-1221	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1
PCB-1232	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1
PCB-1242	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1
PCB-1248	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1
PCB-1254	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1
PCB-1260	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1
PCB-1262	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1
PCB-1268	ND		22.6	ug/Kg	☼	06/20/22 09:39	06/21/22 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*06/20/22 09:39*	*06/21/22 13:49*	*1*
Tetrachloro-m-xylene	*76*		*30 - 150*	*06/20/22 09:39*	*06/21/22 13:49*	*1*
DCB Decachlorobiphenyl (Surr)	*75*		*30 - 150*	*06/20/22 09:39*	*06/21/22 13:49*	*1*
DCB Decachlorobiphenyl (Surr)	*61*		*30 - 150*	*06/20/22 09:39*	*06/21/22 13:49*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**184**		30.4	mg/Kg	☼	06/20/22 13:10	06/22/22 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*85*		*40 - 140*	*06/20/22 13:10*	*06/22/22 15:06*	*1*
o-Terphenyl (Surr)	*80*		*40 - 140*	*06/20/22 13:10*	*06/22/22 15:06*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.45	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Arsenic	**1.66**		1.63	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Barium	**45.0**		1.09	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Beryllium	**0.726**		0.545	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Cadmium	ND		0.545	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Chromium	**13.6**		1.09	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Copper	**16.6**		1.09	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Lead	**41.0**		1.63	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Manganese	**198**		1.09	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Nickel	**7.45**		1.09	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Selenium	ND		1.63	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Silver	ND	*-	1.63	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Thallium	ND		3.27	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Vanadium	**11.9**		1.63	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1
Zinc	**53.5**		3.27	mg/Kg	☼	06/17/22 08:54	06/17/22 19:44	1

Client Sample Results

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA9, HA10(1)

Date Collected: 06/14/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-8

Matrix: Solid
Percent Solids: 87.4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0504		mg/Kg	☼	06/17/22 08:56	06/17/22 15:09	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.6		0.1		%			06/20/22 10:49	1
Percent Solids	87.4		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA11(1.5)
Date Collected: 06/14/22 13:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-9
Matrix: Solid
Percent Solids: 92.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Acetone	ND		51.1		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Acrylonitrile	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Benzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Bromobenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Bromochloromethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Bromodichloromethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Bromoform	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Bromomethane	ND	*+	10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
2-Butanone (MEK)	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
n-Butylbenzene	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
sec-Butylbenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
tert-Butylbenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Carbon disulfide	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Carbon tetrachloride	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Chlorobenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Chloroethane	ND	*+	10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Chloroform	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Chloromethane	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
2-Chlorotoluene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
4-Chlorotoluene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2-Dibromo-3-Chloropropane	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Dibromochloromethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2-Dibromoethane (EDB)	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Dibromomethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2-Dichlorobenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,3-Dichlorobenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,4-Dichlorobenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Dichlorodifluoromethane (Freon 12)	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,1-Dichloroethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2-Dichloroethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,1-Dichloroethene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
cis-1,2-Dichloroethene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
trans-1,2-Dichloroethene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2-Dichloropropane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,3-Dichloropropane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
2,2-Dichloropropane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,1-Dichloropropene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
cis-1,3-Dichloropropene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
trans-1,3-Dichloropropene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Ethylbenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Hexachlorobutadiene	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
2-Hexanone (MBK)	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Isopropylbenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
4-Isopropyltoluene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Methyl tert-butyl ether	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
4-Methyl-2-pentanone (MIBK)	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Methylene Chloride	**13.5**		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Naphthalene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA11(1.5)
Date Collected: 06/14/22 13:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-9
Matrix: Solid
Percent Solids: 92.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Styrene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,1,1,2-Tetrachloroethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,1,2,2-Tetrachloroethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Tetrachloroethene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Toluene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2,3-Trichlorobenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2,4-Trichlorobenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,3,5-Trichlorobenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,1,1-Trichloroethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,1,2-Trichloroethane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Trichloroethene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Trichlorofluoromethane (Freon 11)	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2,3-Trichloropropane	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,2,4-Trimethylbenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,3,5-Trimethylbenzene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Vinyl chloride	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
m,p-Xylene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
o-Xylene	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Tetrahydrofuran	ND		10.2		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Ethyl ether	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Tert-amyl methyl ether	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Ethyl tert-butyl ether	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
di-Isopropyl ether	ND		5.11		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
tert-Butanol	ND		102		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
1,4-Dioxane	ND	*-	102		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
trans-1,4-Dichloro-2-butene	ND		25.6		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1
Ethanol	ND		1020		ug/Kg	☼	06/17/22 15:52	06/18/22 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*06/17/22 15:52*	*06/18/22 03:18*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*06/17/22 15:52*	*06/18/22 03:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*	*06/17/22 15:52*	*06/18/22 03:18*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*	*06/17/22 15:52*	*06/18/22 03:18*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.7**		0.1		%			06/20/22 10:49	1
Percent Solids	**92.3**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA12(1)
Date Collected: 06/14/22 13:50
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-10
Matrix: Solid
Percent Solids: 91.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Acetone	ND		47.6		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Acrylonitrile	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Benzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Bromobenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Bromochloromethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Bromodichloromethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Bromoform	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Bromomethane	ND	*+	9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
2-Butanone (MEK)	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
n-Butylbenzene	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
sec-Butylbenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
tert-Butylbenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Carbon disulfide	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Carbon tetrachloride	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Chlorobenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Chloroethane	ND	*+	9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Chloroform	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Chloromethane	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
2-Chlorotoluene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
4-Chlorotoluene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2-Dibromo-3-Chloropropane	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Dibromochloromethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2-Dibromoethane (EDB)	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Dibromomethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2-Dichlorobenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,3-Dichlorobenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,4-Dichlorobenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Dichlorodifluoromethane (Freon 12)	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,1-Dichloroethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2-Dichloroethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,1-Dichloroethene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
cis-1,2-Dichloroethene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
trans-1,2-Dichloroethene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2-Dichloropropane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,3-Dichloropropane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
2,2-Dichloropropane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,1-Dichloropropene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
cis-1,3-Dichloropropene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
trans-1,3-Dichloropropene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Ethylbenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Hexachlorobutadiene	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
2-Hexanone (MBK)	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Isopropylbenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
4-Isopropyltoluene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Methyl tert-butyl ether	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
4-Methyl-2-pentanone (MIBK)	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Methylene Chloride	**13.2**		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Naphthalene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA12(1)
Date Collected: 06/14/22 13:50
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-10
Matrix: Solid
Percent Solids: 91.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Styrene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,1,1,2-Tetrachloroethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,1,2,2-Tetrachloroethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Tetrachloroethene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Toluene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2,3-Trichlorobenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2,4-Trichlorobenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,3,5-Trichlorobenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,1,1-Trichloroethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,1,2-Trichloroethane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Trichloroethene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Trichlorofluoromethane (Freon 11)	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2,3-Trichloropropane	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,2,4-Trimethylbenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,3,5-Trimethylbenzene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Vinyl chloride	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
m,p-Xylene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
o-Xylene	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Tetrahydrofuran	ND		9.51		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Ethyl ether	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Tert-amyl methyl ether	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Ethyl tert-butyl ether	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
di-Isopropyl ether	ND		4.76		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
tert-Butanol	ND		95.1		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
1,4-Dioxane	ND	*-	95.1		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
trans-1,4-Dichloro-2-butene	ND		23.8		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1
Ethanol	ND		951		ug/Kg	☼	06/17/22 15:52	06/18/22 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/17/22 15:52*	*06/18/22 03:44*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*06/17/22 15:52*	*06/18/22 03:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*	*06/17/22 15:52*	*06/18/22 03:44*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*	*06/17/22 15:52*	*06/18/22 03:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.1**		0.1		%			06/21/22 11:57	1
Percent Solids	**91.9**		0.1		%			06/21/22 11:57	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA11, HA12(1)

Date Collected: 06/14/22 14:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-11

Matrix: Solid
Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
2-Methylnaphthalene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Acenaphthene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Acenaphthylene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Anthracene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Benzo[a]anthracene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Benzo[a]pyrene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Benzo[b]fluoranthene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Benzo[g,h,i]perylene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Benzo[k]fluoranthene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Chrysene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Dibenz(a,h)anthracene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Fluoranthene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Fluorene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Indeno[1,2,3-cd]pyrene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Naphthalene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Phenanthrene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5
Pyrene	ND		360		ug/Kg	☼	06/21/22 12:13	06/22/22 15:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*30*		*30 - 130*	*06/21/22 12:13*	*06/22/22 15:06*	*5*
2-Fluorobiphenyl (Surr)	*38*		*30 - 130*	*06/21/22 12:13*	*06/22/22 15:06*	*5*
Terphenyl-d14 (Surr)	*53*		*30 - 130*	*06/21/22 12:13*	*06/22/22 15:06*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
beta-BHC	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
delta-BHC	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
gamma-BHC (Lindane)	ND		2.10		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Heptachlor	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Aldrin	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Heptachlor epoxide	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Endosulfan I	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Dieldrin	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
4,4'-DDE	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Endrin	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Endosulfan II	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
4,4'-DDD	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Endosulfan sulfate	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
4,4'-DDT	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Methoxychlor	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Endrin ketone	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Endrin aldehyde	ND		8.42		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
cis-Chlordane	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
trans-Chlordane	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Toxaphene	ND		105		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1
Alachlor	ND		5.26		ug/Kg	☼	06/20/22 09:39	06/22/22 01:33	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA11, HA12(1)
Date Collected: 06/14/22 14:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-11
Matrix: Solid
Percent Solids: 91.1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 150*	*06/20/22 09:39*	*06/22/22 01:33*	*1*
Tetrachloro-m-xylene	*70*		*30 - 150*	*06/20/22 09:39*	*06/22/22 01:33*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*30 - 150*	*06/20/22 09:39*	*06/22/22 01:33*	*1*
DCB Decachlorobiphenyl (Surr)	*59*	*p*	*30 - 150*	*06/20/22 09:39*	*06/22/22 01:33*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1
PCB-1221	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1
PCB-1232	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1
PCB-1242	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1
PCB-1248	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1
PCB-1254	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1
PCB-1260	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1
PCB-1262	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1
PCB-1268	ND		21.0	ug/Kg	☼	06/20/22 09:39	06/21/22 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:06*	*1*
Tetrachloro-m-xylene	*90*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:06*	*1*
DCB Decachlorobiphenyl (Surr)	*75*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:06*	*1*
DCB Decachlorobiphenyl (Surr)	*59*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:06*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**74.6**		14.5	mg/Kg	☼	06/20/22 13:10	06/22/22 09:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*42*		*40 - 140*	*06/20/22 13:10*	*06/22/22 09:07*	*1*
o-Terphenyl (Surr)	*44*		*40 - 140*	*06/20/22 13:10*	*06/22/22 09:07*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.11	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Arsenic	**2.89**		1.53	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Barium	**28.7**		1.02	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Beryllium	**0.676**		0.511	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Cadmium	ND		0.511	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Chromium	**8.89**		1.02	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Copper	**10.5**		1.02	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Lead	**19.5**		1.53	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Manganese	**138**		1.02	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Nickel	**5.25**		1.02	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Selenium	ND		1.53	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Silver	ND	*-	1.53	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Thallium	ND		3.06	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Vanadium	**10.9**		1.53	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1
Zinc	**37.1**		3.06	mg/Kg	☼	06/17/22 08:54	06/17/22 19:51	1

Client Sample Results

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA11, HA12(1)

Date Collected: 06/14/22 14:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-11

Matrix: Solid
Percent Solids: 91.1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0517		mg/Kg	☼	06/17/22 08:56	06/17/22 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.9		0.1		%			06/20/22 10:49	1
Percent Solids	91.1		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA1(1.5)
Date Collected: 06/15/22 08:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-12
Matrix: Solid
Percent Solids: 82.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Acetone	ND		54.3		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Acrylonitrile	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Benzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Bromobenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Bromochloromethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Bromodichloromethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Bromoform	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Bromomethane	ND	*+	10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
2-Butanone (MEK)	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
n-Butylbenzene	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
sec-Butylbenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
tert-Butylbenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Carbon disulfide	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Carbon tetrachloride	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Chlorobenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Chloroethane	ND	*+	10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Chloroform	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Chloromethane	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
2-Chlorotoluene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
4-Chlorotoluene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2-Dibromo-3-Chloropropane	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Dibromochloromethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2-Dibromoethane (EDB)	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Dibromomethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2-Dichlorobenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,3-Dichlorobenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,4-Dichlorobenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Dichlorodifluoromethane (Freon 12)	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,1-Dichloroethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2-Dichloroethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,1-Dichloroethene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
cis-1,2-Dichloroethene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
trans-1,2-Dichloroethene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2-Dichloropropane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,3-Dichloropropane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
2,2-Dichloropropane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,1-Dichloropropene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
cis-1,3-Dichloropropene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
trans-1,3-Dichloropropene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Ethylbenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Hexachlorobutadiene	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
2-Hexanone (MBK)	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Isopropylbenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
4-Isopropyltoluene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Methyl tert-butyl ether	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
4-Methyl-2-pentanone (MIBK)	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Methylene Chloride	**14.7**		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Naphthalene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1

Client Sample ID: HA1(1.5)
Date Collected: 06/15/22 08:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-12
Matrix: Solid
Percent Solids: 82.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Styrene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,1,1,2-Tetrachloroethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,1,2,2-Tetrachloroethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Tetrachloroethene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Toluene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2,3-Trichlorobenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2,4-Trichlorobenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,3,5-Trichlorobenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,1,1-Trichloroethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,1,2-Trichloroethane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Trichloroethene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Trichlorofluoromethane (Freon 11)	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2,3-Trichloropropane	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,2,4-Trimethylbenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,3,5-Trimethylbenzene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Vinyl chloride	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
m,p-Xylene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
o-Xylene	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Tetrahydrofuran	ND		10.9		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Ethyl ether	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Tert-amyl methyl ether	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Ethyl tert-butyl ether	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
di-Isopropyl ether	ND		5.43		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
tert-Butanol	ND		109		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
1,4-Dioxane	ND	*-	109		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
trans-1,4-Dichloro-2-butene	ND		27.1		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1
Ethanol	ND		1090		ug/Kg	☼	06/17/22 15:52	06/18/22 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*06/17/22 15:52*	*06/18/22 04:09*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*06/17/22 15:52*	*06/18/22 04:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*06/17/22 15:52*	*06/18/22 04:09*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*	*06/17/22 15:52*	*06/18/22 04:09*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.1**		0.1		%			06/20/22 10:49	1
Percent Solids	**82.9**		0.1		%			06/20/22 10:49	1

Client Sample ID: HA2(1.5)
Date Collected: 06/15/22 09:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-13
Matrix: Solid
Percent Solids: 81.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Acetone	ND		71.5		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Acrylonitrile	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Benzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Bromobenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Bromochloromethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Bromodichloromethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Bromoform	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Bromomethane	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
2-Butanone (MEK)	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
n-Butylbenzene	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
sec-Butylbenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
tert-Butylbenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Carbon disulfide	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Carbon tetrachloride	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Chlorobenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Chloroethane	ND	*+	14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Chloroform	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Chloromethane	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
2-Chlorotoluene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
4-Chlorotoluene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2-Dibromo-3-Chloropropane	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Dibromochloromethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2-Dibromoethane (EDB)	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Dibromomethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2-Dichlorobenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,3-Dichlorobenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,4-Dichlorobenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Dichlorodifluoromethane (Freon 12)	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,1-Dichloroethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2-Dichloroethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,1-Dichloroethene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
cis-1,2-Dichloroethene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
trans-1,2-Dichloroethene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2-Dichloropropane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,3-Dichloropropane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
2,2-Dichloropropane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,1-Dichloropropene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
cis-1,3-Dichloropropene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
trans-1,3-Dichloropropene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Ethylbenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Hexachlorobutadiene	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
2-Hexanone (MBK)	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Isopropylbenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
4-Isopropyltoluene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Methyl tert-butyl ether	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
4-Methyl-2-pentanone (MIBK)	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Methylene Chloride	**15.4**		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Naphthalene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1

Client Sample ID: HA2(1.5)
Date Collected: 06/15/22 09:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-13
Matrix: Solid
Percent Solids: 81.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Styrene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,1,1,2-Tetrachloroethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,1,2,2-Tetrachloroethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Tetrachloroethene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Toluene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2,3-Trichlorobenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2,4-Trichlorobenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,3,5-Trichlorobenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,1,1-Trichloroethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,1,2-Trichloroethane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Trichloroethene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Trichlorofluoromethane (Freon 11)	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2,3-Trichloropropane	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,2,4-Trimethylbenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,3,5-Trimethylbenzene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Vinyl chloride	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
m,p-Xylene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
o-Xylene	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Tetrahydrofuran	ND		14.3		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Ethyl ether	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Tert-amyl methyl ether	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Ethyl tert-butyl ether	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
di-Isopropyl ether	ND		7.15		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
tert-Butanol	ND		143		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
1,4-Dioxane	ND	*-	143		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
trans-1,4-Dichloro-2-butene	ND		35.8		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1
Ethanol	ND		1430		ug/Kg	☼	06/22/22 09:32	06/22/22 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/22/22 09:32*	*06/22/22 14:43*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*	*06/22/22 09:32*	*06/22/22 14:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 130*	*06/22/22 09:32*	*06/22/22 14:43*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*	*06/22/22 09:32*	*06/22/22 14:43*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.9**		0.1		%			06/20/22 10:49	1
Percent Solids	**81.1**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA1,HA2(1.5)

Date Collected: 06/15/22 09:05
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-14

Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
2-Methylnaphthalene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Acenaphthene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Acenaphthylene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Anthracene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Benzo[a]anthracene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Benzo[a]pyrene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Benzo[b]fluoranthene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Benzo[g,h,i]perylene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Benzo[k]fluoranthene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Chrysene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Dibenz(a,h)anthracene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Fluoranthene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Fluorene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Indeno[1,2,3-cd]pyrene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Naphthalene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Phenanthrene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1
Pyrene	ND		78.5		ug/Kg	☼	06/21/22 12:13	06/21/22 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*31*		*30 - 130*	*06/21/22 12:13*	*06/21/22 23:55*	*1*
2-Fluorobiphenyl (Surr)	*39*		*30 - 130*	*06/21/22 12:13*	*06/21/22 23:55*	*1*
Terphenyl-d14 (Surr)	*47*		*30 - 130*	*06/21/22 12:13*	*06/21/22 23:55*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
beta-BHC	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
delta-BHC	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
gamma-BHC (Lindane)	ND		2.23		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Heptachlor	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Aldrin	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Heptachlor epoxide	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Endosulfan I	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Dieldrin	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
4,4'-DDE	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Endrin	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Endosulfan II	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
4,4'-DDD	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Endosulfan sulfate	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
4,4'-DDT	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Methoxychlor	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Endrin ketone	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Endrin aldehyde	ND		8.93		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
cis-Chlordane	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
trans-Chlordane	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Toxaphene	ND		112		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1
Alachlor	ND		5.58		ug/Kg	☼	06/20/22 09:39	06/21/22 22:24	1

Client Sample ID: HA1,HA2(1.5)

Date Collected: 06/15/22 09:05
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-14

Matrix: Solid
Percent Solids: 83.9

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*54*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:24*	*1*
Tetrachloro-m-xylene	*53*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:24*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:24*	*1*
DCB Decachlorobiphenyl (Surr)	*51*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:24*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1
PCB-1221	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1
PCB-1232	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1
PCB-1242	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1
PCB-1248	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1
PCB-1254	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1
PCB-1260	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1
PCB-1262	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1
PCB-1268	ND		22.3	ug/Kg	☼	06/20/22 09:39	06/21/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:23*	*1*
Tetrachloro-m-xylene	*71*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:23*	*1*
DCB Decachlorobiphenyl (Surr)	*66*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:23*	*1*
DCB Decachlorobiphenyl (Surr)	*48*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:23*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**87.8**		15.3	mg/Kg	☼	06/20/22 13:10	06/22/22 09:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*45*		*40 - 140*	*06/20/22 13:10*	*06/22/22 09:32*	*1*
o-Terphenyl (Surr)	*48*		*40 - 140*	*06/20/22 13:10*	*06/22/22 09:32*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.66	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Arsenic	**1.80**		1.70	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Barium	**56.9**		11.3	mg/Kg	☼	06/17/22 08:54	06/20/22 13:15	10
Beryllium	**2.02**		0.566	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Cadmium	ND		0.566	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Chromium	**15.4**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Copper	**28.1**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Lead	**19.2**		1.70	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Manganese	**187**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Nickel	**10.1**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Selenium	ND		1.70	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Silver	ND	*-	1.70	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Thallium	ND		3.40	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Vanadium	**14.5**		1.70	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1
Zinc	**63.1**		3.40	mg/Kg	☼	06/17/22 08:54	06/17/22 19:58	1

Client Sample Results

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA1,HA2(1.5)

Date Collected: 06/15/22 09:05
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-14

Matrix: Solid
Percent Solids: 83.9

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0553		mg/Kg	☼	06/17/22 08:56	06/17/22 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.1		0.1		%			06/20/22 10:49	1
Percent Solids	83.9		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA4(2)
Date Collected: 06/15/22 09:45
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-15
Matrix: Solid
Percent Solids: 93.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Acetone	ND		41.1		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Acrylonitrile	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Benzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Bromobenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Bromochloromethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Bromodichloromethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Bromoform	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Bromomethane	ND	*+	8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
2-Butanone (MEK)	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
n-Butylbenzene	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
sec-Butylbenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
tert-Butylbenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Carbon disulfide	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Carbon tetrachloride	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Chlorobenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Chloroethane	ND	*+	8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Chloroform	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Chloromethane	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
2-Chlorotoluene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
4-Chlorotoluene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2-Dibromo-3-Chloropropane	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Dibromochloromethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2-Dibromoethane (EDB)	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Dibromomethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2-Dichlorobenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,3-Dichlorobenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,4-Dichlorobenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Dichlorodifluoromethane (Freon 12)	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,1-Dichloroethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2-Dichloroethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,1-Dichloroethene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
cis-1,2-Dichloroethene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
trans-1,2-Dichloroethene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2-Dichloropropane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,3-Dichloropropane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
2,2-Dichloropropane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,1-Dichloropropene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
cis-1,3-Dichloropropene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
trans-1,3-Dichloropropene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Ethylbenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Hexachlorobutadiene	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
2-Hexanone (MBK)	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Isopropylbenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
4-Isopropyltoluene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Methyl tert-butyl ether	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
4-Methyl-2-pentanone (MIBK)	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Methylene Chloride	**17.6**		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Naphthalene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1

Client Sample ID: HA4(2)
Date Collected: 06/15/22 09:45
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-15
Matrix: Solid
Percent Solids: 93.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Styrene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,1,1,2-Tetrachloroethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,1,2,2-Tetrachloroethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Tetrachloroethene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Toluene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2,3-Trichlorobenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2,4-Trichlorobenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,3,5-Trichlorobenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,1,1-Trichloroethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,1,2-Trichloroethane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Trichloroethene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Trichlorofluoromethane (Freon 11)	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2,3-Trichloropropane	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,2,4-Trimethylbenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,3,5-Trimethylbenzene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Vinyl chloride	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
m,p-Xylene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
o-Xylene	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Tetrahydrofuran	ND		8.21		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Ethyl ether	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Tert-amyl methyl ether	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Ethyl tert-butyl ether	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
di-Isopropyl ether	ND		4.11		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
tert-Butanol	ND		82.1		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
1,4-Dioxane	ND	*-	82.1		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
trans-1,4-Dichloro-2-butene	ND		20.5		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1
Ethanol	ND		821		ug/Kg	☼	06/17/22 15:52	06/18/22 05:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/17/22 15:52*	*06/18/22 05:01*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*06/17/22 15:52*	*06/18/22 05:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*06/17/22 15:52*	*06/18/22 05:01*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*06/17/22 15:52*	*06/18/22 05:01*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.3**		0.1		%			06/20/22 10:49	1
Percent Solids	**93.7**		0.1		%			06/20/22 10:49	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA5(2)
Date Collected: 06/15/22 10:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-16
Matrix: Solid
Percent Solids: 56.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Acetone	ND		108		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Acrylonitrile	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Benzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Bromobenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Bromochloromethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Bromodichloromethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Bromoform	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Bromomethane	ND	*+	21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
2-Butanone (MEK)	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
n-Butylbenzene	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
sec-Butylbenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
tert-Butylbenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Carbon disulfide	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Carbon tetrachloride	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Chlorobenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Chloroethane	ND	*+	21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Chloroform	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Chloromethane	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
2-Chlorotoluene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
4-Chlorotoluene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2-Dibromo-3-Chloropropane	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Dibromochloromethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2-Dibromoethane (EDB)	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Dibromomethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2-Dichlorobenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,3-Dichlorobenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,4-Dichlorobenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Dichlorodifluoromethane (Freon 12)	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,1-Dichloroethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2-Dichloroethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,1-Dichloroethene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
cis-1,2-Dichloroethene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
trans-1,2-Dichloroethene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2-Dichloropropane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,3-Dichloropropane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
2,2-Dichloropropane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,1-Dichloropropene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
cis-1,3-Dichloropropene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
trans-1,3-Dichloropropene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Ethylbenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Hexachlorobutadiene	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
2-Hexanone (MBK)	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Isopropylbenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
4-Isopropyltoluene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Methyl tert-butyl ether	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
4-Methyl-2-pentanone (MIBK)	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Methylene Chloride	**34.8**		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Naphthalene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1

Client Sample ID: HA5(2)
Date Collected: 06/15/22 10:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-16
Matrix: Solid
Percent Solids: 56.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Styrene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,1,1,2-Tetrachloroethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,1,2,2-Tetrachloroethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Tetrachloroethene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Toluene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2,3-Trichlorobenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2,4-Trichlorobenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,3,5-Trichlorobenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,1,1-Trichloroethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,1,2-Trichloroethane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Trichloroethene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Trichlorofluoromethane (Freon 11)	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2,3-Trichloropropane	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,2,4-Trimethylbenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,3,5-Trimethylbenzene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Vinyl chloride	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
m,p-Xylene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
o-Xylene	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Tetrahydrofuran	ND		21.7		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Ethyl ether	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Tert-amyl methyl ether	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Ethyl tert-butyl ether	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
di-Isopropyl ether	ND		10.8		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
tert-Butanol	ND		217		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
1,4-Dioxane	ND	*-	217		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
trans-1,4-Dichloro-2-butene	ND		54.1		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1
Ethanol	ND		2170		ug/Kg	☼	06/17/22 15:52	06/18/22 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/17/22 15:52*	*06/18/22 05:27*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*06/17/22 15:52*	*06/18/22 05:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 130*	*06/17/22 15:52*	*06/18/22 05:27*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*	*06/17/22 15:52*	*06/18/22 05:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**43.1**		0.1		%			06/20/22 11:46	1
Percent Solids	**56.9**		0.1		%			06/20/22 11:46	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA3,HA4,HA5 (2)

Date Collected: 06/15/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-17

Matrix: Solid
Percent Solids: 80.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
2-Methylnaphthalene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Acenaphthene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Acenaphthylene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Anthracene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Benzo[a]anthracene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Benzo[a]pyrene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Benzo[b]fluoranthene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Benzo[g,h,i]perylene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Benzo[k]fluoranthene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Chrysene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Dibenz(a,h)anthracene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Fluoranthene	**232**		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Fluorene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Indeno[1,2,3-cd]pyrene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Naphthalene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Phenanthrene	ND		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1
Pyrene	**187**		161		ug/Kg	☼	06/21/22 12:13	06/22/22 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*62*		*30 - 130*	*06/21/22 12:13*	*06/22/22 00:23*	*1*
2-Fluorobiphenyl (Surr)	*77*		*30 - 130*	*06/21/22 12:13*	*06/22/22 00:23*	*1*
Terphenyl-d14 (Surr)	*98*		*30 - 130*	*06/21/22 12:13*	*06/22/22 00:23*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
beta-BHC	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
delta-BHC	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
gamma-BHC (Lindane)	ND		2.46		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Heptachlor	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Aldrin	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Heptachlor epoxide	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Endosulfan I	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Dieldrin	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
4,4'-DDE	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Endrin	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Endosulfan II	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
4,4'-DDD	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Endosulfan sulfate	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
4,4'-DDT	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Methoxychlor	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Endrin ketone	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Endrin aldehyde	ND		9.86		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
cis-Chlordane	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
trans-Chlordane	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Toxaphene	ND		123		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1
Alachlor	ND		6.16		ug/Kg	☼	06/20/22 09:39	06/21/22 22:08	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA3,HA4,HA5 (2)
Date Collected: 06/15/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-17
Matrix: Solid
Percent Solids: 80.2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*40*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:08*	*1*
Tetrachloro-m-xylene	*42*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:08*	*1*
DCB Decachlorobiphenyl (Surr)	*59*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:08*	*1*
DCB Decachlorobiphenyl (Surr)	*45*		*30 - 150*	*06/20/22 09:39*	*06/21/22 22:08*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1
PCB-1221	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1
PCB-1232	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1
PCB-1242	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1
PCB-1248	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1
PCB-1254	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1
PCB-1260	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1
PCB-1262	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1
PCB-1268	ND		24.6	ug/Kg	☼	06/20/22 09:39	06/21/22 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:40*	*1*
Tetrachloro-m-xylene	*68*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:40*	*1*
DCB Decachlorobiphenyl (Surr)	*55*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:40*	*1*
DCB Decachlorobiphenyl (Surr)	*50*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:40*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**157**		33.1	mg/Kg	☼	06/20/22 13:10	06/22/22 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*82*		*40 - 140*	*06/20/22 13:10*	*06/22/22 15:31*	*1*
o-Terphenyl (Surr)	*82*		*40 - 140*	*06/20/22 13:10*	*06/22/22 15:31*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.65	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Arsenic	ND		1.69	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Barium	**66.8**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Beryllium	**0.753**		0.565	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Cadmium	ND		0.565	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Chromium	**15.6**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Copper	**23.2**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Lead	**86.5**		1.69	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Manganese	**285**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Nickel	**8.93**		1.13	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Selenium	ND		1.69	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Silver	ND	*-	1.69	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Thallium	ND		3.39	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Vanadium	**14.9**		1.69	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1
Zinc	**59.1**		3.39	mg/Kg	☼	06/17/22 08:54	06/17/22 20:06	1

Client Sample Results

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA3,HA4,HA5 (2)

Date Collected: 06/15/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-17

Matrix: Solid
Percent Solids: 80.2

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0617		mg/Kg	☼	06/17/22 08:56	06/17/22 15:18	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.8		0.1		%			06/20/22 11:46	1
Percent Solids	80.2		0.1		%			06/20/22 11:46	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA13 (1.5)
Date Collected: 06/15/22 10:55
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-18
Matrix: Solid
Percent Solids: 88.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Acetone	ND		47.8		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Acrylonitrile	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Benzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Bromobenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Bromochloromethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Bromodichloromethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Bromoform	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Bromomethane	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
2-Butanone (MEK)	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
n-Butylbenzene	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
sec-Butylbenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
tert-Butylbenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Carbon disulfide	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Carbon tetrachloride	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Chlorobenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Chloroethane	ND	*+	9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Chloroform	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Chloromethane	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
2-Chlorotoluene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
4-Chlorotoluene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2-Dibromo-3-Chloropropane	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Dibromochloromethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2-Dibromoethane (EDB)	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Dibromomethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2-Dichlorobenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,3-Dichlorobenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,4-Dichlorobenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Dichlorodifluoromethane (Freon 12)	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,1-Dichloroethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2-Dichloroethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,1-Dichloroethene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
cis-1,2-Dichloroethene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
trans-1,2-Dichloroethene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2-Dichloropropane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,3-Dichloropropane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
2,2-Dichloropropane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,1-Dichloropropene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
cis-1,3-Dichloropropene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
trans-1,3-Dichloropropene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Ethylbenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Hexachlorobutadiene	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
2-Hexanone (MBK)	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Isopropylbenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
4-Isopropyltoluene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Methyl tert-butyl ether	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
4-Methyl-2-pentanone (MIBK)	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Methylene Chloride	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Naphthalene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA13 (1.5)

Date Collected: 06/15/22 10:55
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-18

Matrix: Solid
Percent Solids: 88.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Styrene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,1,1,2-Tetrachloroethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,1,2,2-Tetrachloroethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Tetrachloroethene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Toluene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2,3-Trichlorobenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2,4-Trichlorobenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,3,5-Trichlorobenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,1,1-Trichloroethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,1,2-Trichloroethane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Trichloroethene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Trichlorofluoromethane (Freon 11)	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2,3-Trichloropropane	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,2,4-Trimethylbenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,3,5-Trimethylbenzene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Vinyl chloride	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
m,p-Xylene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
o-Xylene	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Tetrahydrofuran	ND		9.57		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Ethyl ether	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Tert-amyl methyl ether	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Ethyl tert-butyl ether	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
di-Isopropyl ether	ND		4.78		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
tert-Butanol	ND		95.7		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
1,4-Dioxane	ND	*-	95.7		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
trans-1,4-Dichloro-2-butene	ND		23.9		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1
Ethanol	ND		957		ug/Kg	☼	06/21/22 09:49	06/21/22 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/21/22 09:49*	*06/21/22 16:37*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*06/21/22 09:49*	*06/21/22 16:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*	*06/21/22 09:49*	*06/21/22 16:37*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*06/21/22 09:49*	*06/21/22 16:37*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.7**		0.1		%			06/20/22 11:46	1
Percent Solids	**88.3**		0.1		%			06/20/22 11:46	1

Client Sample ID: HA14 (1.5)
Date Collected: 06/15/22 11:20
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-19
Matrix: Solid
Percent Solids: 79.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Acetone	ND		67.8		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Acrylonitrile	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Benzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Bromobenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Bromochloromethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Bromodichloromethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Bromoform	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Bromomethane	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
2-Butanone (MEK)	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
n-Butylbenzene	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
sec-Butylbenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
tert-Butylbenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Carbon disulfide	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Carbon tetrachloride	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Chlorobenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Chloroethane	ND	*+	13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Chloroform	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Chloromethane	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
2-Chlorotoluene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
4-Chlorotoluene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2-Dibromo-3-Chloropropane	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Dibromochloromethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2-Dibromoethane (EDB)	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Dibromomethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2-Dichlorobenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,3-Dichlorobenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,4-Dichlorobenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Dichlorodifluoromethane (Freon 12)	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,1-Dichloroethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2-Dichloroethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,1-Dichloroethene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
cis-1,2-Dichloroethene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
trans-1,2-Dichloroethene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2-Dichloropropane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,3-Dichloropropane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
2,2-Dichloropropane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,1-Dichloropropene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
cis-1,3-Dichloropropene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
trans-1,3-Dichloropropene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Ethylbenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Hexachlorobutadiene	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
2-Hexanone (MBK)	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Isopropylbenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
4-Isopropyltoluene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Methyl tert-butyl ether	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
4-Methyl-2-pentanone (MIBK)	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Methylene Chloride	**29.9**		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Naphthalene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1

Client Sample ID: HA14 (1.5)
Date Collected: 06/15/22 11:20
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-19
Matrix: Solid
Percent Solids: 79.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Styrene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,1,1,2-Tetrachloroethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,1,2,2-Tetrachloroethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Tetrachloroethene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Toluene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2,3-Trichlorobenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2,4-Trichlorobenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,3,5-Trichlorobenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,1,1-Trichloroethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,1,2-Trichloroethane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Trichloroethene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Trichlorofluoromethane (Freon 11)	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2,3-Trichloropropane	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,2,4-Trimethylbenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,3,5-Trimethylbenzene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Vinyl chloride	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
m,p-Xylene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
o-Xylene	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Tetrahydrofuran	ND		13.6		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Ethyl ether	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Tert-amyl methyl ether	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Ethyl tert-butyl ether	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
di-Isopropyl ether	ND		6.78		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
tert-Butanol	ND		136		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
1,4-Dioxane	ND	*-	136		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
trans-1,4-Dichloro-2-butene	ND		33.9		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1
Ethanol	ND		1360		ug/Kg	☼	06/21/22 09:49	06/21/22 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*06/21/22 09:49*	*06/21/22 17:03*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*06/21/22 09:49*	*06/21/22 17:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*	*06/21/22 09:49*	*06/21/22 17:03*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*06/21/22 09:49*	*06/21/22 17:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.5**		0.1		%			06/20/22 11:46	1
Percent Solids	**79.5**		0.1		%			06/20/22 11:46	1

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA13,HA14(1.5)

Date Collected: 06/15/22 11:25
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-20

Matrix: Solid
Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
2-Methylnaphthalene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Acenaphthene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Acenaphthylene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Anthracene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Benzo[a]anthracene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Benzo[a]pyrene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Benzo[b]fluoranthene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Benzo[g,h,i]perylene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Benzo[k]fluoranthene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Chrysene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Dibenz(a,h)anthracene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Fluoranthene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Fluorene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Indeno[1,2,3-cd]pyrene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Naphthalene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Phenanthrene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1
Pyrene	ND		78.2		ug/Kg	☼	06/21/22 12:13	06/21/22 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*18*	*S1-*	*30 - 130*	*06/21/22 12:13*	*06/21/22 22:02*	*1*
2-Fluorobiphenyl (Surr)	*25*	*S1-*	*30 - 130*	*06/21/22 12:13*	*06/21/22 22:02*	*1*
Terphenyl-d14 (Surr)	*28*	*S1-*	*30 - 130*	*06/21/22 12:13*	*06/21/22 22:02*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
beta-BHC	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
delta-BHC	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
gamma-BHC (Lindane)	ND		2.38		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Heptachlor	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Aldrin	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Heptachlor epoxide	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Endosulfan I	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Dieldrin	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
4,4'-DDE	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Endrin	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Endosulfan II	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
4,4'-DDD	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Endosulfan sulfate	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
4,4'-DDT	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Methoxychlor	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Endrin ketone	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Endrin aldehyde	ND		9.51		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
cis-Chlordane	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
trans-Chlordane	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Toxaphene	ND		119		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1
Alachlor	ND		5.95		ug/Kg	☼	06/20/22 09:39	06/21/22 21:04	1

Client Sample ID: HA13,HA14(1.5)

Date Collected: 06/15/22 11:25
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-20

Matrix: Solid
Percent Solids: 83.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*45*		*30 - 150*	*06/20/22 09:39*	*06/21/22 21:04*	*1*
Tetrachloro-m-xylene	*46*		*30 - 150*	*06/20/22 09:39*	*06/21/22 21:04*	*1*
DCB Decachlorobiphenyl (Surr)	*64*		*30 - 150*	*06/20/22 09:39*	*06/21/22 21:04*	*1*
DCB Decachlorobiphenyl (Surr)	*46*		*30 - 150*	*06/20/22 09:39*	*06/21/22 21:04*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1
PCB-1221	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1
PCB-1232	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1
PCB-1242	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1
PCB-1248	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1
PCB-1254	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1
PCB-1260	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1
PCB-1262	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1
PCB-1268	ND		23.8	ug/Kg	☼	06/20/22 09:39	06/21/22 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:57*	*1*
Tetrachloro-m-xylene	*59*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:57*	*1*
DCB Decachlorobiphenyl (Surr)	*55*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:57*	*1*
DCB Decachlorobiphenyl (Surr)	*49*		*30 - 150*	*06/20/22 09:39*	*06/21/22 14:57*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**101**		15.6	mg/Kg	☼	06/20/22 13:10	06/21/22 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*49*		*40 - 140*	*06/20/22 13:10*	*06/21/22 21:53*	*1*
o-Terphenyl (Surr)	*46*		*40 - 140*	*06/20/22 13:10*	*06/21/22 21:53*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.40	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Arsenic	**2.10**		1.62	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Barium	**22.0**		1.08	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Beryllium	**1.06**		0.540	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Cadmium	ND		0.540	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Chromium	**6.66**		1.08	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Copper	**8.11**		1.08	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Lead	**11.9**		1.62	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Manganese	**120**		1.08	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Nickel	**5.32**		1.08	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Selenium	ND		1.62	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Silver	ND	*-	1.62	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Thallium	ND		3.24	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Vanadium	**7.65**		1.62	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1
Zinc	**38.3**		3.24	mg/Kg	☼	06/17/22 08:54	06/17/22 20:13	1

Client Sample Results

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA13,HA14(1.5)

Date Collected: 06/15/22 11:25
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-20

Matrix: Solid
Percent Solids: 83.6

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0549		mg/Kg	☼	06/17/22 08:56	06/17/22 15:20	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.3		0.1		%			06/20/22 11:46	1
Percent Solids	83.7		0.1		%			06/20/22 11:46	1

Client Sample ID: HA15(1.5)
Date Collected: 06/15/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-21
Matrix: Solid
Percent Solids: 94.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Acetone	ND		44.4		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Acrylonitrile	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Benzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Bromobenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Bromochloromethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Bromodichloromethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Bromoform	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Bromomethane	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
2-Butanone (MEK)	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
n-Butylbenzene	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
sec-Butylbenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
tert-Butylbenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Carbon disulfide	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Carbon tetrachloride	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Chlorobenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Chloroethane	ND	*+	8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Chloroform	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Chloromethane	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
2-Chlorotoluene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
4-Chlorotoluene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2-Dibromo-3-Chloropropane	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Dibromochloromethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2-Dibromoethane (EDB)	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Dibromomethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2-Dichlorobenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,3-Dichlorobenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,4-Dichlorobenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Dichlorodifluoromethane (Freon 12)	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,1-Dichloroethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2-Dichloroethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,1-Dichloroethene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
cis-1,2-Dichloroethene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
trans-1,2-Dichloroethene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2-Dichloropropane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,3-Dichloropropane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
2,2-Dichloropropane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,1-Dichloropropene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
cis-1,3-Dichloropropene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
trans-1,3-Dichloropropene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Ethylbenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Hexachlorobutadiene	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
2-Hexanone (MBK)	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Isopropylbenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
4-Isopropyltoluene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Methyl tert-butyl ether	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
4-Methyl-2-pentanone (MIBK)	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Methylene Chloride	**23.2**		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Naphthalene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1

Client Sample ID: HA15(1.5)
Date Collected: 06/15/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-21
Matrix: Solid
Percent Solids: 94.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Styrene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,1,1,2-Tetrachloroethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,1,2,2-Tetrachloroethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Tetrachloroethene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Toluene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2,3-Trichlorobenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2,4-Trichlorobenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,3,5-Trichlorobenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,1,1-Trichloroethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,1,2-Trichloroethane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Trichloroethene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Trichlorofluoromethane (Freon 11)	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2,3-Trichloropropane	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,2,4-Trimethylbenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,3,5-Trimethylbenzene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Vinyl chloride	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
m,p-Xylene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
o-Xylene	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Tetrahydrofuran	ND		8.88		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Ethyl ether	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Tert-amyl methyl ether	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Ethyl tert-butyl ether	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
di-Isopropyl ether	ND		4.44		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
tert-Butanol	ND		88.8		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
1,4-Dioxane	ND	*-	88.8		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
trans-1,4-Dichloro-2-butene	ND		22.2		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1
Ethanol	ND		888		ug/Kg	☼	06/21/22 09:49	06/21/22 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/21/22 09:49*	*06/21/22 17:29*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*	*06/21/22 09:49*	*06/21/22 17:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*	*06/21/22 09:49*	*06/21/22 17:29*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*06/21/22 09:49*	*06/21/22 17:29*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
2-Methylnaphthalene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Acenaphthene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Acenaphthylene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Anthracene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Benzo[a]anthracene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Benzo[a]pyrene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Benzo[b]fluoranthene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Benzo[g,h,i]perylene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Benzo[k]fluoranthene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Chrysene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Dibenz(a,h)anthracene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Fluoranthene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1

Client Sample ID: HA15(1.5)
Date Collected: 06/15/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-21
Matrix: Solid
Percent Solids: 94.8

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Indeno[1,2,3-cd]pyrene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Naphthalene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Phenanthrene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1
Pyrene	ND		67.2		ug/Kg	☼	06/21/22 12:13	06/21/22 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*9*	*S1-*	*30 - 130*	*06/21/22 12:13*	*06/21/22 21:33*	*1*
2-Fluorobiphenyl (Surr)	*24*	*S1-*	*30 - 130*	*06/21/22 12:13*	*06/21/22 21:33*	*1*
Terphenyl-d14 (Surr)	*44*		*30 - 130*	*06/21/22 12:13*	*06/21/22 21:33*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
beta-BHC	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
delta-BHC	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
gamma-BHC (Lindane)	ND		2.09		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Heptachlor	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Aldrin	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Heptachlor epoxide	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Endosulfan I	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Dieldrin	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
4,4'-DDE	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Endrin	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Endosulfan II	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
4,4'-DDD	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Endosulfan sulfate	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
4,4'-DDT	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Methoxychlor	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Endrin ketone	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Endrin aldehyde	ND		8.36		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
cis-Chlordane	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
trans-Chlordane	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Toxaphene	ND		104		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1
Alachlor	ND		5.22		ug/Kg	☼	06/20/22 09:39	06/21/22 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*30 - 150*	*06/20/22 09:39*	*06/21/22 19:13*	*1*
Tetrachloro-m-xylene	*60*		*30 - 150*	*06/20/22 09:39*	*06/21/22 19:13*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*30 - 150*	*06/20/22 09:39*	*06/21/22 19:13*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*30 - 150*	*06/20/22 09:39*	*06/21/22 19:13*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1
PCB-1221	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1
PCB-1232	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1
PCB-1242	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1
PCB-1248	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1
PCB-1254	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1

Client Sample ID: HA15(1.5)

Date Collected: 06/15/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-21

Matrix: Solid
Percent Solids: 94.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1
PCB-1262	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1
PCB-1268	ND		20.9		ug/Kg	☼	06/20/22 09:39	06/21/22 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*69*		*30 - 150*	*06/20/22 09:39*	*06/21/22 15:14*	*1*
Tetrachloro-m-xylene	*67*		*30 - 150*	*06/20/22 09:39*	*06/21/22 15:14*	*1*
DCB Decachlorobiphenyl (Surr)	*69*		*30 - 150*	*06/20/22 09:39*	*06/21/22 15:14*	*1*
DCB Decachlorobiphenyl (Surr)	*63*		*30 - 150*	*06/20/22 09:39*	*06/21/22 15:14*	*1*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**37.3**		13.7		mg/Kg	☼	06/20/22 13:10	06/21/22 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*72*		*40 - 140*	*06/20/22 13:10*	*06/21/22 19:22*	*1*
o-Terphenyl (Surr)	*60*		*40 - 140*	*06/20/22 13:10*	*06/21/22 19:22*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.75		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Arsenic	ND		1.43		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Barium	**14.0**		0.951		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Beryllium	ND		0.475		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Cadmium	ND		0.475		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Chromium	**2.73**		0.951		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Copper	**3.87**		0.951		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Lead	**6.59**		1.43		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Manganese	**105**		0.951		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Nickel	**2.23**		0.951		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Selenium	ND		1.43		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Silver	ND	*-	1.43		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Thallium	ND		2.85		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Vanadium	**5.17**		1.43		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1
Zinc	**19.9**		2.85		mg/Kg	☼	06/17/22 08:54	06/17/22 20:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0507		mg/Kg	☼	06/17/22 08:56	06/17/22 15:22	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.2**		0.1		%			06/20/22 11:46	1
Percent Solids	**94.8**		0.1		%			06/20/22 11:46	1

Surrogate Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-5169-1	HA3(1)	100	99	117	103
620-5169-2	HA6(1)	92	97	123	107
620-5169-3	HA7(1)	96	98	123	106
620-5169-4	HA8(1)	97	98	117	103
620-5169-6	HA9(1.5)	95	98	123	105
620-5169-7	HA10(1)	95	99	124	106
620-5169-9	HA11(1.5)	97	99	121	106
620-5169-10	HA12(1)	92	97	122	106
620-5169-12	HA1(1.5)	93	99	123	105
620-5169-13	HA2(1.5)	92	93	129	108
620-5169-15	HA4(2)	99	101	119	104
620-5169-16	HA5(2)	92	98	126	106
620-5169-18	HA13 (1.5)	92	94	125	103
620-5169-19	HA14 (1.5)	93	94	124	102
620-5169-21	HA15(1.5)	92	95	121	102
LCS 620-12056/1-A	Lab Control Sample	104	102	118	104
LCS 620-12129/1-A	Lab Control Sample	102	98	118	101
LCS 620-12184/1-A	Lab Control Sample	103	98	119	102
LCSD 620-12056/2-A	Lab Control Sample Dup	104	101	115	102
LCSD 620-12129/2-A	Lab Control Sample Dup	103	98	117	101
LCSD 620-12184/2-A	Lab Control Sample Dup	101	98	119	101
MB 620-12056/3-A	Method Blank	99	99	112	101
MB 620-12129/3-A	Method Blank	99	95	118	99
MB 620-12184/3-A	Method Blank	101	96	116	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(30-130)	(30-130)
620-5169-5	HA6, HA7, HA8(1)	47	66	79
620-5169-8	HA9, HA10(1)	37	41	52
620-5169-11	HA11, HA12(1)	30	38	53
620-5169-14	HA1,HA2(1.5)	31	39	47
620-5169-17	HA3,HA4,HA5 (2)	62	77	98
620-5169-20	HA13,HA14(1.5)	18 S1-	25 S1-	28 S1-
620-5169-21	HA15(1.5)	9 S1-	24 S1-	44
LCS 620-12152/2-A	Lab Control Sample	42	46	87
LCSD 620-12152/3-A	Lab Control Sample Dup	42	46	85
MB 620-12152/1-A	Method Blank	39	44	73

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)

Surrogate Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
620-5169-5	HA6, HA7, HA8(1)	42	46	86	44 p
620-5169-8	HA9, HA10(1)	55	58	74	57
620-5169-11	HA11, HA12(1)	71	70	94	59 p
620-5169-14	HA1,HA2(1.5)	54	53	68	51
620-5169-17	HA3,HA4,HA5 (2)	40	42	59	45
620-5169-20	HA13,HA14(1.5)	45	46	64	46
620-5169-21	HA15(1.5)	62	60	84	77
LCS 620-12081/23-A	Lab Control Sample	73	74	88	87
LCSD 620-12081/24-A	Lab Control Sample Dup	70	72	80	79
MB 620-12081/1-A	Method Blank	72	69	104	86

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
620-5169-5	HA6, HA7, HA8(1)	71	71	67	55
620-5169-8	HA9, HA10(1)	83	76	75	61
620-5169-11	HA11, HA12(1)	92	90	75	59
620-5169-14	HA1,HA2(1.5)	75	71	66	48
620-5169-17	HA3,HA4,HA5 (2)	68	68	55	50
620-5169-20	HA13,HA14(1.5)	62	59	55	49
620-5169-21	HA15(1.5)	69	67	69	63
LCS 620-12081/2-A	Lab Control Sample	91	94	89	83
LCSD 620-12081/3-A	Lab Control Sample Dup	91	93	87	83
MB 620-12081/1-A	Method Blank	82	79	87	81

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1COD (40-140)	OTPH (40-140)
620-5169-5	HA6, HA7, HA8(1)	69	73
620-5169-8	HA9, HA10(1)	85	80
620-5169-11	HA11, HA12(1)	42	44
620-5169-14	HA1,HA2(1.5)	45	48
620-5169-17	HA3,HA4,HA5 (2)	82	82
620-5169-20	HA13,HA14(1.5)	49	46
620-5169-21	HA15(1.5)	72	60
LCS 620-12107/2-A	Lab Control Sample	91	109

Surrogate Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1COD (40-140)	OTPH (40-140)								
LCSD 620-12107/3-A	Lab Control Sample Dup	86	73								
MB 620-12107/1-A	Method Blank	92	58								

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)

OTPH = o-Terphenyl (Surr)

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-12056/3-A
Matrix: Solid
Analysis Batch: 12057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12056

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Acetone	ND		50.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Acrylonitrile	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Benzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Bromobenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Bromochloromethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Bromodichloromethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Bromoform	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Bromomethane	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
2-Butanone (MEK)	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
n-Butylbenzene	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
sec-Butylbenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
tert-Butylbenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Carbon disulfide	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Carbon tetrachloride	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Chlorobenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Chloroethane	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Chloroform	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Chloromethane	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
2-Chlorotoluene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
4-Chlorotoluene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Dibromochloromethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Dibromomethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,1-Dichloroethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2-Dichloroethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,1-Dichloroethene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2-Dichloropropane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,3-Dichloropropane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
2,2-Dichloropropane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,1-Dichloropropene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Ethylbenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Hexachlorobutadiene	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Isopropylbenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
4-Isopropyltoluene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Methylene Chloride	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12056/3-A
Matrix: Solid
Analysis Batch: 12057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12056

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
N-Propylbenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Styrene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Tetrachloroethene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Toluene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Trichloroethene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Vinyl chloride	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
m,p-Xylene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
o-Xylene	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Tetrahydrofuran	ND		10.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Ethyl ether	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
di-Isopropyl ether	ND		5.00		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
tert-Butanol	ND		100		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
1,4-Dioxane	ND		100		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		06/17/22 15:52	06/17/22 20:49	1
Ethanol	ND		1000		ug/Kg		06/17/22 15:52	06/17/22 20:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/17/22 15:52*	*06/17/22 20:49*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*06/17/22 15:52*	*06/17/22 20:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*06/17/22 15:52*	*06/17/22 20:49*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*06/17/22 15:52*	*06/17/22 20:49*	*1*

Lab Sample ID: LCS 620-12056/1-A
Matrix: Solid
Analysis Batch: 12057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.0	19.69		ug/Kg		109	70 - 130
Acetone	18.0	17.88	J	ug/Kg		99	70 - 130
Acrylonitrile	18.0	17.65		ug/Kg		98	70 - 130
Benzene	18.0	18.18		ug/Kg		101	70 - 130
Bromobenzene	18.0	16.68		ug/Kg		93	70 - 130
Bromochloromethane	18.0	18.03		ug/Kg		100	70 - 130
Bromodichloromethane	18.0	19.35		ug/Kg		107	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12056/1-A
Matrix: Solid
Analysis Batch: 12057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	18.0	17.08		ug/Kg		95	70 - 130
Bromomethane	18.0	21.93		ug/Kg		122	70 - 130
2-Butanone (MEK)	18.0	18.25		ug/Kg		101	70 - 130
n-Butylbenzene	18.0	19.37		ug/Kg		108	70 - 130
sec-Butylbenzene	18.0	19.72		ug/Kg		110	70 - 130
tert-Butylbenzene	18.0	17.33		ug/Kg		96	70 - 130
Carbon disulfide	18.0	20.23		ug/Kg		112	70 - 130
Carbon tetrachloride	18.0	19.24		ug/Kg		107	70 - 130
Chlorobenzene	18.0	18.77		ug/Kg		104	70 - 130
Chloroethane	18.0	25.75	*+	ug/Kg		143	70 - 130
Chloroform	18.0	19.68		ug/Kg		109	70 - 130
Chloromethane	18.0	20.40		ug/Kg		113	70 - 130
2-Chlorotoluene	18.0	19.24		ug/Kg		107	70 - 130
4-Chlorotoluene	18.0	19.84		ug/Kg		110	70 - 130
1,2-Dibromo-3-Chloropropane	18.0	13.82		ug/Kg		77	70 - 130
Dibromochloromethane	18.0	17.65		ug/Kg		98	70 - 130
1,2-Dibromoethane (EDB)	18.0	17.11		ug/Kg		95	70 - 130
Dibromomethane	18.0	18.48		ug/Kg		103	70 - 130
1,2-Dichlorobenzene	18.0	17.55		ug/Kg		97	70 - 130
1,3-Dichlorobenzene	18.0	18.08		ug/Kg		100	70 - 130
1,4-Dichlorobenzene	18.0	18.79		ug/Kg		104	70 - 130
Dichlorodifluoromethane (Freon 12)	18.0	19.89		ug/Kg		111	70 - 130
1,1-Dichloroethane	18.0	19.47		ug/Kg		108	70 - 130
1,2-Dichloroethane	18.0	20.61		ug/Kg		114	70 - 130
1,1-Dichloroethene	18.0	17.49		ug/Kg		97	70 - 130
cis-1,2-Dichloroethene	18.0	16.51		ug/Kg		92	70 - 130
trans-1,2-Dichloroethene	18.0	16.80		ug/Kg		93	70 - 130
1,2-Dichloropropane	18.0	18.30		ug/Kg		102	70 - 130
1,3-Dichloropropane	18.0	18.01		ug/Kg		100	70 - 130
2,2-Dichloropropane	18.0	18.90		ug/Kg		105	70 - 130
1,1-Dichloropropene	18.0	17.66		ug/Kg		98	70 - 130
cis-1,3-Dichloropropene	18.0	15.73		ug/Kg		87	70 - 130
trans-1,3-Dichloropropene	18.0	18.65		ug/Kg		104	70 - 130
Ethylbenzene	18.0	19.55		ug/Kg		109	70 - 130
Hexachlorobutadiene	18.0	15.49		ug/Kg		86	70 - 130
2-Hexanone (MBK)	18.0	14.29		ug/Kg		79	70 - 130
Isopropylbenzene	18.0	17.73		ug/Kg		99	70 - 130
4-Isopropyltoluene	18.0	18.05		ug/Kg		100	70 - 130
Methyl tert-butyl ether	18.0	16.51		ug/Kg		92	70 - 130
4-Methyl-2-pentanone (MIBK)	18.0	16.39		ug/Kg		91	70 - 130
Methylene Chloride	18.0	18.82		ug/Kg		105	70 - 130
Naphthalene	18.0	15.17		ug/Kg		84	70 - 130
N-Propylbenzene	18.0	20.12		ug/Kg		112	70 - 130
Styrene	18.0	17.85		ug/Kg		99	70 - 130
1,1,1,2-Tetrachloroethane	18.0	18.94		ug/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	18.0	20.28		ug/Kg		113	70 - 130
Tetrachloroethene	18.0	14.84		ug/Kg		82	70 - 130
Toluene	18.0	18.09		ug/Kg		101	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12056/1-A
Matrix: Solid
Analysis Batch: 12057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	18.0	15.70		ug/Kg		87	70 - 130
1,2,4-Trichlorobenzene	18.0	14.56		ug/Kg		81	70 - 130
1,3,5-Trichlorobenzene	18.0	15.28		ug/Kg		85	70 - 130
1,1,1-Trichloroethane	18.0	19.66		ug/Kg		109	70 - 130
1,1,2-Trichloroethane	18.0	19.21		ug/Kg		107	70 - 130
Trichloroethene	18.0	18.16		ug/Kg		101	70 - 130
Trichlorofluoromethane (Freon 11)	18.0	19.85		ug/Kg		110	70 - 130
1,2,3-Trichloropropane	18.0	21.11		ug/Kg		117	70 - 130
1,2,4-Trimethylbenzene	18.0	19.27		ug/Kg		107	70 - 130
1,3,5-Trimethylbenzene	18.0	19.38		ug/Kg		108	70 - 130
Vinyl chloride	18.0	21.99		ug/Kg		122	70 - 130
m,p-Xylene	18.0	18.60		ug/Kg		103	70 - 130
o-Xylene	18.0	17.39		ug/Kg		97	70 - 130
Tetrahydrofuran	18.0	14.60		ug/Kg		81	70 - 130
Ethyl ether	18.0	18.25		ug/Kg		101	70 - 130
Tert-amyl methyl ether	18.0	16.16		ug/Kg		90	70 - 130
Ethyl tert-butyl ether	18.0	16.26		ug/Kg		90	70 - 130
di-Isopropyl ether	18.0	17.86		ug/Kg		99	70 - 130
tert-Butanol	180	134.6		ug/Kg		75	70 - 130
1,4-Dioxane	180	107.7	*-	ug/Kg		60	70 - 130
trans-1,4-Dichloro-2-butene	18.0	20.91	J	ug/Kg		116	70 - 130
Ethanol	360	374.3	J	ug/Kg		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 620-12056/2-A
Matrix: Solid
Analysis Batch: 12057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12056

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.0	20.81		ug/Kg		116	70 - 130	6	30
Acetone	18.0	18.89	J	ug/Kg		105	70 - 130	5	30
Acrylonitrile	18.0	18.12		ug/Kg		101	70 - 130	3	30
Benzene	18.0	19.35		ug/Kg		108	70 - 130	6	30
Bromobenzene	18.0	17.72		ug/Kg		98	70 - 130	6	30
Bromochloromethane	18.0	18.41		ug/Kg		102	70 - 130	2	30
Bromodichloromethane	18.0	20.01		ug/Kg		111	70 - 130	3	30
Bromoform	18.0	18.04		ug/Kg		100	70 - 130	5	30
Bromomethane	18.0	24.08	*+	ug/Kg		134	70 - 130	9	30
2-Butanone (MEK)	18.0	17.95		ug/Kg		100	70 - 130	2	30
n-Butylbenzene	18.0	20.73		ug/Kg		115	70 - 130	7	30
sec-Butylbenzene	18.0	20.47		ug/Kg		114	70 - 130	4	30
tert-Butylbenzene	18.0	17.98		ug/Kg		100	70 - 130	4	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12056/2-A
Matrix: Solid
Analysis Batch: 12057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12056

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			18.0	21.08		ug/Kg		117	70 - 130	4	30
Carbon tetrachloride			18.0	20.21		ug/Kg		112	70 - 130	5	30
Chlorobenzene			18.0	19.84		ug/Kg		110	70 - 130	6	30
Chloroethane			18.0	26.99	*+	ug/Kg		150	70 - 130	5	30
Chloroform			18.0	20.66		ug/Kg		115	70 - 130	5	30
Chloromethane			18.0	21.49		ug/Kg		119	70 - 130	5	30
2-Chlorotoluene			18.0	20.24		ug/Kg		112	70 - 130	5	30
4-Chlorotoluene			18.0	20.45		ug/Kg		114	70 - 130	3	30
1,2-Dibromo-3-Chloropropane			18.0	14.58		ug/Kg		81	70 - 130	5	30
Dibromochloromethane			18.0	18.25		ug/Kg		101	70 - 130	3	30
1,2-Dibromoethane (EDB)			18.0	18.04		ug/Kg		100	70 - 130	5	30
Dibromomethane			18.0	19.21		ug/Kg		107	70 - 130	4	30
1,2-Dichlorobenzene			18.0	18.89		ug/Kg		105	70 - 130	7	30
1,3-Dichlorobenzene			18.0	18.98		ug/Kg		105	70 - 130	5	30
1,4-Dichlorobenzene			18.0	19.77		ug/Kg		110	70 - 130	5	30
Dichlorodifluoromethane (Freon 12)			18.0	21.22		ug/Kg		118	70 - 130	6	30
1,1-Dichloroethane			18.0	20.22		ug/Kg		112	70 - 130	4	30
1,2-Dichloroethane			18.0	21.47		ug/Kg		119	70 - 130	4	30
1,1-Dichloroethene			18.0	18.56		ug/Kg		103	70 - 130	6	30
cis-1,2-Dichloroethene			18.0	17.56		ug/Kg		98	70 - 130	6	30
trans-1,2-Dichloroethene			18.0	18.04		ug/Kg		100	70 - 130	7	30
1,2-Dichloropropane			18.0	19.09		ug/Kg		106	70 - 130	4	30
1,3-Dichloropropane			18.0	18.69		ug/Kg		104	70 - 130	4	30
2,2-Dichloropropane			18.0	19.97		ug/Kg		111	70 - 130	6	30
1,1-Dichloropropene			18.0	18.59		ug/Kg		103	70 - 130	5	30
cis-1,3-Dichloropropene			18.0	16.93		ug/Kg		94	70 - 130	7	30
trans-1,3-Dichloropropene			18.0	19.49		ug/Kg		108	70 - 130	4	30
Ethylbenzene			18.0	20.61		ug/Kg		114	70 - 130	5	30
Hexachlorobutadiene			18.0	16.16		ug/Kg		90	70 - 130	4	30
2-Hexanone (MBK)			18.0	15.01		ug/Kg		83	70 - 130	5	30
Isopropylbenzene			18.0	18.80		ug/Kg		104	70 - 130	6	30
4-Isopropyltoluene			18.0	19.13		ug/Kg		106	70 - 130	6	30
Methyl tert-butyl ether			18.0	17.29		ug/Kg		96	70 - 130	5	30
4-Methyl-2-pentanone (MIBK)			18.0	16.82		ug/Kg		93	70 - 130	3	30
Methylene Chloride			18.0	19.86		ug/Kg		110	70 - 130	5	30
Naphthalene			18.0	16.43		ug/Kg		91	70 - 130	8	30
N-Propylbenzene			18.0	21.03		ug/Kg		117	70 - 130	4	30
Styrene			18.0	18.59		ug/Kg		103	70 - 130	4	30
1,1,1,2-Tetrachloroethane			18.0	19.54		ug/Kg		109	70 - 130	3	30
1,1,2,2-Tetrachloroethane			18.0	21.25		ug/Kg		118	70 - 130	5	30
Tetrachloroethene			18.0	15.69		ug/Kg		87	70 - 130	6	30
Toluene			18.0	18.96		ug/Kg		105	70 - 130	5	30
1,2,3-Trichlorobenzene			18.0	16.40		ug/Kg		91	70 - 130	4	30
1,2,4-Trichlorobenzene			18.0	15.41		ug/Kg		86	70 - 130	6	30
1,3,5-Trichlorobenzene			18.0	16.28		ug/Kg		90	70 - 130	6	30
1,1,1-Trichloroethane			18.0	20.70		ug/Kg		115	70 - 130	5	30
1,1,2-Trichloroethane			18.0	19.65		ug/Kg		109	70 - 130	2	30
Trichloroethene			18.0	19.28		ug/Kg		107	70 - 130	6	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12056/2-A
Matrix: Solid
Analysis Batch: 12057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12056

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			18.0	21.29		ug/Kg		118	70 - 130	7	30
1,2,3-Trichloropropane			18.0	22.07		ug/Kg		123	70 - 130	4	30
1,2,4-Trimethylbenzene			18.0	20.08		ug/Kg		112	70 - 130	4	30
1,3,5-Trimethylbenzene			18.0	20.40		ug/Kg		113	70 - 130	5	30
Vinyl chloride			18.0	23.07		ug/Kg		128	70 - 130	5	30
m,p-Xylene			18.0	19.37		ug/Kg		108	70 - 130	4	30
o-Xylene			18.0	18.65		ug/Kg		104	70 - 130	7	30
Tetrahydrofuran			18.0	16.78		ug/Kg		93	70 - 130	14	30
Ethyl ether			18.0	19.05		ug/Kg		106	70 - 130	4	30
Tert-amyl methyl ether			18.0	17.44		ug/Kg		97	70 - 130	8	30
Ethyl tert-butyl ether			18.0	17.33		ug/Kg		96	70 - 130	6	30
di-Isopropyl ether			18.0	18.83		ug/Kg		105	70 - 130	5	30
tert-Butanol			180	142.3		ug/Kg		79	70 - 130	6	30
1,4-Dioxane			180	120.1	*-	ug/Kg		67	70 - 130	11	30
trans-1,4-Dichloro-2-butene			18.0	21.27	J	ug/Kg		118	70 - 130	2	30
Ethanol			360	369.0	J	ug/Kg		103	70 - 130	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 620-12129/3-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12129

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Acetone	ND		50.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Acrylonitrile	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Benzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Bromobenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Bromochloromethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Bromodichloromethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Bromoform	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Bromomethane	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
2-Butanone (MEK)	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
n-Butylbenzene	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
sec-Butylbenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
tert-Butylbenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Carbon disulfide	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Carbon tetrachloride	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Chlorobenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Chloroethane	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Chloroform	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Chloromethane	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12129/3-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12129

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
4-Chlorotoluene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Dibromochloromethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Dibromomethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,1-Dichloroethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2-Dichloroethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,1-Dichloroethene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2-Dichloropropane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,3-Dichloropropane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
2,2-Dichloropropane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,1-Dichloropropene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Ethylbenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Hexachlorobutadiene	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Isopropylbenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
4-Isopropyltoluene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Methylene Chloride	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Naphthalene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
N-Propylbenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Styrene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Tetrachloroethene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Toluene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Trichloroethene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Vinyl chloride	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
m,p-Xylene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
o-Xylene	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12129/3-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12129

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND		10.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Ethyl ether	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
di-Isopropyl ether	ND		5.00		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
tert-Butanol	ND		100		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
1,4-Dioxane	ND		100		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		06/21/22 09:49	06/21/22 13:42	1
Ethanol	ND		1000		ug/Kg		06/21/22 09:49	06/21/22 13:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/21/22 09:49*	*06/21/22 13:42*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*	*06/21/22 09:49*	*06/21/22 13:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*	*06/21/22 09:49*	*06/21/22 13:42*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*06/21/22 09:49*	*06/21/22 13:42*	*1*

Lab Sample ID: LCS 620-12129/1-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12129

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.0	19.75		ug/Kg		110	70 - 130
Acetone	18.0	18.70	J	ug/Kg		104	70 - 130
Acrylonitrile	18.0	17.14		ug/Kg		95	70 - 130
Benzene	18.0	18.27		ug/Kg		102	70 - 130
Bromobenzene	18.0	17.59		ug/Kg		98	70 - 130
Bromochloromethane	18.0	16.81		ug/Kg		93	70 - 130
Bromodichloromethane	18.0	19.06		ug/Kg		106	70 - 130
Bromoform	18.0	17.52		ug/Kg		97	70 - 130
Bromomethane	18.0	21.93		ug/Kg		122	70 - 130
2-Butanone (MEK)	18.0	18.44		ug/Kg		102	70 - 130
n-Butylbenzene	18.0	23.34		ug/Kg		130	70 - 130
sec-Butylbenzene	18.0	21.43		ug/Kg		119	70 - 130
tert-Butylbenzene	18.0	17.16		ug/Kg		95	70 - 130
Carbon disulfide	18.0	20.51		ug/Kg		114	70 - 130
Carbon tetrachloride	18.0	18.81		ug/Kg		105	70 - 130
Chlorobenzene	18.0	20.11		ug/Kg		112	70 - 130
Chloroethane	18.0	25.86	*+	ug/Kg		144	70 - 130
Chloroform	18.0	19.50		ug/Kg		108	70 - 130
Chloromethane	18.0	20.56		ug/Kg		114	70 - 130
2-Chlorotoluene	18.0	21.20		ug/Kg		118	70 - 130
4-Chlorotoluene	18.0	21.83		ug/Kg		121	70 - 130
1,2-Dibromo-3-Chloropropane	18.0	15.22		ug/Kg		85	70 - 130
Dibromochloromethane	18.0	16.74		ug/Kg		93	70 - 130
1,2-Dibromoethane (EDB)	18.0	16.73		ug/Kg		93	70 - 130
Dibromomethane	18.0	17.81		ug/Kg		99	70 - 130
1,2-Dichlorobenzene	18.0	19.39		ug/Kg		108	70 - 130
1,3-Dichlorobenzene	18.0	19.85		ug/Kg		110	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12129/1-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12129

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	18.0	21.36		ug/Kg		119	70 - 130
Dichlorodifluoromethane (Freon 12)	18.0	19.33		ug/Kg		107	70 - 130
1,1-Dichloroethane	18.0	19.82		ug/Kg		110	70 - 130
1,2-Dichloroethane	18.0	20.29		ug/Kg		113	70 - 130
1,1-Dichloroethene	18.0	17.71		ug/Kg		98	70 - 130
cis-1,2-Dichloroethene	18.0	16.40		ug/Kg		91	70 - 130
trans-1,2-Dichloroethene	18.0	17.33		ug/Kg		96	70 - 130
1,2-Dichloropropane	18.0	17.92		ug/Kg		100	70 - 130
1,3-Dichloropropane	18.0	17.57		ug/Kg		98	70 - 130
2,2-Dichloropropane	18.0	19.15		ug/Kg		106	70 - 130
1,1-Dichloropropene	18.0	17.66		ug/Kg		98	70 - 130
cis-1,3-Dichloropropene	18.0	15.80		ug/Kg		88	70 - 130
trans-1,3-Dichloropropene	18.0	18.47		ug/Kg		103	70 - 130
Ethylbenzene	18.0	21.13		ug/Kg		117	70 - 130
Hexachlorobutadiene	18.0	17.14		ug/Kg		95	70 - 130
2-Hexanone (MBK)	18.0	14.89		ug/Kg		83	70 - 130
Isopropylbenzene	18.0	19.42		ug/Kg		108	70 - 130
4-Isopropyltoluene	18.0	20.81		ug/Kg		116	70 - 130
Methyl tert-butyl ether	18.0	16.55		ug/Kg		92	70 - 130
4-Methyl-2-pentanone (MIBK)	18.0	16.25		ug/Kg		90	70 - 130
Methylene Chloride	18.0	19.15		ug/Kg		106	70 - 130
Naphthalene	18.0	16.95		ug/Kg		94	70 - 130
N-Propylbenzene	18.0	22.18		ug/Kg		123	70 - 130
Styrene	18.0	19.13		ug/Kg		106	70 - 130
1,1,1,2-Tetrachloroethane	18.0	19.74		ug/Kg		110	70 - 130
1,1,2,2-Tetrachloroethane	18.0	21.91		ug/Kg		122	70 - 130
Tetrachloroethene	18.0	15.39		ug/Kg		85	70 - 130
Toluene	18.0	18.13		ug/Kg		101	70 - 130
1,2,3-Trichlorobenzene	18.0	17.17		ug/Kg		95	70 - 130
1,2,4-Trichlorobenzene	18.0	16.57		ug/Kg		92	70 - 130
1,3,5-Trichlorobenzene	18.0	18.10		ug/Kg		101	70 - 130
1,1,1-Trichloroethane	18.0	19.61		ug/Kg		109	70 - 130
1,1,2-Trichloroethane	18.0	18.56		ug/Kg		103	70 - 130
Trichloroethene	18.0	18.43		ug/Kg		102	70 - 130
Trichlorofluoromethane (Freon 11)	18.0	19.86		ug/Kg		110	70 - 130
1,2,3-Trichloropropane	18.0	22.22		ug/Kg		123	70 - 130
1,2,4-Trimethylbenzene	18.0	21.12		ug/Kg		117	70 - 130
1,3,5-Trimethylbenzene	18.0	21.25		ug/Kg		118	70 - 130
Vinyl chloride	18.0	22.06		ug/Kg		123	70 - 130
m,p-Xylene	18.0	20.31		ug/Kg		113	70 - 130
o-Xylene	18.0	19.06		ug/Kg		106	70 - 130
Tetrahydrofuran	18.0	15.72		ug/Kg		87	70 - 130
Ethyl ether	18.0	17.88		ug/Kg		99	70 - 130
Tert-amyl methyl ether	18.0	16.53		ug/Kg		92	70 - 130
Ethyl tert-butyl ether	18.0	16.46		ug/Kg		91	70 - 130
di-Isopropyl ether	18.0	17.84		ug/Kg		99	70 - 130
tert-Butanol	180	140.4		ug/Kg		78	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12129/1-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12129

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	180	111.3	*-	ug/Kg		62	70 - 130
trans-1,4-Dichloro-2-butene	18.0	20.66	J	ug/Kg		115	70 - 130
Ethanol	360	413.1	J	ug/Kg		115	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 620-12129/2-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12129

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.0	19.08		ug/Kg		106	70 - 130	3	30
Acetone	18.0	17.77	J	ug/Kg		99	70 - 130	5	30
Acrylonitrile	18.0	16.97		ug/Kg		94	70 - 130	1	30
Benzene	18.0	17.71		ug/Kg		98	70 - 130	3	30
Bromobenzene	18.0	16.97		ug/Kg		94	70 - 130	4	30
Bromochloromethane	18.0	17.00		ug/Kg		94	70 - 130	1	30
Bromodichloromethane	18.0	18.08		ug/Kg		100	70 - 130	5	30
Bromoform	18.0	17.29		ug/Kg		96	70 - 130	1	30
Bromomethane	18.0	21.37		ug/Kg		119	70 - 130	3	30
2-Butanone (MEK)	18.0	17.05		ug/Kg		95	70 - 130	8	30
n-Butylbenzene	18.0	22.28		ug/Kg		124	70 - 130	5	30
sec-Butylbenzene	18.0	20.60		ug/Kg		114	70 - 130	4	30
tert-Butylbenzene	18.0	16.57		ug/Kg		92	70 - 130	3	30
Carbon disulfide	18.0	19.47		ug/Kg		108	70 - 130	5	30
Carbon tetrachloride	18.0	18.06		ug/Kg		100	70 - 130	4	30
Chlorobenzene	18.0	19.39		ug/Kg		108	70 - 130	4	30
Chloroethane	18.0	25.68	*+	ug/Kg		143	70 - 130	1	30
Chloroform	18.0	18.84		ug/Kg		105	70 - 130	3	30
Chloromethane	18.0	19.46		ug/Kg		108	70 - 130	5	30
2-Chlorotoluene	18.0	20.42		ug/Kg		113	70 - 130	4	30
4-Chlorotoluene	18.0	20.78		ug/Kg		115	70 - 130	5	30
1,2-Dibromo-3-Chloropropane	18.0	14.96		ug/Kg		83	70 - 130	2	30
Dibromochloromethane	18.0	16.62		ug/Kg		92	70 - 130	1	30
1,2-Dibromoethane (EDB)	18.0	16.22		ug/Kg		90	70 - 130	3	30
Dibromomethane	18.0	17.41		ug/Kg		97	70 - 130	2	30
1,2-Dichlorobenzene	18.0	18.85		ug/Kg		105	70 - 130	3	30
1,3-Dichlorobenzene	18.0	18.94		ug/Kg		105	70 - 130	5	30
1,4-Dichlorobenzene	18.0	20.20		ug/Kg		112	70 - 130	6	30
Dichlorodifluoromethane (Freon 12)	18.0	18.12		ug/Kg		101	70 - 130	6	30
1,1-Dichloroethane	18.0	18.54		ug/Kg		103	70 - 130	7	30
1,2-Dichloroethane	18.0	19.94		ug/Kg		111	70 - 130	2	30
1,1-Dichloroethene	18.0	17.39		ug/Kg		97	70 - 130	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12129/2-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12129

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	18.0	15.77		ug/Kg		88	70 - 130	4	30
trans-1,2-Dichloroethene	18.0	16.59		ug/Kg		92	70 - 130	4	30
1,2-Dichloropropane	18.0	17.34		ug/Kg		96	70 - 130	3	30
1,3-Dichloropropane	18.0	17.08		ug/Kg		95	70 - 130	3	30
2,2-Dichloropropane	18.0	18.41		ug/Kg		102	70 - 130	4	30
1,1-Dichloropropene	18.0	16.94		ug/Kg		94	70 - 130	4	30
cis-1,3-Dichloropropene	18.0	15.57		ug/Kg		86	70 - 130	1	30
trans-1,3-Dichloropropene	18.0	17.83		ug/Kg		99	70 - 130	4	30
Ethylbenzene	18.0	20.24		ug/Kg		112	70 - 130	4	30
Hexachlorobutadiene	18.0	16.48		ug/Kg		92	70 - 130	4	30
2-Hexanone (MBK)	18.0	14.62		ug/Kg		81	70 - 130	2	30
Isopropylbenzene	18.0	18.64		ug/Kg		104	70 - 130	4	30
4-Isopropyltoluene	18.0	19.93		ug/Kg		111	70 - 130	4	30
Methyl tert-butyl ether	18.0	16.13		ug/Kg		90	70 - 130	3	30
4-Methyl-2-pentanone (MIBK)	18.0	16.54		ug/Kg		92	70 - 130	2	30
Methylene Chloride	18.0	18.74		ug/Kg		104	70 - 130	2	30
Naphthalene	18.0	17.11		ug/Kg		95	70 - 130	1	30
N-Propylbenzene	18.0	21.12		ug/Kg		117	70 - 130	5	30
Styrene	18.0	18.30		ug/Kg		102	70 - 130	4	30
1,1,1,2-Tetrachloroethane	18.0	18.92		ug/Kg		105	70 - 130	4	30
1,1,2,2-Tetrachloroethane	18.0	20.94		ug/Kg		116	70 - 130	4	30
Tetrachloroethene	18.0	14.34		ug/Kg		80	70 - 130	7	30
Toluene	18.0	17.28		ug/Kg		96	70 - 130	5	30
1,2,3-Trichlorobenzene	18.0	17.01		ug/Kg		95	70 - 130	1	30
1,2,4-Trichlorobenzene	18.0	15.81		ug/Kg		88	70 - 130	5	30
1,3,5-Trichlorobenzene	18.0	17.49		ug/Kg		97	70 - 130	3	30
1,1,1-Trichloroethane	18.0	18.96		ug/Kg		105	70 - 130	3	30
1,1,2-Trichloroethane	18.0	17.76		ug/Kg		99	70 - 130	4	30
Trichloroethene	18.0	17.32		ug/Kg		96	70 - 130	6	30
Trichlorofluoromethane (Freon 11)	18.0	19.15		ug/Kg		106	70 - 130	4	30
1,2,3-Trichloropropane	18.0	21.48		ug/Kg		119	70 - 130	3	30
1,2,4-Trimethylbenzene	18.0	19.90		ug/Kg		111	70 - 130	6	30
1,3,5-Trimethylbenzene	18.0	20.43		ug/Kg		113	70 - 130	4	30
Vinyl chloride	18.0	21.11		ug/Kg		117	70 - 130	4	30
m,p-Xylene	18.0	19.58		ug/Kg		109	70 - 130	4	30
o-Xylene	18.0	18.29		ug/Kg		102	70 - 130	4	30
Tetrahydrofuran	18.0	15.99		ug/Kg		89	70 - 130	2	30
Ethyl ether	18.0	17.61		ug/Kg		98	70 - 130	2	30
Tert-amyl methyl ether	18.0	16.20		ug/Kg		90	70 - 130	2	30
Ethyl tert-butyl ether	18.0	16.12		ug/Kg		90	70 - 130	2	30
di-Isopropyl ether	18.0	17.41		ug/Kg		97	70 - 130	2	30
tert-Butanol	180	143.9		ug/Kg		80	70 - 130	2	30
1,4-Dioxane	180	126.0		ug/Kg		70	70 - 130	12	30
trans-1,4-Dichloro-2-butene	18.0	20.27	J	ug/Kg		113	70 - 130	2	30
Ethanol	360	355.7	J	ug/Kg		99	70 - 130	15	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12129/2-A
Matrix: Solid
Analysis Batch: 12130

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12129

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
Toluene-d8 (Surr)	98		70 - 130
1,2-Dichloroethane-d4 (Surr)	117		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Lab Sample ID: MB 620-12184/3-A
Matrix: Solid
Analysis Batch: 12185

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12184

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Acetone	ND		50.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Acrylonitrile	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Benzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Bromobenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Bromochloromethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Bromodichloromethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Bromoform	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Bromomethane	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
2-Butanone (MEK)	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
n-Butylbenzene	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
sec-Butylbenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
tert-Butylbenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Carbon disulfide	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Carbon tetrachloride	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Chlorobenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Chloroethane	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Chloroform	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Chloromethane	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
2-Chlorotoluene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
4-Chlorotoluene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Dibromochloromethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Dibromomethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,1-Dichloroethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2-Dichloroethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,1-Dichloroethene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2-Dichloropropane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,3-Dichloropropane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
2,2-Dichloropropane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,1-Dichloropropene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12184/3-A
Matrix: Solid
Analysis Batch: 12185

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12184

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Ethylbenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Hexachlorobutadiene	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Isopropylbenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
4-Isopropyltoluene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Methylene Chloride	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Naphthalene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
N-Propylbenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Styrene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Tetrachloroethene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Toluene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Trichloroethene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Vinyl chloride	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
m,p-Xylene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
o-Xylene	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Tetrahydrofuran	ND		10.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Ethyl ether	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
di-Isopropyl ether	ND		5.00		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
tert-Butanol	ND		100		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
1,4-Dioxane	ND		100		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		06/22/22 09:32	06/22/22 12:32	1
Ethanol	ND		1000		ug/Kg		06/22/22 09:32	06/22/22 12:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*06/22/22 09:32*	*06/22/22 12:32*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*06/22/22 09:32*	*06/22/22 12:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*06/22/22 09:32*	*06/22/22 12:32*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*06/22/22 09:32*	*06/22/22 12:32*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12184/1-A
Matrix: Solid
Analysis Batch: 12185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	22.47		ug/Kg		112	70 - 130
Acetone	20.0	20.47	J	ug/Kg		102	70 - 130
Acrylonitrile	20.0	18.38		ug/Kg		92	70 - 130
Benzene	20.0	19.89		ug/Kg		99	70 - 130
Bromobenzene	20.0	18.85		ug/Kg		94	70 - 130
Bromochloromethane	20.0	18.52		ug/Kg		93	70 - 130
Bromodichloromethane	20.0	20.67		ug/Kg		103	70 - 130
Bromoform	20.0	18.79		ug/Kg		94	70 - 130
Bromomethane	20.0	22.29		ug/Kg		111	70 - 130
2-Butanone (MEK)	20.0	19.26		ug/Kg		96	70 - 130
n-Butylbenzene	20.0	25.21		ug/Kg		126	70 - 130
sec-Butylbenzene	20.0	23.17		ug/Kg		116	70 - 130
tert-Butylbenzene	20.0	18.78		ug/Kg		94	70 - 130
Carbon disulfide	20.0	22.37		ug/Kg		112	70 - 130
Carbon tetrachloride	20.0	20.80		ug/Kg		104	70 - 130
Chlorobenzene	20.0	21.32		ug/Kg		107	70 - 130
Chloroethane	20.0	28.93	*+	ug/Kg		145	70 - 130
Chloroform	20.0	21.26		ug/Kg		106	70 - 130
Chloromethane	20.0	20.51		ug/Kg		103	70 - 130
2-Chlorotoluene	20.0	22.75		ug/Kg		114	70 - 130
4-Chlorotoluene	20.0	23.91		ug/Kg		120	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	15.87		ug/Kg		79	70 - 130
Dibromochloromethane	20.0	18.52		ug/Kg		93	70 - 130
1,2-Dibromoethane (EDB)	20.0	17.82		ug/Kg		89	70 - 130
Dibromomethane	20.0	19.17		ug/Kg		96	70 - 130
1,2-Dichlorobenzene	20.0	20.73		ug/Kg		104	70 - 130
1,3-Dichlorobenzene	20.0	20.98		ug/Kg		105	70 - 130
1,4-Dichlorobenzene	20.0	22.76		ug/Kg		114	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	19.06		ug/Kg		95	70 - 130
1,1-Dichloroethane	20.0	21.07		ug/Kg		105	70 - 130
1,2-Dichloroethane	20.0	22.27		ug/Kg		111	70 - 130
1,1-Dichloroethene	20.0	19.32		ug/Kg		97	70 - 130
cis-1,2-Dichloroethene	20.0	17.83		ug/Kg		89	70 - 130
trans-1,2-Dichloroethene	20.0	18.26		ug/Kg		91	70 - 130
1,2-Dichloropropane	20.0	19.48		ug/Kg		97	70 - 130
1,3-Dichloropropane	20.0	18.94		ug/Kg		95	70 - 130
2,2-Dichloropropane	20.0	20.72		ug/Kg		104	70 - 130
1,1-Dichloropropene	20.0	19.62		ug/Kg		98	70 - 130
cis-1,3-Dichloropropene	20.0	17.23		ug/Kg		86	70 - 130
trans-1,3-Dichloropropene	20.0	20.27		ug/Kg		101	70 - 130
Ethylbenzene	20.0	22.55		ug/Kg		113	70 - 130
Hexachlorobutadiene	20.0	18.38		ug/Kg		92	70 - 130
2-Hexanone (MBK)	20.0	16.66		ug/Kg		83	70 - 130
Isopropylbenzene	20.0	21.11		ug/Kg		106	70 - 130
4-Isopropyltoluene	20.0	22.64		ug/Kg		113	70 - 130
Methyl tert-butyl ether	20.0	17.76		ug/Kg		89	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.77		ug/Kg		94	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12184/1-A
Matrix: Solid
Analysis Batch: 12185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	20.0	22.27		ug/Kg		111	70 - 130
Naphthalene	20.0	18.03		ug/Kg		90	70 - 130
N-Propylbenzene	20.0	23.98		ug/Kg		120	70 - 130
Styrene	20.0	20.68		ug/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.61		ug/Kg		103	70 - 130
1,1,2,2-Tetrachloroethane	20.0	23.75		ug/Kg		119	70 - 130
Tetrachloroethene	20.0	16.18		ug/Kg		81	70 - 130
Toluene	20.0	19.56		ug/Kg		98	70 - 130
1,2,3-Trichlorobenzene	20.0	18.24		ug/Kg		91	70 - 130
1,2,4-Trichlorobenzene	20.0	17.44		ug/Kg		87	70 - 130
1,3,5-Trichlorobenzene	20.0	19.27		ug/Kg		96	70 - 130
1,1,1-Trichloroethane	20.0	21.39		ug/Kg		107	70 - 130
1,1,2-Trichloroethane	20.0	19.98		ug/Kg		100	70 - 130
Trichloroethene	20.0	19.78		ug/Kg		99	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	22.13		ug/Kg		111	70 - 130
1,2,3-Trichloropropane	20.0	23.37		ug/Kg		117	70 - 130
1,2,4-Trimethylbenzene	20.0	22.92		ug/Kg		115	70 - 130
1,3,5-Trimethylbenzene	20.0	23.03		ug/Kg		115	70 - 130
Vinyl chloride	20.0	23.67		ug/Kg		118	70 - 130
m,p-Xylene	20.0	21.96		ug/Kg		110	70 - 130
o-Xylene	20.0	20.31		ug/Kg		102	70 - 130
Tetrahydrofuran	20.0	16.98		ug/Kg		85	70 - 130
Ethyl ether	20.0	19.54		ug/Kg		98	70 - 130
Tert-amyl methyl ether	20.0	18.03		ug/Kg		90	70 - 130
Ethyl tert-butyl ether	20.0	17.92		ug/Kg		90	70 - 130
di-Isopropyl ether	20.0	19.74		ug/Kg		99	70 - 130
tert-Butanol	200	142.2		ug/Kg		71	70 - 130
1,4-Dioxane	200	118.7	*-	ug/Kg		59	70 - 130
trans-1,4-Dichloro-2-butene	20.0	22.53	J	ug/Kg		113	70 - 130
Ethanol	400	429.9	J	ug/Kg		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 620-12184/2-A
Matrix: Solid
Analysis Batch: 12185

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12184

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	21.50		ug/Kg		107	70 - 130	4	30
Acetone	20.0	21.50	J	ug/Kg		107	70 - 130	5	30
Acrylonitrile	20.0	19.36		ug/Kg		97	70 - 130	5	30
Benzene	20.0	19.83		ug/Kg		99	70 - 130	0	30
Bromobenzene	20.0	18.72		ug/Kg		94	70 - 130	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12184/2-A
Matrix: Solid
Analysis Batch: 12185

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12184

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromochloromethane	20.0	18.83		ug/Kg		94	70 - 130	2	30
Bromodichloromethane	20.0	20.47		ug/Kg		102	70 - 130	1	30
Bromoform	20.0	19.18		ug/Kg		96	70 - 130	2	30
Bromomethane	20.0	23.73		ug/Kg		119	70 - 130	6	30
2-Butanone (MEK)	20.0	19.41		ug/Kg		97	70 - 130	1	30
n-Butylbenzene	20.0	24.17		ug/Kg		121	70 - 130	4	30
sec-Butylbenzene	20.0	22.64		ug/Kg		113	70 - 130	2	30
tert-Butylbenzene	20.0	18.41		ug/Kg		92	70 - 130	2	30
Carbon disulfide	20.0	21.75		ug/Kg		109	70 - 130	3	30
Carbon tetrachloride	20.0	20.46		ug/Kg		102	70 - 130	2	30
Chlorobenzene	20.0	21.25		ug/Kg		106	70 - 130	0	30
Chloroethane	20.0	27.89	*+	ug/Kg		139	70 - 130	4	30
Chloroform	20.0	21.22		ug/Kg		106	70 - 130	0	30
Chloromethane	20.0	21.50		ug/Kg		107	70 - 130	5	30
2-Chlorotoluene	20.0	22.23		ug/Kg		111	70 - 130	2	30
4-Chlorotoluene	20.0	23.11		ug/Kg		116	70 - 130	3	30
1,2-Dibromo-3-Chloropropane	20.0	17.15		ug/Kg		86	70 - 130	8	30
Dibromochloromethane	20.0	18.18		ug/Kg		91	70 - 130	2	30
1,2-Dibromoethane (EDB)	20.0	18.35		ug/Kg		92	70 - 130	3	30
Dibromomethane	20.0	19.50		ug/Kg		97	70 - 130	2	30
1,2-Dichlorobenzene	20.0	20.54		ug/Kg		103	70 - 130	1	30
1,3-Dichlorobenzene	20.0	20.59		ug/Kg		103	70 - 130	2	30
1,4-Dichlorobenzene	20.0	22.04		ug/Kg		110	70 - 130	3	30
Dichlorodifluoromethane (Freon 12)	20.0	18.65		ug/Kg		93	70 - 130	2	30
1,1-Dichloroethane	20.0	20.87		ug/Kg		104	70 - 130	1	30
1,2-Dichloroethane	20.0	22.23		ug/Kg		111	70 - 130	0	30
1,1-Dichloroethene	20.0	19.39		ug/Kg		97	70 - 130	0	30
cis-1,2-Dichloroethene	20.0	17.90		ug/Kg		90	70 - 130	0	30
trans-1,2-Dichloroethene	20.0	18.23		ug/Kg		91	70 - 130	0	30
1,2-Dichloropropane	20.0	19.32		ug/Kg		97	70 - 130	1	30
1,3-Dichloropropane	20.0	19.25		ug/Kg		96	70 - 130	2	30
2,2-Dichloropropane	20.0	20.96		ug/Kg		105	70 - 130	1	30
1,1-Dichloropropene	20.0	19.65		ug/Kg		98	70 - 130	0	30
cis-1,3-Dichloropropene	20.0	17.51		ug/Kg		88	70 - 130	2	30
trans-1,3-Dichloropropene	20.0	20.29		ug/Kg		101	70 - 130	0	30
Ethylbenzene	20.0	22.15		ug/Kg		111	70 - 130	2	30
Hexachlorobutadiene	20.0	17.88		ug/Kg		89	70 - 130	3	30
2-Hexanone (MBK)	20.0	17.38		ug/Kg		87	70 - 130	4	30
Isopropylbenzene	20.0	20.51		ug/Kg		103	70 - 130	3	30
4-Isopropyltoluene	20.0	21.87		ug/Kg		109	70 - 130	3	30
Methyl tert-butyl ether	20.0	18.73		ug/Kg		94	70 - 130	5	30
4-Methyl-2-pentanone (MIBK)	20.0	19.30		ug/Kg		97	70 - 130	3	30
Methylene Chloride	20.0	21.31		ug/Kg		107	70 - 130	4	30
Naphthalene	20.0	18.74		ug/Kg		94	70 - 130	4	30
N-Propylbenzene	20.0	23.19		ug/Kg		116	70 - 130	3	30
Styrene	20.0	20.60		ug/Kg		103	70 - 130	0	30
1,1,1,2-Tetrachloroethane	20.0	20.86		ug/Kg		104	70 - 130	1	30
1,1,2,2-Tetrachloroethane	20.0	23.48		ug/Kg		117	70 - 130	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12184/2-A
Matrix: Solid
Analysis Batch: 12185

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12184

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Tetrachloroethene			20.0	15.95		ug/Kg		80	70 - 130	1	30
Toluene			20.0	19.35		ug/Kg		97	70 - 130	1	30
1,2,3-Trichlorobenzene			20.0	18.45		ug/Kg		92	70 - 130	1	30
1,2,4-Trichlorobenzene			20.0	17.36		ug/Kg		87	70 - 130	1	30
1,3,5-Trichlorobenzene			20.0	18.79		ug/Kg		94	70 - 130	2	30
1,1,1-Trichloroethane			20.0	21.21		ug/Kg		106	70 - 130	1	30
1,1,2-Trichloroethane			20.0	20.04		ug/Kg		100	70 - 130	0	30
Trichloroethene			20.0	19.89		ug/Kg		99	70 - 130	1	30
Trichlorofluoromethane (Freon 11)			20.0	21.60		ug/Kg		108	70 - 130	2	30
1,2,3-Trichloropropane			20.0	23.44		ug/Kg		117	70 - 130	0	30
1,2,4-Trimethylbenzene			20.0	22.23		ug/Kg		111	70 - 130	3	30
1,3,5-Trimethylbenzene			20.0	22.33		ug/Kg		112	70 - 130	3	30
Vinyl chloride			20.0	23.44		ug/Kg		117	70 - 130	1	30
m,p-Xylene			20.0	21.72		ug/Kg		109	70 - 130	1	30
o-Xylene			20.0	20.07		ug/Kg		100	70 - 130	1	30
Tetrahydrofuran			20.0	17.40		ug/Kg		87	70 - 130	2	30
Ethyl ether			20.0	19.91		ug/Kg		100	70 - 130	2	30
Tert-amyl methyl ether			20.0	18.38		ug/Kg		92	70 - 130	2	30
Ethyl tert-butyl ether			20.0	18.31		ug/Kg		92	70 - 130	2	30
di-Isopropyl ether			20.0	19.84		ug/Kg		99	70 - 130	0	30
tert-Butanol			200	150.3		ug/Kg		75	70 - 130	6	30
1,4-Dioxane			200	137.3	*-	ug/Kg		69	70 - 130	15	30
trans-1,4-Dichloro-2-butene			20.0	22.64	J	ug/Kg		113	70 - 130	1	30
Ethanol			400	455.9	J	ug/Kg		114	70 - 130	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 620-12152/1-A
Matrix: Solid
Analysis Batch: 12140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12152

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
2-Methylnaphthalene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Acenaphthene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Acenaphthylene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Anthracene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Benzo[a]anthracene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Benzo[a]pyrene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Benzo[b]fluoranthene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Benzo[g,h,i]perylene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Benzo[k]fluoranthene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1

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

Lab Sample ID: MB 620-12152/1-A
Matrix: Solid
Analysis Batch: 12140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12152

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Dibenz(a,h)anthracene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Fluoranthene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Fluorene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Indeno[1,2,3-cd]pyrene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Naphthalene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Phenanthrene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1
Pyrene	ND		50.0		ug/Kg		06/21/22 12:13	06/21/22 17:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*39*		*30 - 130*	*06/21/22 12:13*	*06/21/22 17:46*	*1*
2-Fluorobiphenyl (Surr)	*44*		*30 - 130*	*06/21/22 12:13*	*06/21/22 17:46*	*1*
Terphenyl-d14 (Surr)	*73*		*30 - 130*	*06/21/22 12:13*	*06/21/22 17:46*	*1*

Lab Sample ID: LCS 620-12152/2-A
Matrix: Solid
Analysis Batch: 12140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12152

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1-Methylnaphthalene			1670	837.0		ug/Kg		50	40 - 140		
2-Methylnaphthalene			1670	778.9		ug/Kg		47	40 - 140		
Acenaphthene			1670	812.1		ug/Kg		49	40 - 140		
Acenaphthylene			1670	823.7		ug/Kg		49	40 - 140		
Anthracene			1670	1300		ug/Kg		78	40 - 140		
Benzo[a]anthracene			1670	1516		ug/Kg		91	40 - 140		
Benzo[a]pyrene			1670	1417		ug/Kg		85	40 - 140		
Benzo[b]fluoranthene			1670	1472		ug/Kg		88	40 - 140		
Benzo[g,h,i]perylene			1670	1566		ug/Kg		94	40 - 140		
Benzo[k]fluoranthene			1670	1390		ug/Kg		83	40 - 140		
Chrysene			1670	1400		ug/Kg		84	40 - 140		
Dibenz(a,h)anthracene			1670	1528		ug/Kg		92	40 - 140		
Fluoranthene			1670	1390		ug/Kg		83	40 - 140		
Fluorene			1670	938.1		ug/Kg		56	40 - 140		
Indeno[1,2,3-cd]pyrene			1670	1556		ug/Kg		93	40 - 140		
Naphthalene			1670	769.6		ug/Kg		46	40 - 140		
Phenanthrene			1670	1232		ug/Kg		74	40 - 140		
Pyrene			1670	1358		ug/Kg		81	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*42*		*30 - 130*
2-Fluorobiphenyl (Surr)	*46*		*30 - 130*
Terphenyl-d14 (Surr)	*87*		*30 - 130*

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

Lab Sample ID: LCSD 620-12152/3-A
Matrix: Solid
Analysis Batch: 12140

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12152

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			1670	849.9		ug/Kg		51	40 - 140	2	30
2-Methylnaphthalene			1670	799.5		ug/Kg		48	40 - 140	3	30
Acenaphthene			1670	859.6		ug/Kg		52	40 - 140	6	30
Acenaphthylene			1670	881.7		ug/Kg		53	40 - 140	7	30
Anthracene			1670	1313		ug/Kg		79	40 - 140	1	30
Benzo[a]anthracene			1670	1494		ug/Kg		90	40 - 140	1	30
Benzo[a]pyrene			1670	1428		ug/Kg		86	40 - 140	1	30
Benzo[b]fluoranthene			1670	1482		ug/Kg		89	40 - 140	1	30
Benzo[g,h,i]perylene			1670	1565		ug/Kg		94	40 - 140	0	30
Benzo[k]fluoranthene			1670	1368		ug/Kg		82	40 - 140	2	30
Chrysene			1670	1396		ug/Kg		84	40 - 140	0	30
Dibenz(a,h)anthracene			1670	1525		ug/Kg		91	40 - 140	0	30
Fluoranthene			1670	1421		ug/Kg		85	40 - 140	2	30
Fluorene			1670	1012		ug/Kg		61	40 - 140	8	30
Indeno[1,2,3-cd]pyrene			1670	1546		ug/Kg		93	40 - 140	1	30
Naphthalene			1670	758.9		ug/Kg		46	40 - 140	1	30
Phenanthrene			1670	1296		ug/Kg		78	40 - 140	5	30
Pyrene			1670	1352		ug/Kg		81	40 - 140	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*42*		*30 - 130*
2-Fluorobiphenyl (Surr)	*46*		*30 - 130*
Terphenyl-d14 (Surr)	*85*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-12081/1-A
Matrix: Solid
Analysis Batch: 12158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12081

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
beta-BHC	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
delta-BHC	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
gamma-BHC (Lindane)	ND		2.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Heptachlor	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Aldrin	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Heptachlor epoxide	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Endosulfan I	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Dieldrin	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
4,4'-DDE	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Endrin	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Endosulfan II	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
4,4'-DDD	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Endosulfan sulfate	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
4,4'-DDT	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Methoxychlor	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Endrin ketone	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1

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

Lab Sample ID: MB 620-12081/1-A
Matrix: Solid
Analysis Batch: 12158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12081

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endrin aldehyde	ND		8.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
cis-Chlordane	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
trans-Chlordane	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Toxaphene	ND		100		ug/Kg		06/20/22 09:39	06/21/22 18:25	1
Alachlor	ND		5.00		ug/Kg		06/20/22 09:39	06/21/22 18:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*30 - 150*	*06/20/22 09:39*	*06/21/22 18:25*	*1*
Tetrachloro-m-xylene	*69*		*30 - 150*	*06/20/22 09:39*	*06/21/22 18:25*	*1*
DCB Decachlorobiphenyl (Surr)	*104*		*30 - 150*	*06/20/22 09:39*	*06/21/22 18:25*	*1*
DCB Decachlorobiphenyl (Surr)	*86*		*30 - 150*	*06/20/22 09:39*	*06/21/22 18:25*	*1*

Lab Sample ID: LCS 620-12081/23-A
Matrix: Solid
Analysis Batch: 12158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	13.4	9.695		ug/Kg		72	27 - 108
alpha-BHC	13.4	9.974		ug/Kg		74	27 - 108
beta-BHC	13.3	11.11		ug/Kg		83	50 - 114
beta-BHC	13.3	10.72		ug/Kg		80	50 - 114
delta-BHC	13.4	9.928		ug/Kg		74	41 - 101
delta-BHC	13.4	10.44		ug/Kg		78	41 - 101
gamma-BHC (Lindane)	13.5	10.42		ug/Kg		77	40 - 110
gamma-BHC (Lindane)	13.5	10.10		ug/Kg		75	40 - 110
Heptachlor	13.4	9.893		ug/Kg		74	30 - 101
Heptachlor	13.4	10.14		ug/Kg		76	30 - 101
Aldrin	13.4	9.775		ug/Kg		73	21 - 113
Aldrin	13.4	10.27		ug/Kg		77	21 - 113
Heptachlor epoxide	13.3	10.23		ug/Kg		77	46 - 106
Heptachlor epoxide	13.3	10.36		ug/Kg		78	46 - 106
Endosulfan I	13.3	10.95		ug/Kg		82	45 - 115
Endosulfan I	13.3	11.10		ug/Kg		83	45 - 115
Dieldrin	13.4	10.94		ug/Kg		82	48 - 117
Dieldrin	13.4	11.22		ug/Kg		84	48 - 117
4,4'-DDE	13.4	11.27		ug/Kg		84	40 - 136
4,4'-DDE	13.4	11.51		ug/Kg		86	40 - 136
Endrin	13.4	13.79		ug/Kg		103	58 - 148
Endrin	13.4	13.87		ug/Kg		104	58 - 148
Endosulfan II	13.3	11.78		ug/Kg		88	54 - 120
Endosulfan II	13.3	11.79		ug/Kg		88	54 - 120
4,4'-DDD	13.4	12.13		ug/Kg		91	55 - 133
4,4'-DDD	13.4	12.32		ug/Kg		92	55 - 133
Endosulfan sulfate	13.4	11.90		ug/Kg		89	55 - 119
Endosulfan sulfate	13.4	12.00		ug/Kg		89	55 - 119
4,4'-DDT	13.5	12.90		ug/Kg		96	43 - 140
4,4'-DDT	13.5	12.85		ug/Kg		95	43 - 140
Methoxychlor	13.3	13.87		ug/Kg		104	45 - 156

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

Lab Sample ID: LCS 620-12081/23-A
Matrix: Solid
Analysis Batch: 12158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12081

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methoxychlor			13.3	13.38		ug/Kg		100	45 - 156		
Endrin ketone			13.4	11.33		ug/Kg		85	56 - 107		
Endrin ketone			13.4	11.35		ug/Kg		85	56 - 107		
Endrin aldehyde			13.4	12.23		ug/Kg		91	23 - 145		
Endrin aldehyde			13.4	11.59		ug/Kg		86	23 - 145		
cis-Chlordane			13.4	10.84		ug/Kg		81	44 - 111		
cis-Chlordane			13.4	10.85		ug/Kg		81	44 - 111		
trans-Chlordane			13.4	10.82		ug/Kg		81	50 - 109		
trans-Chlordane			13.4	10.95		ug/Kg		82	50 - 109		
Alachlor			13.4	11.67		ug/Kg		87	53 - 114		
Alachlor			13.4	11.94		ug/Kg		89	53 - 114		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*73*		*30 - 150*
Tetrachloro-m-xylene	*74*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*88*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*87*		*30 - 150*

Lab Sample ID: LCSD 620-12081/24-A
Matrix: Solid
Analysis Batch: 12158

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12081

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	9.792		ug/Kg		73	27 - 108	1	30
alpha-BHC			13.4	10.14		ug/Kg		76	27 - 108	2	30
beta-BHC			13.3	10.90		ug/Kg		82	50 - 114	2	30
beta-BHC			13.3	10.73		ug/Kg		80	50 - 114	0	30
delta-BHC			13.4	9.738		ug/Kg		73	41 - 101	2	30
delta-BHC			13.4	10.30		ug/Kg		77	41 - 101	1	30
gamma-BHC (Lindane)			13.5	10.60		ug/Kg		79	40 - 110	2	30
gamma-BHC (Lindane)			13.5	10.37		ug/Kg		77	40 - 110	3	30
Heptachlor			13.4	10.19		ug/Kg		76	30 - 101	3	30
Heptachlor			13.4	10.42		ug/Kg		78	30 - 101	3	30
Aldrin			13.4	9.842		ug/Kg		74	21 - 113	1	30
Aldrin			13.4	10.34		ug/Kg		77	21 - 113	1	30
Heptachlor epoxide			13.3	10.06		ug/Kg		75	46 - 106	2	30
Heptachlor epoxide			13.3	10.26		ug/Kg		77	46 - 106	1	30
Endosulfan I			13.3	10.54		ug/Kg		79	45 - 115	4	30
Endosulfan I			13.3	10.84		ug/Kg		81	45 - 115	2	30
Dieldrin			13.4	10.43		ug/Kg		78	48 - 117	5	30
Dieldrin			13.4	10.76		ug/Kg		81	48 - 117	4	30
4,4'-DDE			13.4	10.62		ug/Kg		79	40 - 136	6	30
4,4'-DDE			13.4	10.95		ug/Kg		82	40 - 136	5	30
Endrin			13.4	13.09		ug/Kg		98	58 - 148	5	30
Endrin			13.4	13.37		ug/Kg		100	58 - 148	4	30
Endosulfan II			13.3	11.03		ug/Kg		83	54 - 120	7	30
Endosulfan II			13.3	11.32		ug/Kg		85	54 - 120	4	30
4,4'-DDD			13.4	11.23		ug/Kg		84	55 - 133	8	30

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

Lab Sample ID: LCSD 620-12081/24-A
Matrix: Solid
Analysis Batch: 12158

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12081

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			13.4	11.66		ug/Kg		87	55 - 133	5	30
Endosulfan sulfate			13.4	11.55		ug/Kg		86	55 - 119	3	30
Endosulfan sulfate			13.4	11.77		ug/Kg		88	55 - 119	2	30
4,4'-DDT			13.5	12.61		ug/Kg		94	43 - 140	2	30
4,4'-DDT			13.5	12.71		ug/Kg		94	43 - 140	1	30
Methoxychlor			13.3	13.29		ug/Kg		100	45 - 156	4	30
Methoxychlor			13.3	13.21		ug/Kg		99	45 - 156	1	30
Endrin ketone			13.4	10.82		ug/Kg		81	56 - 107	5	30
Endrin ketone			13.4	11.07		ug/Kg		83	56 - 107	2	30
Endrin aldehyde			13.4	12.46		ug/Kg		93	23 - 145	2	30
Endrin aldehyde			13.4	12.80		ug/Kg		95	23 - 145	10	30
cis-Chlordane			13.4	10.44		ug/Kg		78	44 - 111	4	30
cis-Chlordane			13.4	10.53		ug/Kg		78	44 - 111	3	30
trans-Chlordane			13.4	10.55		ug/Kg		79	50 - 109	2	30
trans-Chlordane			13.4	10.66		ug/Kg		80	50 - 109	3	30
Alachlor			13.4	11.01		ug/Kg		82	53 - 114	6	30
Alachlor			13.4	11.60		ug/Kg		87	53 - 114	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*30 - 150*
Tetrachloro-m-xylene	*72*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*80*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*79*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-12081/1-A
Matrix: Solid
Analysis Batch: 12145

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12081

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1
PCB-1221	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1
PCB-1232	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1
PCB-1242	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1
PCB-1248	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1
PCB-1254	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1
PCB-1260	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1
PCB-1262	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1
PCB-1268	ND		20.0		ug/Kg		06/20/22 09:39	06/21/22 12:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 150*	*06/20/22 09:39*	*06/21/22 12:42*	*1*
Tetrachloro-m-xylene	*79*		*30 - 150*	*06/20/22 09:39*	*06/21/22 12:42*	*1*
DCB Decachlorobiphenyl (Surr)	*87*		*30 - 150*	*06/20/22 09:39*	*06/21/22 12:42*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*30 - 150*	*06/20/22 09:39*	*06/21/22 12:42*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 620-12081/2-A
Matrix: Solid
Analysis Batch: 12145

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12081

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	152.5		ug/Kg		91	61 - 112		
PCB-1016			167	151.4		ug/Kg		91	61 - 112		
PCB-1260			167	167.3		ug/Kg		100	63 - 105		
PCB-1260			167	159.3		ug/Kg		96	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*91*		*30 - 150*
Tetrachloro-m-xylene	*94*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*89*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*83*		*30 - 150*

Lab Sample ID: LCSD 620-12081/3-A
Matrix: Solid
Analysis Batch: 12145

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12081

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	159.6		ug/Kg		96	61 - 112	5	30
PCB-1016			167	164.6		ug/Kg		99	61 - 112	8	30
PCB-1260			167	175.2		ug/Kg		105	63 - 105	5	30
PCB-1260			167	166.0		ug/Kg		100	63 - 105	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*91*		*30 - 150*
Tetrachloro-m-xylene	*93*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*87*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*83*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-12107/1-A
Matrix: Solid
Analysis Batch: 12133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12107

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		06/20/22 13:10	06/21/22 13:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*92*		*40 - 140*	*06/20/22 13:10*	*06/21/22 13:59*	*1*
o-Terphenyl (Surr)	*58*		*40 - 140*	*06/20/22 13:10*	*06/21/22 13:59*	*1*

Lab Sample ID: LCS 620-12107/2-A
Matrix: Solid
Analysis Batch: 12133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12107

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	182.7		mg/Kg		55	22 - 93		

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC) (Continued)

Lab Sample ID: LCS 620-12107/2-A
Matrix: Solid
Analysis Batch: 12133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12107

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*91*		*40 - 140*
o-Terphenyl (Surr)	*109*		*40 - 140*

Lab Sample ID: LCSD 620-12107/3-A
Matrix: Solid
Analysis Batch: 12133

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12107

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	202.7		mg/Kg		61	22 - 93	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*86*		*40 - 140*
o-Terphenyl (Surr)	*73*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-12004/1-A
Matrix: Solid
Analysis Batch: 12044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12004

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.00		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Arsenic	ND		1.50		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Barium	ND		1.00		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Beryllium	ND		0.500		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Cadmium	ND		0.500		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Chromium	ND		1.00		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Copper	ND		1.00		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Lead	ND		1.50		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Manganese	ND		1.00		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Nickel	ND		1.00		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Selenium	ND		1.50		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Silver	ND		1.50		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Thallium	ND		3.00		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Vanadium	ND		1.50		mg/Kg		06/16/22 14:39	06/17/22 16:51	1
Zinc	ND		3.00		mg/Kg		06/16/22 14:39	06/17/22 16:51	1

Lab Sample ID: MB 620-12004/1-A
Matrix: Solid
Analysis Batch: 12086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12004

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		1.00		mg/Kg		06/16/22 14:39	06/20/22 12:54	1

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

Lab Sample ID: LCDSRM 620-12004/3-A
Matrix: Solid
Analysis Batch: 12044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12004

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	244	68.24		mg/Kg		28.0	10.0 - 123.0	13	20
Arsenic	109	89.83		mg/Kg		82.4	75.1 - 106.4	6	20
Barium	364	316.3		mg/Kg		86.9	76.9 - 110.2	8	20
Beryllium	57.0	50.24		mg/Kg		88.1	76.5 - 108.1	6	20
Cadmium	48.7	40.10		mg/Kg		82.3	74.7 - 106.0	8	20
Chromium	173	153.1		mg/Kg		88.5	76.3 - 109.8	9	20
Copper	179	161.9		mg/Kg		90.5	79.3 - 110.1	6	20
Lead	101	86.48		mg/Kg		85.6	81.3 - 114.9	5	20
Manganese	370	322.2		mg/Kg		87.1	78.4 - 113.0	6	20
Nickel	52.2	42.62		mg/Kg		81.7	74.7 - 106.7	7	20
Selenium	104	84.10		mg/Kg		80.9	71.4 - 109.6	8	20
Silver	29.9	23.80		mg/Kg		79.6	74.6 - 112.7	7	20
Thallium	101	86.43		mg/Kg		85.6	72.6 - 107.9	8	20
Vanadium	194	167.2		mg/Kg		86.2	73.2 - 112.4	8	20
Zinc	431	367.3		mg/Kg		85.2	74.9 - 111.4	7	20

Lab Sample ID: LCDSRM 620-12004/3-A
Matrix: Solid
Analysis Batch: 12086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12004

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	364	341.6		mg/Kg		93.8	76.9 - 110.2	8	20

Lab Sample ID: LCSSRM 620-12004/2-A
Matrix: Solid
Analysis Batch: 12044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12004

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	244	59.92		mg/Kg		24.6	10.0 - 123.0
Arsenic	109	84.50		mg/Kg		77.5	75.1 - 106.4
Barium	364	290.5		mg/Kg		79.8	76.9 - 110.2
Beryllium	57.0	47.13		mg/Kg		82.7	76.5 - 108.1
Cadmium	48.7	37.08		mg/Kg		76.1	74.7 - 106.0

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

Lab Sample ID: LCSSRM 620-12004/2-A
Matrix: Solid
Analysis Batch: 12044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12004

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	173	139.8		mg/Kg		80.8	76.3 - 109.8
Copper	179	152.9		mg/Kg		85.4	79.3 - 110.1
Lead	101	82.14		mg/Kg		81.3	81.3 - 114.9
Manganese	370	304.9		mg/Kg		82.4	78.4 - 113.0
Nickel	52.2	39.92		mg/Kg		76.5	74.7 - 106.7
Selenium	104	77.64		mg/Kg		74.7	71.4 - 109.6
Silver	29.9	22.23	*-	mg/Kg		74.3	74.6 - 112.7
Thallium	101	79.55		mg/Kg		78.8	72.6 - 107.9
Vanadium	194	154.9		mg/Kg		79.8	73.2 - 112.4
Zinc	431	344.1		mg/Kg		79.8	74.9 - 111.4

Lab Sample ID: LCSSRM 620-12004/2-A
Matrix: Solid
Analysis Batch: 12086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12004

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Barium	364	314.0		mg/Kg		86.3	76.9 - 110.2

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-12005/1-A
Matrix: Solid
Analysis Batch: 12066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12005

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500		mg/Kg		06/16/22 14:41	06/17/22 14:52	1

Lab Sample ID: LCSSRM 620-12005/2-A ^20
Matrix: Solid
Analysis Batch: 12066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12005

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	11.0	9.104		mg/Kg		82.8	64.3 - 118.2

Lab Sample ID: 620-5169-5 MS
Matrix: Solid
Analysis Batch: 12066

Client Sample ID: HA6, HA7, HA8(1)
Prep Type: Total/NA
Prep Batch: 12005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.228	0.2927		mg/Kg	☼	108	75 - 125

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 620-5169-5 MSD
Matrix: Solid
Analysis Batch: 12066

Client Sample ID: HA6, HA7, HA8(1)
Prep Type: Total/NA
Prep Batch: 12005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.245	0.3080		mg/Kg	☼	106	75 - 125	5	20

Method: Moisture - Percent Moisture

Lab Sample ID: 620-5169-6 DU
Matrix: Solid
Analysis Batch: 12088

Client Sample ID: HA9(1.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	54.5			54.6		%				0.2	5
Percent Solids	45.5			45.4		%				0.2	5

GC/MS VOA

Pre Prep Batch: 12019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-1	HA3(1)	Total/NA	Solid	Frozen Preserve	
620-5169-2	HA6(1)	Total/NA	Solid	Frozen Preserve	
620-5169-3	HA7(1)	Total/NA	Solid	Frozen Preserve	
620-5169-4	HA8(1)	Total/NA	Solid	Frozen Preserve	
620-5169-6	HA9(1.5)	Total/NA	Solid	Frozen Preserve	
620-5169-7	HA10(1)	Total/NA	Solid	Frozen Preserve	
620-5169-9	HA11(1.5)	Total/NA	Solid	Frozen Preserve	
620-5169-10	HA12(1)	Total/NA	Solid	Frozen Preserve	
620-5169-12	HA1(1.5)	Total/NA	Solid	Frozen Preserve	
620-5169-13	HA2(1.5)	Total/NA	Solid	Frozen Preserve	
620-5169-15	HA4(2)	Total/NA	Solid	Frozen Preserve	
620-5169-16	HA5(2)	Total/NA	Solid	Frozen Preserve	
620-5169-18	HA13 (1.5)	Total/NA	Solid	Frozen Preserve	
620-5169-19	HA14 (1.5)	Total/NA	Solid	Frozen Preserve	
620-5169-21	HA15(1.5)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 12056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-1	HA3(1)	Total/NA	Solid	5035	12019
620-5169-2	HA6(1)	Total/NA	Solid	5035	12019
620-5169-3	HA7(1)	Total/NA	Solid	5035	12019
620-5169-4	HA8(1)	Total/NA	Solid	5035	12019
620-5169-6	HA9(1.5)	Total/NA	Solid	5035	12019
620-5169-7	HA10(1)	Total/NA	Solid	5035	12019
620-5169-9	HA11(1.5)	Total/NA	Solid	5035	12019
620-5169-10	HA12(1)	Total/NA	Solid	5035	12019
620-5169-12	HA1(1.5)	Total/NA	Solid	5035	12019
620-5169-15	HA4(2)	Total/NA	Solid	5035	12019
620-5169-16	HA5(2)	Total/NA	Solid	5035	12019
MB 620-12056/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-12056/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-12056/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 12057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-1	HA3(1)	Total/NA	Solid	8260C	12056
620-5169-2	HA6(1)	Total/NA	Solid	8260C	12056
620-5169-3	HA7(1)	Total/NA	Solid	8260C	12056
620-5169-4	HA8(1)	Total/NA	Solid	8260C	12056
620-5169-6	HA9(1.5)	Total/NA	Solid	8260C	12056

GC/MS VOA (Continued)

Analysis Batch: 12057 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-7	HA10(1)	Total/NA	Solid	8260C	12056
620-5169-9	HA11(1.5)	Total/NA	Solid	8260C	12056
620-5169-10	HA12(1)	Total/NA	Solid	8260C	12056
620-5169-12	HA1(1.5)	Total/NA	Solid	8260C	12056
620-5169-15	HA4(2)	Total/NA	Solid	8260C	12056
620-5169-16	HA5(2)	Total/NA	Solid	8260C	12056
MB 620-12056/3-A	Method Blank	Total/NA	Solid	8260C	12056
LCS 620-12056/1-A	Lab Control Sample	Total/NA	Solid	8260C	12056
LCSD 620-12056/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	12056

Prep Batch: 12129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-18	HA13 (1.5)	Total/NA	Solid	5035	12019
620-5169-19	HA14 (1.5)	Total/NA	Solid	5035	12019
620-5169-21	HA15(1.5)	Total/NA	Solid	5035	12019
MB 620-12129/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-12129/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-12129/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 12130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-18	HA13 (1.5)	Total/NA	Solid	8260C	12129
620-5169-19	HA14 (1.5)	Total/NA	Solid	8260C	12129
620-5169-21	HA15(1.5)	Total/NA	Solid	8260C	12129
MB 620-12129/3-A	Method Blank	Total/NA	Solid	8260C	12129
LCS 620-12129/1-A	Lab Control Sample	Total/NA	Solid	8260C	12129
LCSD 620-12129/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	12129

Prep Batch: 12184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-13	HA2(1.5)	Total/NA	Solid	5035	12019
MB 620-12184/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-12184/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-12184/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 12185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-13	HA2(1.5)	Total/NA	Solid	8260C	12184
MB 620-12184/3-A	Method Blank	Total/NA	Solid	8260C	12184
LCS 620-12184/1-A	Lab Control Sample	Total/NA	Solid	8260C	12184
LCSD 620-12184/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	12184

GC/MS Semi VOA

Analysis Batch: 12140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	8270D	12152
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	8270D	12152
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	8270D	12152
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	8270D	12152
620-5169-21	HA15(1.5)	Total/NA	Solid	8270D	12152

GC/MS Semi VOA (Continued)

Analysis Batch: 12140 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-12152/1-A	Method Blank	Total/NA	Solid	8270D	12152
LCS 620-12152/2-A	Lab Control Sample	Total/NA	Solid	8270D	12152
LCSD 620-12152/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	12152

Prep Batch: 12152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	3546	
620-5169-8	HA9, HA10(1)	Total/NA	Solid	3546	
620-5169-11	HA11, HA12(1)	Total/NA	Solid	3546	
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	3546	
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	3546	
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	3546	
620-5169-21	HA15(1.5)	Total/NA	Solid	3546	
MB 620-12152/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-12152/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-12152/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 12174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-8	HA9, HA10(1)	Total/NA	Solid	8270D	12152
620-5169-11	HA11, HA12(1)	Total/NA	Solid	8270D	12152

GC Semi VOA

Prep Batch: 12081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	3546	
620-5169-8	HA9, HA10(1)	Total/NA	Solid	3546	
620-5169-11	HA11, HA12(1)	Total/NA	Solid	3546	
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	3546	
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	3546	
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	3546	
620-5169-21	HA15(1.5)	Total/NA	Solid	3546	
MB 620-12081/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-12081/23-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-12081/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-12081/24-A	Lab Control Sample Dup	Total/NA	Solid	3546	
LCSD 620-12081/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Prep Batch: 12107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	3546	
620-5169-8	HA9, HA10(1)	Total/NA	Solid	3546	
620-5169-11	HA11, HA12(1)	Total/NA	Solid	3546	
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	3546	
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	3546	
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	3546	
620-5169-21	HA15(1.5)	Total/NA	Solid	3546	
MB 620-12107/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-12107/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-12107/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

GC Semi VOA

Analysis Batch: 12133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	8100	12107
620-5169-8	HA9, HA10(1)	Total/NA	Solid	8100	12107
620-5169-11	HA11, HA12(1)	Total/NA	Solid	8100	12107
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	8100	12107
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	8100	12107
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	8100	12107
620-5169-21	HA15(1.5)	Total/NA	Solid	8100	12107
MB 620-12107/1-A	Method Blank	Total/NA	Solid	8100	12107
LCS 620-12107/2-A	Lab Control Sample	Total/NA	Solid	8100	12107
LCSD 620-12107/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	12107

Analysis Batch: 12145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	8082A	12081
620-5169-8	HA9, HA10(1)	Total/NA	Solid	8082A	12081
620-5169-11	HA11, HA12(1)	Total/NA	Solid	8082A	12081
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	8082A	12081
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	8082A	12081
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	8082A	12081
620-5169-21	HA15(1.5)	Total/NA	Solid	8082A	12081
MB 620-12081/1-A	Method Blank	Total/NA	Solid	8082A	12081
LCS 620-12081/2-A	Lab Control Sample	Total/NA	Solid	8082A	12081
LCSD 620-12081/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	12081

Analysis Batch: 12158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	8081B	12081
620-5169-8	HA9, HA10(1)	Total/NA	Solid	8081B	12081
620-5169-11	HA11, HA12(1)	Total/NA	Solid	8081B	12081
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	8081B	12081
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	8081B	12081
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	8081B	12081
620-5169-21	HA15(1.5)	Total/NA	Solid	8081B	12081
MB 620-12081/1-A	Method Blank	Total/NA	Solid	8081B	12081
LCS 620-12081/23-A	Lab Control Sample	Total/NA	Solid	8081B	12081
LCSD 620-12081/24-A	Lab Control Sample Dup	Total/NA	Solid	8081B	12081

Metals

Prep Batch: 12004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	3050B	
620-5169-8	HA9, HA10(1)	Total/NA	Solid	3050B	
620-5169-11	HA11, HA12(1)	Total/NA	Solid	3050B	
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	3050B	
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	3050B	
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	3050B	
620-5169-21	HA15(1.5)	Total/NA	Solid	3050B	
MB 620-12004/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 620-12004/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 620-12004/2-A	Lab Control Sample	Total/NA	Solid	3050B	

QC Association Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Metals

Prep Batch: 12005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	7471B	
620-5169-8	HA9, HA10(1)	Total/NA	Solid	7471B	
620-5169-11	HA11, HA12(1)	Total/NA	Solid	7471B	
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	7471B	
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	7471B	
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	7471B	
620-5169-21	HA15(1.5)	Total/NA	Solid	7471B	
MB 620-12005/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-12005/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	
620-5169-5 MS	HA6, HA7, HA8(1)	Total/NA	Solid	7471B	
620-5169-5 MSD	HA6, HA7, HA8(1)	Total/NA	Solid	7471B	

Analysis Batch: 12044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	6010D	12004
620-5169-8	HA9, HA10(1)	Total/NA	Solid	6010D	12004
620-5169-11	HA11, HA12(1)	Total/NA	Solid	6010D	12004
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	6010D	12004
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	6010D	12004
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	6010D	12004
620-5169-21	HA15(1.5)	Total/NA	Solid	6010D	12004
MB 620-12004/1-A	Method Blank	Total/NA	Solid	6010D	12004
LCDSRM 620-12004/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	12004
LCSSRM 620-12004/2-A	Lab Control Sample	Total/NA	Solid	6010D	12004

Analysis Batch: 12066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	7471B	12005
620-5169-8	HA9, HA10(1)	Total/NA	Solid	7471B	12005
620-5169-11	HA11, HA12(1)	Total/NA	Solid	7471B	12005
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	7471B	12005
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	7471B	12005
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	7471B	12005
620-5169-21	HA15(1.5)	Total/NA	Solid	7471B	12005
MB 620-12005/1-A	Method Blank	Total/NA	Solid	7471B	12005
LCSSRM 620-12005/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	12005
620-5169-5 MS	HA6, HA7, HA8(1)	Total/NA	Solid	7471B	12005
620-5169-5 MSD	HA6, HA7, HA8(1)	Total/NA	Solid	7471B	12005

Analysis Batch: 12086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	6010D	12004
MB 620-12004/1-A	Method Blank	Total/NA	Solid	6010D	12004
LCDSRM 620-12004/3-A	Lab Control Sample Dup	Total/NA	Solid	6010D	12004
LCSSRM 620-12004/2-A	Lab Control Sample	Total/NA	Solid	6010D	12004

General Chemistry

Analysis Batch: 12088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-1	HA3(1)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 12088 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-2	HA6(1)	Total/NA	Solid	Moisture	
620-5169-3	HA7(1)	Total/NA	Solid	Moisture	
620-5169-4	HA8(1)	Total/NA	Solid	Moisture	
620-5169-5	HA6, HA7, HA8(1)	Total/NA	Solid	Moisture	
620-5169-6	HA9(1.5)	Total/NA	Solid	Moisture	
620-5169-7	HA10(1)	Total/NA	Solid	Moisture	
620-5169-8	HA9, HA10(1)	Total/NA	Solid	Moisture	
620-5169-9	HA11(1.5)	Total/NA	Solid	Moisture	
620-5169-11	HA11, HA12(1)	Total/NA	Solid	Moisture	
620-5169-12	HA1(1.5)	Total/NA	Solid	Moisture	
620-5169-13	HA2(1.5)	Total/NA	Solid	Moisture	
620-5169-14	HA1,HA2(1.5)	Total/NA	Solid	Moisture	
620-5169-15	HA4(2)	Total/NA	Solid	Moisture	
620-5169-6 DU	HA9(1.5)	Total/NA	Solid	Moisture	

Analysis Batch: 12094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-16	HA5(2)	Total/NA	Solid	Moisture	
620-5169-17	HA3,HA4,HA5 (2)	Total/NA	Solid	Moisture	
620-5169-18	HA13 (1.5)	Total/NA	Solid	Moisture	
620-5169-19	HA14 (1.5)	Total/NA	Solid	Moisture	
620-5169-20	HA13,HA14(1.5)	Total/NA	Solid	Moisture	
620-5169-21	HA15(1.5)	Total/NA	Solid	Moisture	

Analysis Batch: 12151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5169-10	HA12(1)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA3(1)
Date Collected: 06/14/22 08:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA3(1)
Date Collected: 06/14/22 08:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-1
Matrix: Solid
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 00:42	CLR	ENE

Client Sample ID: HA6(1)
Date Collected: 06/14/22 09:15
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA6(1)
Date Collected: 06/14/22 09:15
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-2
Matrix: Solid
Percent Solids: 73.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 01:08	CLR	ENE

Client Sample ID: HA7(1)
Date Collected: 06/14/22 10:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA7(1)
Date Collected: 06/14/22 10:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-3
Matrix: Solid
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 01:34	CLR	ENE

Lab Chronicle

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA8(1)
Date Collected: 06/14/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA8(1)
Date Collected: 06/14/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-4
Matrix: Solid
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 02:00	CLR	ENE

Client Sample ID: HA6, HA7, HA8(1)
Date Collected: 06/14/22 10:45
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA6, HA7, HA8(1)
Date Collected: 06/14/22 10:45
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-5
Matrix: Solid
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			12152	06/21/22 12:13	EDJ	ENE
Total/NA	Analysis	8270D		1	12140	06/21/22 22:30	JS	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8081B		1	12158	06/22/22 01:17	SFL	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8082A		1	12145	06/21/22 13:33	JS	ENE
Total/NA	Prep	3546			12107	06/20/22 13:10	EDJ	ENE
Total/NA	Analysis	8100		1	12133	06/22/22 09:57	JS	ENE
Total/NA	Prep	3050B			12004	06/17/22 08:54	CEV	ENE
Total/NA	Analysis	6010D		1	12044	06/17/22 19:22	CEV	ENE
Total/NA	Prep	7471B			12005	06/16/22 14:42	CEV	ENE
Total/NA	Analysis	7471B		1	12066	06/17/22 15:03	CEV	ENE

Client Sample ID: HA9(1.5)
Date Collected: 06/14/22 11:15
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Lab Chronicle

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA9(1.5)
Date Collected: 06/14/22 11:15
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-6
Matrix: Solid
Percent Solids: 45.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 02:26	CLR	ENE

Client Sample ID: HA10(1)
Date Collected: 06/14/22 11:50
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA10(1)
Date Collected: 06/14/22 11:50
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-7
Matrix: Solid
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 02:52	CLR	ENE

Client Sample ID: HA9, HA10(1)
Date Collected: 06/14/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA9, HA10(1)
Date Collected: 06/14/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-8
Matrix: Solid
Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			12152	06/21/22 12:13	EDJ	ENE
Total/NA	Analysis	8270D		5	12174	06/22/22 14:09	JS	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8081B		1	12158	06/21/22 22:40	SFL	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8082A		1	12145	06/21/22 13:49	JS	ENE
Total/NA	Prep	3546			12107	06/20/22 13:10	EDJ	ENE
Total/NA	Analysis	8100		1	12133	06/22/22 15:06	JS	ENE
Total/NA	Prep	3050B			12004	06/17/22 08:54	CEV	ENE
Total/NA	Analysis	6010D		1	12044	06/17/22 19:44	CEV	ENE
Total/NA	Prep	7471B			12005	06/17/22 08:56	CEV	ENE
Total/NA	Analysis	7471B		1	12066	06/17/22 15:09	CEV	ENE

Lab Chronicle

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA11(1.5)
Date Collected: 06/14/22 13:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA11(1.5)
Date Collected: 06/14/22 13:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-9
Matrix: Solid
Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 03:18	CLR	ENE

Client Sample ID: HA12(1)
Date Collected: 06/14/22 13:50
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12151	06/21/22 11:57	PN	ENE

Client Sample ID: HA12(1)
Date Collected: 06/14/22 13:50
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-10
Matrix: Solid
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 03:44	CLR	ENE

Client Sample ID: HA11, HA12(1)
Date Collected: 06/14/22 14:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA11, HA12(1)
Date Collected: 06/14/22 14:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-11
Matrix: Solid
Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			12152	06/21/22 12:13	EDJ	ENE
Total/NA	Analysis	8270D		5	12174	06/22/22 15:06	JS	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8081B		1	12158	06/22/22 01:33	SFL	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8082A		1	12145	06/21/22 14:06	JS	ENE

Lab Chronicle

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA11, HA12(1)
Date Collected: 06/14/22 14:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-11
Matrix: Solid
Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			12107	06/20/22 13:10	EDJ	ENE
Total/NA	Analysis	8100		1	12133	06/22/22 09:07	JS	ENE
Total/NA	Prep	3050B			12004	06/17/22 08:54	CEV	ENE
Total/NA	Analysis	6010D		1	12044	06/17/22 19:51	CEV	ENE
Total/NA	Prep	7471B			12005	06/17/22 08:56	CEV	ENE
Total/NA	Analysis	7471B		1	12066	06/17/22 15:14	CEV	ENE

Client Sample ID: HA1(1.5)
Date Collected: 06/15/22 08:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA1(1.5)
Date Collected: 06/15/22 08:30
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-12
Matrix: Solid
Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 04:09	CLR	ENE

Client Sample ID: HA2(1.5)
Date Collected: 06/15/22 09:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA2(1.5)
Date Collected: 06/15/22 09:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-13
Matrix: Solid
Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12184	06/22/22 09:32	CLR	ENE
Total/NA	Analysis	8260C		1	12185	06/22/22 14:43	CLR	ENE

Client Sample ID: HA1,HA2(1.5)
Date Collected: 06/15/22 09:05
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Lab Chronicle

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA1,HA2(1.5)

Lab Sample ID: 620-5169-14
Date Collected: 06/15/22 09:05
Matrix: Solid
Date Received: 06/16/22 16:49
Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			12152	06/21/22 12:13	EDJ	ENE
Total/NA	Analysis	8270D		1	12140	06/21/22 23:55	JS	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8081B		1	12158	06/21/22 22:24	SFL	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8082A		1	12145	06/21/22 14:23	JS	ENE
Total/NA	Prep	3546			12107	06/20/22 13:10	EDJ	ENE
Total/NA	Analysis	8100		1	12133	06/22/22 09:32	JS	ENE
Total/NA	Prep	3050B			12004	06/17/22 08:54	CEV	ENE
Total/NA	Analysis	6010D		10	12086	06/20/22 13:15	CEV	ENE
Total/NA	Prep	3050B			12004	06/17/22 08:54	CEV	ENE
Total/NA	Analysis	6010D		1	12044	06/17/22 19:58	CEV	ENE
Total/NA	Prep	7471B			12005	06/17/22 08:56	CEV	ENE
Total/NA	Analysis	7471B		1	12066	06/17/22 15:16	CEV	ENE

Client Sample ID: HA4(2)

Lab Sample ID: 620-5169-15
Date Collected: 06/15/22 09:45
Matrix: Solid
Date Received: 06/16/22 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12088	06/20/22 10:49	JMF	ENE

Client Sample ID: HA4(2)

Lab Sample ID: 620-5169-15
Date Collected: 06/15/22 09:45
Matrix: Solid
Date Received: 06/16/22 16:49
Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 05:01	CLR	ENE

Client Sample ID: HA5(2)

Lab Sample ID: 620-5169-16
Date Collected: 06/15/22 10:30
Matrix: Solid
Date Received: 06/16/22 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12094	06/20/22 11:46	JMF	ENE

Client Sample ID: HA5(2)

Lab Sample ID: 620-5169-16
Date Collected: 06/15/22 10:30
Matrix: Solid
Date Received: 06/16/22 16:49
Percent Solids: 56.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12056	06/17/22 15:52	CLR	ENE
Total/NA	Analysis	8260C		1	12057	06/18/22 05:27	CLR	ENE

Client Sample ID: HA3,HA4,HA5 (2)
Date Collected: 06/15/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12094	06/20/22 11:46	JMF	ENE

Client Sample ID: HA3,HA4,HA5 (2)
Date Collected: 06/15/22 10:35
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-17
Matrix: Solid
Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			12152	06/21/22 12:13	EDJ	ENE
Total/NA	Analysis	8270D		1	12140	06/22/22 00:23	JS	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8081B		1	12158	06/21/22 22:08	SFL	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8082A		1	12145	06/21/22 14:40	JS	ENE
Total/NA	Prep	3546			12107	06/20/22 13:10	EDJ	ENE
Total/NA	Analysis	8100		1	12133	06/22/22 15:31	JS	ENE
Total/NA	Prep	3050B			12004	06/17/22 08:54	CEV	ENE
Total/NA	Analysis	6010D		1	12044	06/17/22 20:06	CEV	ENE
Total/NA	Prep	7471B			12005	06/17/22 08:56	CEV	ENE
Total/NA	Analysis	7471B		1	12066	06/17/22 15:18	CEV	ENE

Client Sample ID: HA13 (1.5)
Date Collected: 06/15/22 10:55
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12094	06/20/22 11:46	JMF	ENE

Client Sample ID: HA13 (1.5)
Date Collected: 06/15/22 10:55
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-18
Matrix: Solid
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12129	06/21/22 09:49	CLR	ENE
Total/NA	Analysis	8260C		1	12130	06/21/22 16:37	CLR	ENE

Client Sample ID: HA14 (1.5)
Date Collected: 06/15/22 11:20
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12094	06/20/22 11:46	JMF	ENE

Lab Chronicle

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA14 (1.5)
Date Collected: 06/15/22 11:20
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-19
Matrix: Solid
Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12129	06/21/22 09:49	CLR	ENE
Total/NA	Analysis	8260C		1	12130	06/21/22 17:03	CLR	ENE

Client Sample ID: HA13,HA14(1.5)
Date Collected: 06/15/22 11:25
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12094	06/20/22 11:46	JMF	ENE

Client Sample ID: HA13,HA14(1.5)
Date Collected: 06/15/22 11:25
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-20
Matrix: Solid
Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			12152	06/21/22 12:13	EDJ	ENE
Total/NA	Analysis	8270D		1	12140	06/21/22 22:02	JS	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8081B		1	12158	06/21/22 21:04	SFL	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8082A		1	12145	06/21/22 14:57	JS	ENE
Total/NA	Prep	3546			12107	06/20/22 13:10	EDJ	ENE
Total/NA	Analysis	8100		1	12133	06/21/22 21:53	JS	ENE
Total/NA	Prep	3050B			12004	06/17/22 08:54	CEV	ENE
Total/NA	Analysis	6010D		1	12044	06/17/22 20:13	CEV	ENE
Total/NA	Prep	7471B			12005	06/17/22 08:56	CEV	ENE
Total/NA	Analysis	7471B		1	12066	06/17/22 15:20	CEV	ENE

Client Sample ID: HA15(1.5)
Date Collected: 06/15/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12094	06/20/22 11:46	JMF	ENE

Client Sample ID: HA15(1.5)
Date Collected: 06/15/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-21
Matrix: Solid
Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12019	06/15/22 14:00	KFS	ENE
Total/NA	Prep	5035			12129	06/21/22 09:49	CLR	ENE
Total/NA	Analysis	8260C		1	12130	06/21/22 17:29	CLR	ENE
Total/NA	Prep	3546			12152	06/21/22 12:13	EDJ	ENE
Total/NA	Analysis	8270D		1	12140	06/21/22 21:33	JS	ENE

Lab Chronicle

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Client Sample ID: HA15(1.5)
Date Collected: 06/15/22 12:00
Date Received: 06/16/22 16:49

Lab Sample ID: 620-5169-21
Matrix: Solid
Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8081B		1	12158	06/21/22 19:13	SFL	ENE
Total/NA	Prep	3546			12081	06/20/22 09:39	EDJ	ENE
Total/NA	Analysis	8082A		1	12145	06/21/22 15:14	JS	ENE
Total/NA	Prep	3546			12107	06/20/22 13:10	EDJ	ENE
Total/NA	Analysis	8100		1	12133	06/21/22 19:22	JS	ENE
Total/NA	Prep	3050B			12004	06/17/22 08:54	CEV	ENE
Total/NA	Analysis	6010D		1	12044	06/17/22 20:20	CEV	ENE
Total/NA	Prep	7471B			12005	06/17/22 08:56	CEV	ENE
Total/NA	Analysis	7471B		1	12066	06/17/22 15:22	CEV	ENE

Laboratory References:
ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
6010D	3050B	Solid	Antimony
6010D	3050B	Solid	Arsenic
6010D	3050B	Solid	Barium
6010D	3050B	Solid	Beryllium
6010D	3050B	Solid	Cadmium
6010D	3050B	Solid	Chromium
6010D	3050B	Solid	Copper
6010D	3050B	Solid	Lead
6010D	3050B	Solid	Manganese
6010D	3050B	Solid	Nickel
6010D	3050B	Solid	Selenium
6010D	3050B	Solid	Silver
6010D	3050B	Solid	Thallium
6010D	3050B	Solid	Vanadium
6010D	3050B	Solid	Zinc
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260

Laboratory: Eurofins New England (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
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene

Accreditation/Certification Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Laboratory: Eurofins New England (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
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Pyrene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ENE
8081B	Organochlorine Pesticides (GC)	SW846	ENE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ENE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	ENE
6010D	Metals (ICP)	SW846	ENE
7471B	Mercury (CVAA)	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
3050B	Preparation, Metals	SW846	ENE
3546	Microwave Extraction	SW846	ENE
5035	Closed System Purge and Trap	SW846	ENE
7471B	Preparation, Mercury	SW846	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I-295

Job ID: 620-5169-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-5169-1	HA3(1)	Solid	06/14/22 08:30	06/16/22 16:49
620-5169-2	HA6(1)	Solid	06/14/22 09:15	06/16/22 16:49
620-5169-3	HA7(1)	Solid	06/14/22 10:00	06/16/22 16:49
620-5169-4	HA8(1)	Solid	06/14/22 10:35	06/16/22 16:49
620-5169-5	HA6, HA7, HA8(1)	Solid	06/14/22 10:45	06/16/22 16:49
620-5169-6	HA9(1.5)	Solid	06/14/22 11:15	06/16/22 16:49
620-5169-7	HA10(1)	Solid	06/14/22 11:50	06/16/22 16:49
620-5169-8	HA9, HA10(1)	Solid	06/14/22 12:00	06/16/22 16:49
620-5169-9	HA11(1.5)	Solid	06/14/22 13:00	06/16/22 16:49
620-5169-10	HA12(1)	Solid	06/14/22 13:50	06/16/22 16:49
620-5169-11	HA11, HA12(1)	Solid	06/14/22 14:00	06/16/22 16:49
620-5169-12	HA1(1.5)	Solid	06/15/22 08:30	06/16/22 16:49
620-5169-13	HA2(1.5)	Solid	06/15/22 09:00	06/16/22 16:49
620-5169-14	HA1,HA2(1.5)	Solid	06/15/22 09:05	06/16/22 16:49
620-5169-15	HA4(2)	Solid	06/15/22 09:45	06/16/22 16:49
620-5169-16	HA5(2)	Solid	06/15/22 10:30	06/16/22 16:49
620-5169-17	HA3,HA4,HA5 (2)	Solid	06/15/22 10:35	06/16/22 16:49
620-5169-18	HA13 (1.5)	Solid	06/15/22 10:55	06/16/22 16:49
620-5169-19	HA14 (1.5)	Solid	06/15/22 11:20	06/16/22 16:49
620-5169-20	HA13,HA14(1.5)	Solid	06/15/22 11:25	06/16/22 16:49
620-5169-21	HA15(1.5)	Solid	06/15/22 12:00	06/16/22 16:49

620-5169 Chain of Custody

ment Testing
gland

CHAIN OF CUSTODY RECORD

Page 1 of 3

Special Handling:
- [x] Standard TAT - ~~7 to 10~~ 5 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: AECOM
10 OIMS Street suite 405
Providence, RI 02904

Telephone #: 978-905-2210
Project Mgr: Patrick Haskell

Invoice To: AECOM
Patrick Haskell

PO No. ~~HHS~~ 144832 Quote #:

Project No: 60680132
Site Name: I-295
Location: I-295 State: RI
Sampler(s): Anthony Wong-L.

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= X2= X3=

G= Grab C=Compsite

List Preservative Code below: 9/7 | - | - | - | - | - |

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? Yes No
CT DPH RCP Report? Yes No
Standard No QC DQA*
ASP A* ASP B*
NJ Reduced* NJ Full*
Tier II* Tier IV*
Other
State-specific reporting standards.

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	TPH 8100 M	PAHs	PAHs + Mg, V	PCBs	Pesticides	Check if chlorinated
	HA3(1)	6/14/22	0830	G	SO	3	1			X						
	HA6(1)	6/14/22	0915	G	SO	3	1			X						
	HA7(1)	6/14/22	1000	G	SO	3	1			X						
	HA8(1)	6/14/22	1035	G	SO	3	1			X						
	HA6, HA7, HA8(1)	6/14/22	1045	C	SO		2				X	X	X	X	X	
	HA9(1.5)	6/14/22	1115	G	SO	3	1			X						
	HA10(1)	6/14/22	1150	G	SO	3	1			X						
	HA9, HA10(1)	6/14/22	1200	C	SO		2				X	X	X	X	X	
	HA11(1.5)	6/14/22	1300	G	SO	3	1			X						
	HA12(1)	6/14/22	1350	G	SO	3	1			X						

~~#11~~ VOCs frozen 6/15/22 1400

Relinquished by:	Received by:	Date:	Time:	Temp °C
Nash Gladwell		6/16/22	10:45	Observed 0.2
		6/16/22	16:49	Correction Factor +0.4
				Corrected 0.6
				IR ID # 6

EDD format:
E-mail to:

Condition upon receipt: Custody Seals: Present Intact Broken
Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen

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6/23/2022

eurofins | Environment Testing New England

CHAIN OF CUSTODY RECORD

Page 2 of 3

Special Handling:

☑ Standard TAT - ~~7 to 10~~ 5 business days

☐ Rush TAT - Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To	AECOM 10 Orms Street Suite 405 Providence, RI 02904
Telephone #	978-905-2210
Project Mgr	Patrick Haskell
Invoice To:	AECOM Patrick Haskell
PO No.	144832
Quote #:	
Project No:	60680132
Site Name:	I-295
Location.	I-295
State:	RI
Sampler(s)	Anthony Wong-L.

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: VOCs	TPH 8100M	PAHs	Pb, Mn, V	PCBs	Pesticides	Check if chlorinated
	HA11, HA12(1)	6/14/22	1400	C	SO		2				X	X	X	X	X	
	HA1 (1.5)	6/15/22	0830	G	SO	3	1			X						
	HA2 (1.5)	6/15/22	0900	G	SO	3	1			X						
	HA1, HA2 (1.5)	6/15/22	0905	C	SO		2				X	X	X	X	X	
	HA4 (2)	6/15/22	0945	G	SO	3	1			X						
	HA5 (2)	6/15/22	1030	G	SO	3	1			X						
	HA3, HA4, HA5 (2)	6/15/22	1035	C	SO		2				X	X	X	X	X	
	HA13 (1.5)	6/15/22	1055	G	SO	3	1			X						
	HA14 (1.5)	6/15/22	1120	G	SO	3	1			X						
	HA13, HA14 (1.5)	6/15/22	1125	C	SO		2				X	X	X	X	X	

List Preservative Code below: 9/7 | – | – | – | – | –

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other _____
State-specific reporting standards.

All VOCs frozen 6/15/22 1400

Relinquished by:	Received by:	Date:	Time:
Nash Gildersleeve		6/16/22	10:45
		6/16/22	16:49

Temp °C: Observed 0-2 | Correction Factor +0.4 | Corrected 0.6 | IR ID # 6

☐ EDD format: _____
☐ E-mail to _____

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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6/23/2022

eurofins | Environment Testing New England

CHAIN OF CUSTODY RECORD

Special Handling:
☑ Standard TAT - ~~7 to~~ 5 10 business days
☐ Rush TAT - Date Needed.
All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: AECOM
10 Olms Street Suite 405
Providence, RI 02904
Telephone #: 970-905-2210
Project Mgr: Patrick Haskell

Invoice To: AECOM
Patrick Haskell
PO No. 144832 Quote #:

Project No: 60680132
Site Name: I-295
Location: I-295 State: RI
Sampler(s): Anthony Wong-L.

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= X2= X3=

G= Grab C=Compsite

List Preservative Code below: 9/7, -, -, -, -, -

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		VOCs	TPH 8100M	PAHs	Plumber Metals	PCBs	Pesticides			Check if chlorinated
	HA 15 (1.5)	6/15/22	1200	G	SO	3	3				X	X	X	X	X	X			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐

QA/QC Reporting Notes:
* additional charges may appply
MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC
☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other
State-specific reporting standards.

All VOCs frozen 6/15/22 1400

Relinquished by:	Received by:	Date:	Time:	Temp °C
Nash Gildwell	[signature]	6/16/22	10:45	Observed 0.2
[signature]	[signature]	6/16/22	16:49	Correction Factor +0.4
				Corrected 0.6
				IR ID # 6

☐ EDD format:
☐ E-mail to

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Rev Jan 2020

6/23/2022

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-5169-1

Login Number: 5169
List Number: 1
Creator: McAdams, Nicole L

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-5417-1
Client Project/Site: I295/Rt 37 - Johnston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
7/7/2022 3:03:53 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-5417-1
Project/Site: I295/Rt 37 - Johnston, RI

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
H	Sample was prepped or analyzed beyond the specified holding time
H3	Sample was received and analyzed past holding time.
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)
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

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Job ID: 620-5417-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-5417-1

Comments
No additional comments.

Receipt
The samples were received on 6/29/2022 5:20 PM. 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 was 3.8º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The VOC preservative codes are missing from the CoC.

GC/MS VOA
Method 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: m,p-Xylenes, Chloroethane, Vinyl chloride, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Naphthalene, Hexachlorobutadiene, and 1,2-Dibromo-3-Chloropropane.
(CCVIS 620-12601/3)

Methods 8260, 8260C: The laboratory control sample (LCS) for preparation batch 620-12598 and analytical batch 620-12601 recovered outside control limits for the following analytes: Vinyl chloride and Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Methods 8260, 8260C: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 620-12598 and analytical batch 620-12601 recovered outside control limits for the following analytes: 2-Hexanone, Acetone, 2-Butanone (MEK), and 1,4-Dioxane, which have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Methods 8260, 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 620-12598 and analytical batch 620-12601 recovered outside control limits for the following analytes: Vinyl chloride, Chloroethane, and Bromomethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The following samples were received with insufficient time remaining to freeze within 48 hours, as required for samples collected in water preserved vials: RW-1 (2-4) (620-5417-1) and B109-2' (620-5417-2). The sampled were collected on 6/16 at 09:00. The samples were received on 6/29 at 17:20 and placed in the freezer on 6/29 at 18:56 .

Method Frozen Preserve: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: RW-1 (2-4) (620-5417-1) and B109-2' (620-5417-2).

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

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Client Sample ID: RW-1 (2-4) — Lab Sample ID: 620-5417-1

No Detections.

Client Sample ID: B109-2' — Lab Sample ID: 620-5417-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Client Sample ID: RW-1 (2-4)
Date Collected: 06/16/22 09:00
Date Received: 06/29/22 17:20

Lab Sample ID: 620-5417-1
Matrix: Solid
Percent Solids: 97.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Acetone	ND	H *- H3	38.5		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Acrylonitrile	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Benzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Bromobenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Bromochloromethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Bromodichloromethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Bromoform	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Bromomethane	ND	*+ H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
2-Butanone (MEK)	ND	H *- H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
n-Butylbenzene	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
sec-Butylbenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
tert-Butylbenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Carbon disulfide	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Carbon tetrachloride	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Chlorobenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Chloroethane	ND	*+ H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Chloroform	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Chloromethane	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
2-Chlorotoluene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
4-Chlorotoluene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2-Dibromo-3-Chloropropane	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Dibromochloromethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2-Dibromoethane (EDB)	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Dibromomethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2-Dichlorobenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,3-Dichlorobenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,4-Dichlorobenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Dichlorodifluoromethane (Freon 12)	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,1-Dichloroethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2-Dichloroethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,1-Dichloroethene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
cis-1,2-Dichloroethene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
trans-1,2-Dichloroethene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2-Dichloropropane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,3-Dichloropropane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
2,2-Dichloropropane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,1-Dichloropropene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
cis-1,3-Dichloropropene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
trans-1,3-Dichloropropene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Ethylbenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Hexachlorobutadiene	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
2-Hexanone (MBK)	ND	H *- H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Isopropylbenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
4-Isopropyltoluene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Methyl tert-butyl ether	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
4-Methyl-2-pentanone (MIBK)	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Methylene Chloride	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Naphthalene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Client Sample ID: RW-1 (2-4)
Date Collected: 06/16/22 09:00
Date Received: 06/29/22 17:20

Lab Sample ID: 620-5417-1
Matrix: Solid
Percent Solids: 97.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Styrene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,1,1,2-Tetrachloroethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,1,2,2-Tetrachloroethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Tetrachloroethene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Toluene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2,3-Trichlorobenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2,4-Trichlorobenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,3,5-Trichlorobenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,1,1-Trichloroethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,1,2-Trichloroethane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Trichloroethene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Trichlorofluoromethane (Freon 11)	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2,3-Trichloropropane	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,2,4-Trimethylbenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,3,5-Trimethylbenzene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Vinyl chloride	ND	*+ H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
m,p-Xylene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
o-Xylene	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Tetrahydrofuran	ND	H H3	7.70		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Ethyl ether	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Tert-amyl methyl ether	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Ethyl tert-butyl ether	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
di-Isopropyl ether	ND	H H3	3.85		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
tert-Butanol	ND	H H3	77.0		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
1,4-Dioxane	ND	H *- H3	77.0		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
trans-1,4-Dichloro-2-butene	ND	H H3	19.2		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1
Ethanol	ND	H H3	770		ug/Kg	☼	07/01/22 10:00	07/01/22 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/01/22 10:00*	*07/01/22 16:56*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*07/01/22 10:00*	*07/01/22 16:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*127*		*70 - 130*	*07/01/22 10:00*	*07/01/22 16:56*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*07/01/22 10:00*	*07/01/22 16:56*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**2.9**		0.1		%			06/30/22 11:26	1
Percent Solids	**97.1**		0.1		%			06/30/22 11:26	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Client Sample ID: B109-2'
Date Collected: 06/17/22 09:30
Date Received: 06/29/22 17:20

Lab Sample ID: 620-5417-2
Matrix: Solid
Percent Solids: 96.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Acetone	ND	H *- H3	39.7		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Acrylonitrile	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Benzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Bromobenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Bromochloromethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Bromodichloromethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Bromoform	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Bromomethane	ND	*+ H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
2-Butanone (MEK)	ND	H *- H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
n-Butylbenzene	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
sec-Butylbenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
tert-Butylbenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Carbon disulfide	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Carbon tetrachloride	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Chlorobenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Chloroethane	ND	*+ H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Chloroform	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Chloromethane	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
2-Chlorotoluene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
4-Chlorotoluene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2-Dibromo-3-Chloropropane	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Dibromochloromethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2-Dibromoethane (EDB)	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Dibromomethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2-Dichlorobenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,3-Dichlorobenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,4-Dichlorobenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Dichlorodifluoromethane (Freon 12)	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,1-Dichloroethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2-Dichloroethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,1-Dichloroethene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
cis-1,2-Dichloroethene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
trans-1,2-Dichloroethene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2-Dichloropropane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,3-Dichloropropane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
2,2-Dichloropropane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,1-Dichloropropene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
cis-1,3-Dichloropropene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
trans-1,3-Dichloropropene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Ethylbenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Hexachlorobutadiene	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
2-Hexanone (MBK)	ND	H *- H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Isopropylbenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
4-Isopropyltoluene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Methyl tert-butyl ether	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
4-Methyl-2-pentanone (MIBK)	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Methylene Chloride	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Naphthalene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1

Client Sample ID: B109-2'
Date Collected: 06/17/22 09:30
Date Received: 06/29/22 17:20

Lab Sample ID: 620-5417-2
Matrix: Solid
Percent Solids: 96.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Styrene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,1,1,2-Tetrachloroethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,1,2,2-Tetrachloroethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Tetrachloroethene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Toluene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2,3-Trichlorobenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2,4-Trichlorobenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,3,5-Trichlorobenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,1,1-Trichloroethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,1,2-Trichloroethane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Trichloroethene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Trichlorofluoromethane (Freon 11)	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2,3-Trichloropropane	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,2,4-Trimethylbenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,3,5-Trimethylbenzene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Vinyl chloride	ND	*+ H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
m,p-Xylene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
o-Xylene	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Tetrahydrofuran	ND	H H3	7.95		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Ethyl ether	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Tert-amyl methyl ether	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Ethyl tert-butyl ether	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
di-Isopropyl ether	ND	H H3	3.97		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
tert-Butanol	ND	H H3	79.5		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
1,4-Dioxane	ND	H *- H3	79.5		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
trans-1,4-Dichloro-2-butene	ND	H H3	19.9		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1
Ethanol	ND	H H3	795		ug/Kg	☼	07/01/22 10:00	07/01/22 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/01/22 10:00*	*07/01/22 17:23*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*07/01/22 10:00*	*07/01/22 17:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*129*		*70 - 130*	*07/01/22 10:00*	*07/01/22 17:23*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*07/01/22 10:00*	*07/01/22 17:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.0**		0.1		%			06/30/22 11:26	1
Percent Solids	**96.0**		0.1		%			06/30/22 11:26	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-5417-1	RW-1 (2-4)	97	96	127	102
620-5417-2	B109-2'	97	96	129	103
LCS 620-12598/1-A	Lab Control Sample	102	98	124	103
LCSD 620-12598/2-A	Lab Control Sample Dup	101	98	123	102
MB 620-12598/3-A	Method Blank	98	96	124	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-12598/3-A
Matrix: Solid
Analysis Batch: 12601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12598

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Acetone	ND		50.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Acrylonitrile	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Benzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Bromobenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Bromochloromethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Bromodichloromethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Bromoform	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Bromomethane	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
2-Butanone (MEK)	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
n-Butylbenzene	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
sec-Butylbenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
tert-Butylbenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Carbon disulfide	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Carbon tetrachloride	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Chlorobenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Chloroethane	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Chloroform	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Chloromethane	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
2-Chlorotoluene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
4-Chlorotoluene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Dibromochloromethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Dibromomethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,1-Dichloroethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2-Dichloroethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,1-Dichloroethene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2-Dichloropropane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,3-Dichloropropane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
2,2-Dichloropropane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,1-Dichloropropene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Ethylbenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Hexachlorobutadiene	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Isopropylbenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
4-Isopropyltoluene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Methylene Chloride	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12598/3-A
Matrix: Solid
Analysis Batch: 12601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12598

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
N-Propylbenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Styrene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Tetrachloroethene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Toluene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Trichloroethene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Vinyl chloride	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
m,p-Xylene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
o-Xylene	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Tetrahydrofuran	ND		10.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Ethyl ether	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
di-Isopropyl ether	ND		5.00		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
tert-Butanol	ND		100		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
1,4-Dioxane	ND		100		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		07/01/22 10:00	07/01/22 13:01	1
Ethanol	ND		1000		ug/Kg		07/01/22 10:00	07/01/22 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*07/01/22 10:00*	*07/01/22 13:01*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*07/01/22 10:00*	*07/01/22 13:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*	*07/01/22 10:00*	*07/01/22 13:01*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*07/01/22 10:00*	*07/01/22 13:01*	*1*

Lab Sample ID: LCS 620-12598/1-A
Matrix: Solid
Analysis Batch: 12601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	23.45		ug/Kg		117	70 - 130
Acetone	20.0	ND	*-	ug/Kg		55	70 - 130
Acrylonitrile	20.0	19.94		ug/Kg		100	70 - 130
Benzene	20.0	19.14		ug/Kg		96	70 - 130
Bromobenzene	20.0	18.25		ug/Kg		91	70 - 130
Bromochloromethane	20.0	19.09		ug/Kg		95	70 - 130
Bromodichloromethane	20.0	22.96		ug/Kg		115	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12598/1-A
Matrix: Solid
Analysis Batch: 12601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	19.77		ug/Kg		99	70 - 130
Bromomethane	20.0	25.23		ug/Kg		126	70 - 130
2-Butanone (MEK)	20.0	12.81	*-	ug/Kg		64	70 - 130
n-Butylbenzene	20.0	25.13		ug/Kg		126	70 - 130
sec-Butylbenzene	20.0	22.51		ug/Kg		113	70 - 130
tert-Butylbenzene	20.0	17.68		ug/Kg		88	70 - 130
Carbon disulfide	20.0	22.00		ug/Kg		110	70 - 130
Carbon tetrachloride	20.0	20.80		ug/Kg		104	70 - 130
Chlorobenzene	20.0	22.15		ug/Kg		111	70 - 130
Chloroethane	20.0	31.75	*+	ug/Kg		159	70 - 130
Chloroform	20.0	21.23		ug/Kg		106	70 - 130
Chloromethane	20.0	23.68		ug/Kg		118	70 - 130
2-Chlorotoluene	20.0	22.97		ug/Kg		115	70 - 130
4-Chlorotoluene	20.0	23.43		ug/Kg		117	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	15.68		ug/Kg		78	70 - 130
Dibromochloromethane	20.0	19.55		ug/Kg		98	70 - 130
1,2-Dibromoethane (EDB)	20.0	18.00		ug/Kg		90	70 - 130
Dibromomethane	20.0	20.24		ug/Kg		101	70 - 130
1,2-Dichlorobenzene	20.0	20.89		ug/Kg		104	70 - 130
1,3-Dichlorobenzene	20.0	20.80		ug/Kg		104	70 - 130
1,4-Dichlorobenzene	20.0	23.22		ug/Kg		116	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	24.06		ug/Kg		120	70 - 130
1,1-Dichloroethane	20.0	21.67		ug/Kg		108	70 - 130
1,2-Dichloroethane	20.0	22.49		ug/Kg		112	70 - 130
1,1-Dichloroethene	20.0	20.03		ug/Kg		100	70 - 130
cis-1,2-Dichloroethene	20.0	18.06		ug/Kg		90	70 - 130
trans-1,2-Dichloroethene	20.0	19.56		ug/Kg		98	70 - 130
1,2-Dichloropropane	20.0	20.86		ug/Kg		104	70 - 130
1,3-Dichloropropane	20.0	18.68		ug/Kg		93	70 - 130
2,2-Dichloropropane	20.0	21.26		ug/Kg		106	70 - 130
1,1-Dichloropropene	20.0	17.71		ug/Kg		89	70 - 130
cis-1,3-Dichloropropene	20.0	16.49		ug/Kg		82	70 - 130
trans-1,3-Dichloropropene	20.0	20.15		ug/Kg		101	70 - 130
Ethylbenzene	20.0	22.57		ug/Kg		113	70 - 130
Hexachlorobutadiene	20.0	16.50		ug/Kg		83	70 - 130
2-Hexanone (MBK)	20.0	10.13	*-	ug/Kg		51	70 - 130
Isopropylbenzene	20.0	19.70		ug/Kg		98	70 - 130
4-Isopropyltoluene	20.0	21.21		ug/Kg		106	70 - 130
Methyl tert-butyl ether	20.0	17.04		ug/Kg		85	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	16.08		ug/Kg		80	70 - 130
Methylene Chloride	20.0	21.19		ug/Kg		106	70 - 130
Naphthalene	20.0	16.55		ug/Kg		83	70 - 130
N-Propylbenzene	20.0	23.67		ug/Kg		118	70 - 130
Styrene	20.0	19.61		ug/Kg		98	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.14		ug/Kg		106	70 - 130
1,1,2,2-Tetrachloroethane	20.0	24.47		ug/Kg		122	70 - 130
Tetrachloroethene	20.0	14.77		ug/Kg		74	70 - 130
Toluene	20.0	19.01		ug/Kg		95	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12598/1-A
Matrix: Solid
Analysis Batch: 12601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	20.0	17.01		ug/Kg		85	70 - 130
1,2,4-Trichlorobenzene	20.0	16.05		ug/Kg		80	70 - 130
1,3,5-Trichlorobenzene	20.0	17.84		ug/Kg		89	70 - 130
1,1,1-Trichloroethane	20.0	21.91		ug/Kg		110	70 - 130
1,1,2-Trichloroethane	20.0	22.15		ug/Kg		111	70 - 130
Trichloroethene	20.0	19.04		ug/Kg		95	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	23.43		ug/Kg		117	70 - 130
1,2,3-Trichloropropane	20.0	24.16		ug/Kg		121	70 - 130
1,2,4-Trimethylbenzene	20.0	22.55		ug/Kg		113	70 - 130
1,3,5-Trimethylbenzene	20.0	22.95		ug/Kg		115	70 - 130
Vinyl chloride	20.0	28.01	*+	ug/Kg		140	70 - 130
m,p-Xylene	40.0	46.31		ug/Kg		116	70 - 130
o-Xylene	20.0	19.48		ug/Kg		97	70 - 130
Tetrahydrofuran	20.0	16.69		ug/Kg		83	70 - 130
Ethyl ether	20.0	18.55		ug/Kg		93	70 - 130
Tert-amyl methyl ether	20.0	16.78		ug/Kg		84	70 - 130
Ethyl tert-butyl ether	20.0	16.14		ug/Kg		81	70 - 130
di-Isopropyl ether	20.0	17.99		ug/Kg		90	70 - 130
tert-Butanol	200	176.6		ug/Kg		88	70 - 130
1,4-Dioxane	200	127.8	*-	ug/Kg		64	70 - 130
trans-1,4-Dichloro-2-butene	20.0	21.81	J	ug/Kg		109	70 - 130
Ethanol	400	446.2	J	ug/Kg		112	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 620-12598/2-A
Matrix: Solid
Analysis Batch: 12601

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12598

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	23.29		ug/Kg		116	70 - 130	1	30
Acetone	20.0	11.46	J *-	ug/Kg		57	70 - 130	4	30
Acrylonitrile	20.0	19.73		ug/Kg		99	70 - 130	1	30
Benzene	20.0	19.31		ug/Kg		97	70 - 130	1	30
Bromobenzene	20.0	18.43		ug/Kg		92	70 - 130	1	30
Bromochloromethane	20.0	18.79		ug/Kg		94	70 - 130	2	30
Bromodichloromethane	20.0	22.62		ug/Kg		113	70 - 130	2	30
Bromoform	20.0	19.53		ug/Kg		98	70 - 130	1	30
Bromomethane	20.0	28.52	*+	ug/Kg		143	70 - 130	12	30
2-Butanone (MEK)	20.0	10.83	*-	ug/Kg		54	70 - 130	17	30
n-Butylbenzene	20.0	25.03		ug/Kg		125	70 - 130	0	30
sec-Butylbenzene	20.0	22.36		ug/Kg		112	70 - 130	1	30
tert-Butylbenzene	20.0	17.70		ug/Kg		89	70 - 130	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12598/2-A
Matrix: Solid
Analysis Batch: 12601

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12598

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	21.74		ug/Kg		109	70 - 130	1	30
Carbon tetrachloride			20.0	20.57		ug/Kg		103	70 - 130	1	30
Chlorobenzene			20.0	21.75		ug/Kg		109	70 - 130	2	30
Chloroethane			20.0	33.75	*+	ug/Kg		169	70 - 130	6	30
Chloroform			20.0	21.11		ug/Kg		106	70 - 130	1	30
Chloromethane			20.0	23.86		ug/Kg		119	70 - 130	1	30
2-Chlorotoluene			20.0	22.61		ug/Kg		113	70 - 130	2	30
4-Chlorotoluene			20.0	22.92		ug/Kg		115	70 - 130	2	30
1,2-Dibromo-3-Chloropropane			20.0	15.51		ug/Kg		78	70 - 130	1	30
Dibromochloromethane			20.0	19.70		ug/Kg		99	70 - 130	1	30
1,2-Dibromoethane (EDB)			20.0	17.79		ug/Kg		89	70 - 130	1	30
Dibromomethane			20.0	20.65		ug/Kg		103	70 - 130	2	30
1,2-Dichlorobenzene			20.0	20.81		ug/Kg		104	70 - 130	0	30
1,3-Dichlorobenzene			20.0	20.58		ug/Kg		103	70 - 130	1	30
1,4-Dichlorobenzene			20.0	22.59		ug/Kg		113	70 - 130	3	30
Dichlorodifluoromethane (Freon 12)			20.0	23.82		ug/Kg		119	70 - 130	1	30
1,1-Dichloroethane			20.0	21.45		ug/Kg		107	70 - 130	1	30
1,2-Dichloroethane			20.0	23.06		ug/Kg		115	70 - 130	2	30
1,1-Dichloroethene			20.0	20.23		ug/Kg		101	70 - 130	1	30
cis-1,2-Dichloroethene			20.0	18.39		ug/Kg		92	70 - 130	2	30
trans-1,2-Dichloroethene			20.0	19.52		ug/Kg		98	70 - 130	0	30
1,2-Dichloropropane			20.0	21.00		ug/Kg		105	70 - 130	1	30
1,3-Dichloropropane			20.0	18.57		ug/Kg		93	70 - 130	1	30
2,2-Dichloropropane			20.0	21.09		ug/Kg		105	70 - 130	1	30
1,1-Dichloropropene			20.0	18.01		ug/Kg		90	70 - 130	2	30
cis-1,3-Dichloropropene			20.0	16.91		ug/Kg		85	70 - 130	2	30
trans-1,3-Dichloropropene			20.0	20.40		ug/Kg		102	70 - 130	1	30
Ethylbenzene			20.0	22.25		ug/Kg		111	70 - 130	1	30
Hexachlorobutadiene			20.0	16.02		ug/Kg		80	70 - 130	3	30
2-Hexanone (MBK)			20.0	10.25	*-	ug/Kg		51	70 - 130	1	30
Isopropylbenzene			20.0	19.81		ug/Kg		99	70 - 130	1	30
4-Isopropyltoluene			20.0	20.90		ug/Kg		105	70 - 130	1	30
Methyl tert-butyl ether			20.0	17.37		ug/Kg		87	70 - 130	2	30
4-Methyl-2-pentanone (MIBK)			20.0	16.13		ug/Kg		81	70 - 130	0	30
Methylene Chloride			20.0	20.88		ug/Kg		104	70 - 130	1	30
Naphthalene			20.0	17.21		ug/Kg		86	70 - 130	4	30
N-Propylbenzene			20.0	23.27		ug/Kg		116	70 - 130	2	30
Styrene			20.0	19.46		ug/Kg		97	70 - 130	1	30
1,1,1,2-Tetrachloroethane			20.0	21.48		ug/Kg		107	70 - 130	2	30
1,1,2,2-Tetrachloroethane			20.0	24.63		ug/Kg		123	70 - 130	1	30
Tetrachloroethene			20.0	14.79		ug/Kg		74	70 - 130	0	30
Toluene			20.0	18.98		ug/Kg		95	70 - 130	0	30
1,2,3-Trichlorobenzene			20.0	17.50		ug/Kg		87	70 - 130	3	30
1,2,4-Trichlorobenzene			20.0	16.06		ug/Kg		80	70 - 130	0	30
1,3,5-Trichlorobenzene			20.0	17.81		ug/Kg		89	70 - 130	0	30
1,1,1-Trichloroethane			20.0	21.72		ug/Kg		109	70 - 130	1	30
1,1,2-Trichloroethane			20.0	21.80		ug/Kg		109	70 - 130	2	30
Trichloroethene			20.0	19.62		ug/Kg		98	70 - 130	3	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12598/2-A
Matrix: Solid
Analysis Batch: 12601

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12598

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	23.24		ug/Kg		116	70 - 130	1	30
1,2,3-Trichloropropane			20.0	23.75		ug/Kg		119	70 - 130	2	30
1,2,4-Trimethylbenzene			20.0	22.47		ug/Kg		112	70 - 130	0	30
1,3,5-Trimethylbenzene			20.0	22.65		ug/Kg		113	70 - 130	1	30
Vinyl chloride			20.0	27.99	*+	ug/Kg		140	70 - 130	0	30
m,p-Xylene			40.0	46.13		ug/Kg		115	70 - 130	0	30
o-Xylene			20.0	19.70		ug/Kg		98	70 - 130	1	30
Tetrahydrofuran			20.0	17.57		ug/Kg		88	70 - 130	5	30
Ethyl ether			20.0	18.70		ug/Kg		94	70 - 130	1	30
Tert-amyl methyl ether			20.0	16.70		ug/Kg		84	70 - 130	0	30
Ethyl tert-butyl ether			20.0	16.66		ug/Kg		83	70 - 130	3	30
di-Isopropyl ether			20.0	18.29		ug/Kg		91	70 - 130	2	30
tert-Butanol			200	171.9		ug/Kg		86	70 - 130	3	30
1,4-Dioxane			200	126.8	*-	ug/Kg		63	70 - 130	1	30
trans-1,4-Dichloro-2-butene			20.0	21.30	J	ug/Kg		107	70 - 130	2	30
Ethanol			400	492.9	J	ug/Kg		123	70 - 130	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

Method: Moisture - Percent Moisture

Lab Sample ID: 620-5417-1 DU
Matrix: Solid
Analysis Batch: 12547

Client Sample ID: RW-1 (2-4)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	2.9			2.8		%				3	5
Percent Solids	97.1			97.2		%				0.08	5

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

GC/MS VOA

Pre Prep Batch: 12513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5417-1	RW-1 (2-4)	Total/NA	Solid	Frozen Preserve	
620-5417-2	B109-2'	Total/NA	Solid	Frozen Preserve	

Prep Batch: 12598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5417-1	RW-1 (2-4)	Total/NA	Solid	5035	12513
620-5417-2	B109-2'	Total/NA	Solid	5035	12513
MB 620-12598/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-12598/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-12598/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 12601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5417-1	RW-1 (2-4)	Total/NA	Solid	8260C	12598
620-5417-2	B109-2'	Total/NA	Solid	8260C	12598
MB 620-12598/3-A	Method Blank	Total/NA	Solid	8260C	12598
LCS 620-12598/1-A	Lab Control Sample	Total/NA	Solid	8260C	12598
LCSD 620-12598/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	12598

General Chemistry

Analysis Batch: 12547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5417-1	RW-1 (2-4)	Total/NA	Solid	Moisture	
620-5417-2	B109-2'	Total/NA	Solid	Moisture	
620-5417-1 DU	RW-1 (2-4)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Job ID: 620-5417-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: RW-1 (2-4)
Lab Sample ID: 620-5417-1
Date Collected: 06/16/22 09:00
Matrix: Solid
Date Received: 06/29/22 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12547	06/30/22 11:26	JMF	ENE

Client Sample ID: RW-1 (2-4)
Lab Sample ID: 620-5417-1
Date Collected: 06/16/22 09:00
Matrix: Solid
Date Received: 06/29/22 17:20
Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12513	06/29/22 18:56	KFS	ENE
Total/NA	Prep	5035			12598	07/01/22 10:00	CLR	ENE
Total/NA	Analysis	8260C		1	12601	07/01/22 16:56	CLR	ENE

Client Sample ID: B109-2'
Lab Sample ID: 620-5417-2
Date Collected: 06/17/22 09:30
Matrix: Solid
Date Received: 06/29/22 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	12547	06/30/22 11:26	JMF	ENE

Client Sample ID: B109-2'
Lab Sample ID: 620-5417-2
Date Collected: 06/17/22 09:30
Matrix: Solid
Date Received: 06/29/22 17:20
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Frozen Preserve			12513	06/29/22 18:56	KFS	ENE
Total/NA	Prep	5035			12598	07/01/22 10:00	CLR	ENE
Total/NA	Analysis	8260C		1	12601	07/01/22 17:23	CLR	ENE

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-5417-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene

Laboratory: Eurofins New England (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
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
Moisture	Percent Moisture	EPA	ENE
5035	Closed System Purge and Trap	SW846	ENE
Frozen Preserve	Freezing Samples	None	ENE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-5417-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-5417-1	RW-1 (2-4)	Solid	06/16/22 09:00	06/29/22 17:20
620-5417-2	B109-2'	Solid	06/17/22 09:30	06/29/22 17:20

5417

620-5417 Chain of Custody

ment Testing
ıgland

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

☒ Standard TAT - ~~7 to 10 business days~~ 5 days

☐ Rush TAT - Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell
AECom
10 Orms St. Suite 400
Providence, RI 02904
Telephone #: 401 854 2815
Project Mgr: Richard Prior

Invoice To: Richard Prior
AECom

P.O No. _____ Quote #: _____

Project No: 60680132
Site Name: 295/37 Interchange
Location: Cranston, RI State: RI
Sampler(s): Maddy Fasca

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: VOCs
01	RW-1 (2-4)	6/16/22	0900	G	SO	3	1			X
02	B109_2'	6/17/22	0930	G	So	3	1			X

List Preservative Code below:

Check if chlorinated

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp °C
Maddy Fasca	Richard Munschauer	6-17-22	15:15	Observed 3.4
Richard Munschauer		6/24/22	10:24	Correction Factor +0.4
		6/24/22	17:20	Corrected 3.8
				IR ID # 6

☐ EDD format: _____
☐ E-mail to _____

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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7/7/2022

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-5417-1

Login Number: 5417
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-7487-1
Client Project/Site: I295/Rt 37 - Johnston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
10/18/2022 9:25:15 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-7487-1
Project/Site: I295/Rt 37 - Johnston, RI

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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)
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 ID: 620-7487-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-7487-1

Comments
No additional comments.

Receipt
The samples were received on 10/7/2022 2:52 PM. 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 was 0.7º C.

GC/MS VOA
Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: Trichlorofluoromethane, Carbon tetrachloride, Tetrahydrofuran, Acrylonitrile, Isopropyl ether, Naphthalene, 1,2-Dichloropropane, and 1,2-Dibromo-3-Chloropropane. (CCVIS 620-16235/3)

Method 8260C: The laboratory control sample (LCS) for preparation batch 620-16234 and analytical batch 620-16235 recovered outside control limits for the following analytes: Tetrahydrofuran. According to 8260C parameters, as long as <10% of analyte that fail the 70-130% criteria but are within 60-140%, no reanalysis/re-extraction is required. Since the affected target compounds meet this criteria, the data have been reported and qualified.

Method 8260C: The laboratory control sample (LCS) for preparation batch 620-16234 and analytical batch 620-16235 recovered outside control limits for the following analytes: Tetrahydrofuran and 2-Hexanone. According to 8260C parameters, as long as <10% of analyte that fail the 70-130% criteria but are within 60-140%, no reanalysis/re-extraction is required. Since the affected target compounds meet this criteria, the data have been reported and qualified.

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8082A: Surrogate recovery was outside control limits for the following sample: (CCV 620-16418/6). The DCB Decachlorobiphenyl (Surr) for the 1242/1268 aroclor CCV was outside acceptance criteria due to pattern interference from aroclor 1268. The 1242/1268 aroclor target peaks were within acceptance criteria. The surrogate is reported based on the 1016/1260 continuing calibration.

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

Metals
Method 7471B: The matrix spike (MS) recoveries for preparation batch 620-16299 and analytical batch 620-16342 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

General Chemistry
Method Moisture: The sample duplicate precision for the following sample associated with analytical batch 620-16108 was outside control limits: (620-7507-A-2). Non-homogeneity of the sample matrix is suspected.

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

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

Client Sample ID: B101 (1-3) — Lab Sample ID: 620-7487-1

No Detections.

Client Sample ID: B101/RW1 (0-4) — Lab Sample ID: 620-7487-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	60.5		13.4		mg/Kg	1	☼	8100	Total/NA
Chromium	13.3		2.09		mg/Kg	2	☼	6010D	Total/NA
Copper	10.8		5.23		mg/Kg	2	☼	6010D	Total/NA
Lead	7.32		2.09		mg/Kg	2	☼	6010D	Total/NA
Manganese	176		3.14		mg/Kg	2	☼	6010D	Total/NA
Nickel	9.95		8.37		mg/Kg	2	☼	6010D	Total/NA
Vanadium	10.9		10.5		mg/Kg	2	☼	6010D	Total/NA
Zinc	30.3		6.28		mg/Kg	2	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

Client Sample ID: B101 (1-3)
Date Collected: 10/03/22 09:00
Date Received: 10/07/22 14:52

Lab Sample ID: 620-7487-1
Matrix: Solid
Percent Solids: 95.5

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Acetone	ND		45.7		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Acrylonitrile	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Benzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Bromobenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Bromochloromethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Bromodichloromethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Bromoform	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Bromomethane	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
2-Butanone (MEK)	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
n-Butylbenzene	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
sec-Butylbenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
tert-Butylbenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Carbon disulfide	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Carbon tetrachloride	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Chlorobenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Chloroethane	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Chloroform	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Chloromethane	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
2-Chlorotoluene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
4-Chlorotoluene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2-Dibromo-3-Chloropropane	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Dibromochloromethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2-Dibromoethane (EDB)	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Dibromomethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2-Dichlorobenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,3-Dichlorobenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,4-Dichlorobenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Dichlorodifluoromethane (Freon 12)	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,1-Dichloroethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2-Dichloroethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,1-Dichloroethene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
cis-1,2-Dichloroethene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
trans-1,2-Dichloroethene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2-Dichloropropane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,3-Dichloropropane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
2,2-Dichloropropane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,1-Dichloropropene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
cis-1,3-Dichloropropene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
trans-1,3-Dichloropropene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Ethylbenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Hexachlorobutadiene	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
2-Hexanone (MBK)	ND	*-	9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Isopropylbenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
4-Isopropyltoluene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Methyl tert-butyl ether	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
4-Methyl-2-pentanone (MIBK)	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Methylene Chloride	ND		9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Naphthalene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1

Client Sample ID: B101 (1-3)
Date Collected: 10/03/22 09:00
Date Received: 10/07/22 14:52

Lab Sample ID: 620-7487-1
Matrix: Solid
Percent Solids: 95.5

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Styrene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,1,1,2-Tetrachloroethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,1,2,2-Tetrachloroethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Tetrachloroethene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Toluene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2,3-Trichlorobenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2,4-Trichlorobenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,3,5-Trichlorobenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,1,1-Trichloroethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,1,2-Trichloroethane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Trichloroethene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Trichlorofluoromethane (Freon 11)	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2,3-Trichloropropane	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,2,4-Trimethylbenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,3,5-Trimethylbenzene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Vinyl chloride	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
m,p-Xylene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
o-Xylene	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Tetrahydrofuran	ND	*-	9.15		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Ethyl ether	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Tert-amyl methyl ether	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Ethyl tert-butyl ether	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
di-Isopropyl ether	ND		4.57		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
tert-Butanol	ND		91.5		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
1,4-Dioxane	ND		91.5		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
trans-1,4-Dichloro-2-butene	ND		22.9		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1
Ethanol	ND		915		ug/Kg	☼	10/12/22 13:35	10/12/22 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/12/22 13:35*	*10/12/22 18:32*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*10/12/22 13:35*	*10/12/22 18:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*10/12/22 13:35*	*10/12/22 18:32*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*	*10/12/22 13:35*	*10/12/22 18:32*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	**4.5**		0.1		%			10/18/22 11:04	1
Percent Solids (EPA Moisture)	**95.5**		0.1		%			10/18/22 11:04	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

Client Sample ID: B101/RW1 (0-4)
Date Collected: 10/04/22 10:50
Date Received: 10/07/22 14:52

Lab Sample ID: 620-7487-2
Matrix: Solid
Percent Solids: 94.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
2-Methylnaphthalene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Acenaphthene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Acenaphthylene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Anthracene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Benzo[a]anthracene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Benzo[a]pyrene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Benzo[b]fluoranthene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Benzo[g,h,i]perylene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Benzo[k]fluoranthene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Chrysene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Dibenz(a,h)anthracene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Fluoranthene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Fluorene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Indeno[1,2,3-cd]pyrene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Naphthalene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Phenanthrene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1
Pyrene	ND		69.8		ug/Kg	☼	10/11/22 09:08	10/11/22 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*49*		*30 - 130*	*10/11/22 09:08*	*10/11/22 20:08*	*1*
2-Fluorobiphenyl (Surr)	*56*		*30 - 130*	*10/11/22 09:08*	*10/11/22 20:08*	*1*
Terphenyl-d14 (Surr)	*55*		*30 - 130*	*10/11/22 09:08*	*10/11/22 20:08*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
beta-BHC	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
delta-BHC	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
gamma-BHC (Lindane)	ND		2.06		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Heptachlor	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Aldrin	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Heptachlor epoxide	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Endosulfan I	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Dieldrin	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
4,4'-DDE	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Endrin	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Endosulfan II	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
4,4'-DDD	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Endosulfan sulfate	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
4,4'-DDT	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Methoxychlor	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Endrin ketone	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Endrin aldehyde	ND		8.25		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
cis-Chlordane	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
trans-Chlordane	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Toxaphene	ND		103		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1
Alachlor	ND		5.15		ug/Kg	☼	10/17/22 09:24	10/18/22 13:53	1

Client Sample ID: B101/RW1 (0-4)
Date Collected: 10/04/22 10:50
Date Received: 10/07/22 14:52

Lab Sample ID: 620-7487-2
Matrix: Solid
Percent Solids: 94.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*55*		*30 - 150*	*10/17/22 09:24*	*10/18/22 13:53*	*1*
Tetrachloro-m-xylene	*57*		*30 - 150*	*10/17/22 09:24*	*10/18/22 13:53*	*1*
DCB Decachlorobiphenyl (Surr)	*74*		*30 - 150*	*10/17/22 09:24*	*10/18/22 13:53*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*30 - 150*	*10/17/22 09:24*	*10/18/22 13:53*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1
PCB-1221	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1
PCB-1232	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1
PCB-1242	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1
PCB-1248	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1
PCB-1254	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1
PCB-1260	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1
PCB-1262	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1
PCB-1268	ND		20.6		ug/Kg	☼	10/17/22 09:24	10/18/22 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 150*	*10/17/22 09:24*	*10/18/22 13:55*	*1*
Tetrachloro-m-xylene	*79*		*30 - 150*	*10/17/22 09:24*	*10/18/22 13:55*	*1*
DCB Decachlorobiphenyl (Surr)	*99*		*30 - 150*	*10/17/22 09:24*	*10/18/22 13:55*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*30 - 150*	*10/17/22 09:24*	*10/18/22 13:55*	*1*

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**60.5**		13.4		mg/Kg	☼	10/11/22 08:15	10/13/22 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*71*		*40 - 140*	*10/11/22 08:15*	*10/13/22 11:41*	*1*
o-Terphenyl (Surr)	*56*		*40 - 140*	*10/11/22 08:15*	*10/13/22 11:41*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.19		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Arsenic	ND		3.14		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Barium	ND		41.9		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Beryllium	ND		0.419		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Cadmium	ND		0.837		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Chromium	**13.3**		2.09		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Copper	**10.8**		5.23		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Lead	**7.32**		2.09		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Manganese	**176**		3.14		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Nickel	**9.95**		8.37		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Selenium	ND		4.19		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Silver	ND		2.09		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Thallium	ND		4.19		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Vanadium	**10.9**		10.5		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2
Zinc	**30.3**		6.28		mg/Kg	☼	10/11/22 09:23	10/12/22 12:23	2

Client Sample Results

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

Client Sample ID: B101/RW1 (0-4)

Date Collected: 10/04/22 10:50
Date Received: 10/07/22 14:52

Lab Sample ID: 620-7487-2

Matrix: Solid
Percent Solids: 94.6

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0487		mg/Kg	☼	10/13/22 14:53	10/14/22 15:07	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	5.4		0.1		%			10/10/22 10:16	1
Percent Solids (EPA Moisture)	94.6		0.1		%			10/10/22 10:16	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-7487-1	B101 (1-3)	96	102	114	111
LCS 620-16234/1-A	Lab Control Sample	99	104	107	110
LCSD 620-16234/2-A	Lab Control Sample Dup	100	104	106	109
MB 620-16234/3-A	Method Blank	98	102	109	109

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(30-130)	(30-130)
620-7487-2	B101/RW1 (0-4)	49	56	55
LCS 620-16155/2-A	Lab Control Sample	62	65	62
LCSD 620-16155/3-A	Lab Control Sample Dup	62	65	60
MB 620-16155/1-A	Method Blank	56	59	54

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-7487-2	B101/RW1 (0-4)	55	57	74	77
LCS 620-16375/4-A	Lab Control Sample	54	55	81	67
LCSD 620-16375/5-A	Lab Control Sample Dup	62	65	88	75
MB 620-16375/1-A	Method Blank	51	51	56	61

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-7487-2	B101/RW1 (0-4)	77	79	99	89
LCS 620-16375/2-A	Lab Control Sample	83	81	85	81
LCSD 620-16375/3-A	Lab Control Sample Dup	80	80	101	94
MB 620-16375/1-A	Method Blank	83	84	84	75

Surrogate Summary

Client: AECOM
Job ID: 620-7487-1
Project/Site: I295/Rt 37 - Johnston, RI

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1COD (40-140)	OTPH (40-140)								
620-7487-2	B101/RW1 (0-4)	71	56								
LCS 620-16143/2-A	Lab Control Sample	73	76								
LCSD 620-16143/3-A	Lab Control Sample Dup	77	79								
MB 620-16143/1-A	Method Blank	73	54								

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)
OTPH = o-Terphenyl (Surr)

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-16234/3-A
Matrix: Solid
Analysis Batch: 16235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16234

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Acetone	ND		50.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Acrylonitrile	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Benzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Bromobenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Bromochloromethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Bromodichloromethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Bromoform	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Bromomethane	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
2-Butanone (MEK)	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
n-Butylbenzene	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
sec-Butylbenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
tert-Butylbenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Carbon disulfide	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Carbon tetrachloride	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Chlorobenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Chloroethane	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Chloroform	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Chloromethane	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
2-Chlorotoluene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
4-Chlorotoluene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Dibromochloromethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Dibromomethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,1-Dichloroethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2-Dichloroethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,1-Dichloroethene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2-Dichloropropane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,3-Dichloropropane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
2,2-Dichloropropane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,1-Dichloropropene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Ethylbenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Hexachlorobutadiene	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Isopropylbenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
4-Isopropyltoluene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Methylene Chloride	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-16234/3-A
Matrix: Solid
Analysis Batch: 16235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16234

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
N-Propylbenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Styrene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Tetrachloroethene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Toluene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Trichloroethene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Vinyl chloride	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
m,p-Xylene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
o-Xylene	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Tetrahydrofuran	ND		10.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Ethyl ether	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
di-Isopropyl ether	ND		5.00		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
tert-Butanol	ND		100		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
1,4-Dioxane	ND		100		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		10/12/22 13:35	10/12/22 16:49	1
Ethanol	ND		1000		ug/Kg		10/12/22 13:35	10/12/22 16:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*10/12/22 13:35*	*10/12/22 16:49*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*10/12/22 13:35*	*10/12/22 16:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*	*10/12/22 13:35*	*10/12/22 16:49*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*	*10/12/22 13:35*	*10/12/22 16:49*	*1*

Lab Sample ID: LCS 620-16234/1-A
Matrix: Solid
Analysis Batch: 16235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	22.45		ug/Kg		112	70 - 130
Acetone	20.0	19.13	J	ug/Kg		96	70 - 130
Acrylonitrile	20.0	14.33		ug/Kg		72	70 - 130
Benzene	20.0	18.80		ug/Kg		94	70 - 130
Bromobenzene	20.0	22.02		ug/Kg		110	70 - 130
Bromochloromethane	20.0	23.13		ug/Kg		116	70 - 130
Bromodichloromethane	20.0	21.26		ug/Kg		106	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-16234/1-A
Matrix: Solid
Analysis Batch: 16235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	21.59		ug/Kg		108	70 - 130
Bromomethane	20.0	22.63		ug/Kg		113	70 - 130
2-Butanone (MEK)	20.0	15.92		ug/Kg		80	70 - 130
n-Butylbenzene	20.0	16.94		ug/Kg		85	70 - 130
sec-Butylbenzene	20.0	20.32		ug/Kg		102	70 - 130
tert-Butylbenzene	20.0	23.25		ug/Kg		116	70 - 130
Carbon disulfide	20.0	19.36		ug/Kg		97	70 - 130
Carbon tetrachloride	20.0	25.87		ug/Kg		129	70 - 130
Chlorobenzene	20.0	19.71		ug/Kg		99	70 - 130
Chloroethane	20.0	21.20		ug/Kg		106	70 - 130
Chloroform	20.0	21.63		ug/Kg		108	70 - 130
Chloromethane	20.0	16.16		ug/Kg		81	70 - 130
2-Chlorotoluene	20.0	20.13		ug/Kg		101	70 - 130
4-Chlorotoluene	20.0	19.61		ug/Kg		98	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	16.83		ug/Kg		84	70 - 130
Dibromochloromethane	20.0	22.90		ug/Kg		114	70 - 130
1,2-Dibromoethane (EDB)	20.0	20.56		ug/Kg		103	70 - 130
Dibromomethane	20.0	20.37		ug/Kg		102	70 - 130
1,2-Dichlorobenzene	20.0	19.03		ug/Kg		95	70 - 130
1,3-Dichlorobenzene	20.0	21.89		ug/Kg		109	70 - 130
1,4-Dichlorobenzene	20.0	19.33		ug/Kg		97	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	23.00		ug/Kg		115	70 - 130
1,1-Dichloroethane	20.0	18.39		ug/Kg		92	70 - 130
1,2-Dichloroethane	20.0	22.23		ug/Kg		111	70 - 130
1,1-Dichloroethene	20.0	20.70		ug/Kg		103	70 - 130
cis-1,2-Dichloroethene	20.0	19.63		ug/Kg		98	70 - 130
trans-1,2-Dichloroethene	20.0	20.30		ug/Kg		102	70 - 130
1,2-Dichloropropane	20.0	16.86		ug/Kg		84	70 - 130
1,3-Dichloropropane	20.0	18.31		ug/Kg		92	70 - 130
2,2-Dichloropropane	20.0	21.70		ug/Kg		108	70 - 130
1,1-Dichloropropene	20.0	19.45		ug/Kg		97	70 - 130
cis-1,3-Dichloropropene	20.0	18.01		ug/Kg		90	70 - 130
trans-1,3-Dichloropropene	20.0	19.97		ug/Kg		100	70 - 130
Ethylbenzene	20.0	19.09		ug/Kg		95	70 - 130
Hexachlorobutadiene	20.0	21.39		ug/Kg		107	70 - 130
2-Hexanone (MBK)	20.0	15.11		ug/Kg		76	70 - 130
Isopropylbenzene	20.0	19.67		ug/Kg		98	70 - 130
4-Isopropyltoluene	20.0	18.39		ug/Kg		92	70 - 130
Methyl tert-butyl ether	20.0	19.10		ug/Kg		96	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	15.21		ug/Kg		76	70 - 130
Methylene Chloride	20.0	19.70		ug/Kg		99	70 - 130
Naphthalene	20.0	16.51		ug/Kg		83	70 - 130
N-Propylbenzene	20.0	19.29		ug/Kg		96	70 - 130
Styrene	20.0	19.08		ug/Kg		95	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.42		ug/Kg		107	70 - 130
1,1,2,2-Tetrachloroethane	20.0	16.87		ug/Kg		84	70 - 130
Tetrachloroethene	20.0	24.48		ug/Kg		122	70 - 130
Toluene	20.0	20.50		ug/Kg		102	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-16234/1-A
Matrix: Solid
Analysis Batch: 16235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16234

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichlorobenzene			20.0	19.35		ug/Kg		97	70 - 130		
1,2,4-Trichlorobenzene			20.0	21.46		ug/Kg		107	70 - 130		
1,3,5-Trichlorobenzene			20.0	19.58		ug/Kg		98	70 - 130		
1,1,1-Trichloroethane			20.0	23.87		ug/Kg		119	70 - 130		
1,1,2-Trichloroethane			20.0	19.34		ug/Kg		97	70 - 130		
Trichloroethene			20.0	21.70		ug/Kg		109	70 - 130		
Trichlorofluoromethane (Freon 11)			20.0	24.93		ug/Kg		125	70 - 130		
1,2,3-Trichloropropane			20.0	17.77		ug/Kg		89	70 - 130		
1,2,4-Trimethylbenzene			20.0	20.44		ug/Kg		102	70 - 130		
1,3,5-Trimethylbenzene			20.0	20.67		ug/Kg		103	70 - 130		
Vinyl chloride			20.0	18.59		ug/Kg		93	70 - 130		
m,p-Xylene			20.0	19.07		ug/Kg		95	70 - 130		
o-Xylene			20.0	18.51		ug/Kg		93	70 - 130		
Tetrahydrofuran			20.0	13.53	*-	ug/Kg		68	70 - 130		
Ethyl ether			20.0	17.31		ug/Kg		87	70 - 130		
Tert-amyl methyl ether			20.0	18.11		ug/Kg		91	70 - 130		
Ethyl tert-butyl ether			20.0	17.22		ug/Kg		86	70 - 130		
di-Isopropyl ether			20.0	15.42		ug/Kg		77	70 - 130		
tert-Butanol			200	164.8		ug/Kg		82	70 - 130		
1,4-Dioxane			200	155.1		ug/Kg		78	70 - 130		
trans-1,4-Dichloro-2-butene			20.0	19.52	J	ug/Kg		98	70 - 130		
Ethanol			400	297.4	J	ug/Kg		74	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 620-16234/2-A
Matrix: Solid
Analysis Batch: 16235

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16234

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	22.34		ug/Kg		112	70 - 130	0	30
Acetone			20.0	17.58	J	ug/Kg		88	70 - 130	8	30
Acrylonitrile			20.0	14.85		ug/Kg		74	70 - 130	4	30
Benzene			20.0	19.17		ug/Kg		96	70 - 130	2	30
Bromobenzene			20.0	21.34		ug/Kg		107	70 - 130	3	30
Bromochloromethane			20.0	22.35		ug/Kg		112	70 - 130	3	30
Bromodichloromethane			20.0	21.42		ug/Kg		107	70 - 130	1	30
Bromoform			20.0	21.19		ug/Kg		106	70 - 130	2	30
Bromomethane			20.0	21.80		ug/Kg		109	70 - 130	4	30
2-Butanone (MEK)			20.0	15.77		ug/Kg		79	70 - 130	1	30
n-Butylbenzene			20.0	16.00		ug/Kg		80	70 - 130	6	30
sec-Butylbenzene			20.0	19.70		ug/Kg		99	70 - 130	3	30
tert-Butylbenzene			20.0	22.60		ug/Kg		113	70 - 130	3	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-16234/2-A
Matrix: Solid
Analysis Batch: 16235

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16234

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	19.36		ug/Kg		97	70 - 130	0	30
Carbon tetrachloride			20.0	25.76		ug/Kg		129	70 - 130	0	30
Chlorobenzene			20.0	19.47		ug/Kg		97	70 - 130	1	30
Chloroethane			20.0	20.89		ug/Kg		104	70 - 130	1	30
Chloroform			20.0	21.46		ug/Kg		107	70 - 130	1	30
Chloromethane			20.0	15.75		ug/Kg		79	70 - 130	3	30
2-Chlorotoluene			20.0	19.52		ug/Kg		98	70 - 130	3	30
4-Chlorotoluene			20.0	18.64		ug/Kg		93	70 - 130	5	30
1,2-Dibromo-3-Chloropropane			20.0	16.57		ug/Kg		83	70 - 130	2	30
Dibromochloromethane			20.0	22.26		ug/Kg		111	70 - 130	3	30
1,2-Dibromoethane (EDB)			20.0	20.24		ug/Kg		101	70 - 130	2	30
Dibromomethane			20.0	20.18		ug/Kg		101	70 - 130	1	30
1,2-Dichlorobenzene			20.0	18.43		ug/Kg		92	70 - 130	3	30
1,3-Dichlorobenzene			20.0	21.01		ug/Kg		105	70 - 130	4	30
1,4-Dichlorobenzene			20.0	18.46		ug/Kg		92	70 - 130	5	30
Dichlorodifluoromethane (Freon 12)			20.0	22.85		ug/Kg		114	70 - 130	1	30
1,1-Dichloroethane			20.0	18.20		ug/Kg		91	70 - 130	1	30
1,2-Dichloroethane			20.0	21.91		ug/Kg		110	70 - 130	1	30
1,1-Dichloroethene			20.0	21.02		ug/Kg		105	70 - 130	2	30
cis-1,2-Dichloroethene			20.0	19.48		ug/Kg		97	70 - 130	1	30
trans-1,2-Dichloroethene			20.0	20.12		ug/Kg		101	70 - 130	1	30
1,2-Dichloropropane			20.0	16.94		ug/Kg		85	70 - 130	0	30
1,3-Dichloropropane			20.0	18.26		ug/Kg		91	70 - 130	0	30
2,2-Dichloropropane			20.0	21.49		ug/Kg		107	70 - 130	1	30
1,1-Dichloropropene			20.0	19.64		ug/Kg		98	70 - 130	1	30
cis-1,3-Dichloropropene			20.0	18.18		ug/Kg		91	70 - 130	1	30
trans-1,3-Dichloropropene			20.0	19.41		ug/Kg		97	70 - 130	3	30
Ethylbenzene			20.0	19.05		ug/Kg		95	70 - 130	0	30
Hexachlorobutadiene			20.0	19.52		ug/Kg		98	70 - 130	9	30
2-Hexanone (MBK)			20.0	12.92	*-	ug/Kg		65	70 - 130	16	30
Isopropylbenzene			20.0	19.50		ug/Kg		97	70 - 130	1	30
4-Isopropyltoluene			20.0	17.88		ug/Kg		89	70 - 130	3	30
Methyl tert-butyl ether			20.0	18.89		ug/Kg		94	70 - 130	1	30
4-Methyl-2-pentanone (MIBK)			20.0	14.26		ug/Kg		71	70 - 130	6	30
Methylene Chloride			20.0	19.20		ug/Kg		96	70 - 130	3	30
Naphthalene			20.0	15.99		ug/Kg		80	70 - 130	3	30
N-Propylbenzene			20.0	18.79		ug/Kg		94	70 - 130	3	30
Styrene			20.0	18.89		ug/Kg		94	70 - 130	1	30
1,1,1,2-Tetrachloroethane			20.0	21.08		ug/Kg		105	70 - 130	2	30
1,1,2,2-Tetrachloroethane			20.0	16.71		ug/Kg		84	70 - 130	1	30
Tetrachloroethene			20.0	24.15		ug/Kg		121	70 - 130	1	30
Toluene			20.0	20.37		ug/Kg		102	70 - 130	1	30
1,2,3-Trichlorobenzene			20.0	18.53		ug/Kg		93	70 - 130	4	30
1,2,4-Trichlorobenzene			20.0	19.46		ug/Kg		97	70 - 130	10	30
1,3,5-Trichlorobenzene			20.0	18.34		ug/Kg		92	70 - 130	7	30
1,1,1-Trichloroethane			20.0	23.36		ug/Kg		117	70 - 130	2	30
1,1,2-Trichloroethane			20.0	18.71		ug/Kg		94	70 - 130	3	30
Trichloroethene			20.0	21.16		ug/Kg		106	70 - 130	3	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-16234/2-A
Matrix: Solid
Analysis Batch: 16235

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16234

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	24.68		ug/Kg		123	70 - 130	1	30
1,2,3-Trichloropropane			20.0	17.32		ug/Kg		87	70 - 130	3	30
1,2,4-Trimethylbenzene			20.0	19.64		ug/Kg		98	70 - 130	4	30
1,3,5-Trimethylbenzene			20.0	20.12		ug/Kg		101	70 - 130	3	30
Vinyl chloride			20.0	18.25		ug/Kg		91	70 - 130	2	30
m,p-Xylene			20.0	18.89		ug/Kg		94	70 - 130	1	30
o-Xylene			20.0	18.36		ug/Kg		92	70 - 130	1	30
Tetrahydrofuran			20.0	13.71	*-	ug/Kg		69	70 - 130	1	30
Ethyl ether			20.0	16.78		ug/Kg		84	70 - 130	3	30
Tert-amyl methyl ether			20.0	17.86		ug/Kg		89	70 - 130	1	30
Ethyl tert-butyl ether			20.0	17.08		ug/Kg		85	70 - 130	1	30
di-Isopropyl ether			20.0	15.32		ug/Kg		77	70 - 130	1	30
tert-Butanol			200	162.3		ug/Kg		81	70 - 130	2	30
1,4-Dioxane			200	153.4		ug/Kg		77	70 - 130	1	30
trans-1,4-Dichloro-2-butene			20.0	18.03	J	ug/Kg		90	70 - 130	8	30
Ethanol			400	326.0	J	ug/Kg		82	70 - 130	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*109*		*70 - 130*

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

Lab Sample ID: MB 620-16155/1-A
Matrix: Solid
Analysis Batch: 16151

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16155

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
2-Methylnaphthalene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Acenaphthene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Acenaphthylene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Anthracene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Benzo[a]anthracene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Benzo[a]pyrene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Benzo[b]fluoranthene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Benzo[g,h,i]perylene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Benzo[k]fluoranthene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Chrysene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Dibenz(a,h)anthracene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Fluoranthene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Fluorene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Indeno[1,2,3-cd]pyrene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Naphthalene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Phenanthrene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1
Pyrene	ND		66.7		ug/Kg		10/11/22 09:08	10/11/22 14:18	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	56		30 - 130	10/11/22 09:08	10/11/22 14:18	1
2-Fluorobiphenyl (Surr)	59		30 - 130	10/11/22 09:08	10/11/22 14:18	1
Terphenyl-d14 (Surr)	54		30 - 130	10/11/22 09:08	10/11/22 14:18	1

Lab Sample ID: LCS 620-16155/2-A
Matrix: Solid
Analysis Batch: 16151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16155

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1670	1094		ug/Kg		66	40 - 140
2-Methylnaphthalene	1670	1100		ug/Kg		66	40 - 140
Acenaphthene	1670	1118		ug/Kg		67	40 - 140
Acenaphthylene	1670	1088		ug/Kg		65	40 - 140
Anthracene	1670	1238		ug/Kg		74	40 - 140
Benzo[a]anthracene	1670	1236		ug/Kg		74	40 - 140
Benzo[a]pyrene	1670	1167		ug/Kg		70	40 - 140
Benzo[b]fluoranthene	1670	1134		ug/Kg		68	40 - 140
Benzo[g,h,i]perylene	1670	1320		ug/Kg		79	40 - 140
Benzo[k]fluoranthene	1670	1203		ug/Kg		72	40 - 140
Chrysene	1670	1171		ug/Kg		70	40 - 140
Dibenz(a,h)anthracene	1670	1209		ug/Kg		73	40 - 140
Fluoranthene	1670	1230		ug/Kg		74	40 - 140
Fluorene	1670	1140		ug/Kg		68	40 - 140
Indeno[1,2,3-cd]pyrene	1670	1232		ug/Kg		74	40 - 140
Naphthalene	1670	1083		ug/Kg		65	40 - 140
Phenanthrene	1670	1183		ug/Kg		71	40 - 140
Pyrene	1670	1161		ug/Kg		70	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	62		30 - 130
2-Fluorobiphenyl (Surr)	65		30 - 130
Terphenyl-d14 (Surr)	62		30 - 130

Lab Sample ID: LCSD 620-16155/3-A
Matrix: Solid
Analysis Batch: 16151

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16155

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1670	1103		ug/Kg		66	40 - 140	1	30
2-Methylnaphthalene	1670	1105		ug/Kg		66	40 - 140	1	30
Acenaphthene	1670	1099		ug/Kg		66	40 - 140	2	30
Acenaphthylene	1670	1082		ug/Kg		65	40 - 140	1	30
Anthracene	1670	1208		ug/Kg		72	40 - 140	2	30
Benzo[a]anthracene	1670	1213		ug/Kg		73	40 - 140	2	30
Benzo[a]pyrene	1670	1155		ug/Kg		69	40 - 140	1	30
Benzo[b]fluoranthene	1670	1132		ug/Kg		68	40 - 140	0	30
Benzo[g,h,i]perylene	1670	1292		ug/Kg		78	40 - 140	2	30
Benzo[k]fluoranthene	1670	1171		ug/Kg		70	40 - 140	3	30
Chrysene	1670	1138		ug/Kg		68	40 - 140	3	30
Dibenz(a,h)anthracene	1670	1194		ug/Kg		72	40 - 140	1	30
Fluoranthene	1670	1219		ug/Kg		73	40 - 140	1	30

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

Lab Sample ID: LCSD 620-16155/3-A
Matrix: Solid
Analysis Batch: 16151

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16155

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			1670	1112		ug/Kg		67	40 - 140	2	30
Indeno[1,2,3-cd]pyrene			1670	1210		ug/Kg		73	40 - 140	2	30
Naphthalene			1670	1102		ug/Kg		66	40 - 140	2	30
Phenanthrene			1670	1163		ug/Kg		70	40 - 140	2	30
Pyrene			1670	1135		ug/Kg		68	40 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*62*		*30 - 130*
2-Fluorobiphenyl (Surr)	*65*		*30 - 130*
Terphenyl-d14 (Surr)	*60*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-16375/1-A
Matrix: Solid
Analysis Batch: 16414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16375

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
beta-BHC	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
delta-BHC	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
gamma-BHC (Lindane)	ND		2.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Heptachlor	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Aldrin	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Heptachlor epoxide	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Endosulfan I	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Dieldrin	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
4,4'-DDE	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Endrin	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Endosulfan II	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
4,4'-DDD	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Endosulfan sulfate	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
4,4'-DDT	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Methoxychlor	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Endrin ketone	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Endrin aldehyde	ND		8.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
cis-Chlordane	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
trans-Chlordane	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Toxaphene	ND		100		ug/Kg		10/17/22 09:22	10/18/22 13:05	1
Alachlor	ND		5.00		ug/Kg		10/17/22 09:22	10/18/22 13:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*30 - 150*	*10/17/22 09:22*	*10/18/22 13:05*	*1*
Tetrachloro-m-xylene	*51*		*30 - 150*	*10/17/22 09:22*	*10/18/22 13:05*	*1*
DCB Decachlorobiphenyl (Surr)	*56*		*30 - 150*	*10/17/22 09:22*	*10/18/22 13:05*	*1*
DCB Decachlorobiphenyl (Surr)	*61*		*30 - 150*	*10/17/22 09:22*	*10/18/22 13:05*	*1*

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

Lab Sample ID: LCS 620-16375/4-A
Matrix: Solid
Analysis Batch: 16414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16375

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
alpha-BHC			13.4	7.824		ug/Kg		58	27 - 108		
alpha-BHC			13.4	7.938		ug/Kg		59	27 - 108		
beta-BHC			13.3	8.230		ug/Kg		62	50 - 114		
beta-BHC			13.3	8.486		ug/Kg		64	50 - 114		
delta-BHC			13.4	7.765		ug/Kg		58	41 - 101		
delta-BHC			13.4	7.648		ug/Kg		57	41 - 101		
gamma-BHC (Lindane)			13.5	8.692		ug/Kg		65	40 - 110		
gamma-BHC (Lindane)			13.5	8.491		ug/Kg		63	40 - 110		
Heptachlor			13.4	8.554		ug/Kg		64	30 - 101		
Heptachlor			13.4	8.593		ug/Kg		64	30 - 101		
Aldrin			13.4	8.508		ug/Kg		64	21 - 113		
Aldrin			13.4	8.731		ug/Kg		65	21 - 113		
Heptachlor epoxide			13.3	8.390		ug/Kg		63	46 - 106		
Heptachlor epoxide			13.3	8.496		ug/Kg		64	46 - 106		
Endosulfan I			13.3	8.933		ug/Kg		67	45 - 115		
Endosulfan I			13.3	9.617		ug/Kg		72	45 - 115		
Dieldrin			13.4	8.996		ug/Kg		67	48 - 117		
Dieldrin			13.4	9.191		ug/Kg		69	48 - 117		
4,4'-DDE			13.4	8.900		ug/Kg		66	40 - 136		
4,4'-DDE			13.4	8.916		ug/Kg		66	40 - 136		
Endrin			13.4	11.04		ug/Kg		82	58 - 148		
Endrin			13.4	11.47		ug/Kg		86	58 - 148		
Endosulfan II			13.3	9.063		ug/Kg		68	54 - 120		
Endosulfan II			13.3	9.530		ug/Kg		71	54 - 120		
4,4'-DDD			13.4	8.768		ug/Kg		65	55 - 133		
4,4'-DDD			13.4	9.091		ug/Kg		68	55 - 133		
Endosulfan sulfate			13.4	10.71		ug/Kg		80	55 - 119		
Endosulfan sulfate			13.4	10.69		ug/Kg		80	55 - 119		
4,4'-DDT			13.5	11.17		ug/Kg		83	43 - 140		
4,4'-DDT			13.5	11.15		ug/Kg		83	43 - 140		
Methoxychlor			13.3	9.761		ug/Kg		73	45 - 156		
Methoxychlor			13.3	9.686		ug/Kg		73	45 - 156		
Endrin ketone			13.4	8.930		ug/Kg		67	56 - 107		
Endrin ketone			13.4	9.145		ug/Kg		68	56 - 107		
Endrin aldehyde			13.4	8.919		ug/Kg		66	23 - 145		
Endrin aldehyde			13.4	9.725		ug/Kg		72	23 - 145		
cis-Chlordane			13.4	8.799		ug/Kg		65	44 - 111		
cis-Chlordane			13.4	8.838		ug/Kg		66	44 - 111		
trans-Chlordane			13.4	8.770		ug/Kg		65	50 - 109		
trans-Chlordane			13.4	9.015		ug/Kg		67	50 - 109		
Alachlor			13.4	7.969		ug/Kg		60	53 - 114		
Alachlor			13.4	7.998		ug/Kg		60	53 - 114		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*54*		*30 - 150*
Tetrachloro-m-xylene	*55*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*81*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*67*		*30 - 150*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LCSD 620-16375/5-A
Matrix: Solid
Analysis Batch: 16414

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16375

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	9.349		ug/Kg		70	27 - 108	18	30
alpha-BHC			13.4	9.386		ug/Kg		70	27 - 108	17	30
beta-BHC			13.3	9.527		ug/Kg		71	50 - 114	15	30
beta-BHC			13.3	9.604		ug/Kg		72	50 - 114	12	30
delta-BHC			13.4	8.895		ug/Kg		66	41 - 101	14	30
delta-BHC			13.4	8.718		ug/Kg		65	41 - 101	13	30
gamma-BHC (Lindane)			13.5	10.38		ug/Kg		77	40 - 110	18	30
gamma-BHC (Lindane)			13.5	9.969		ug/Kg		74	40 - 110	16	30
Heptachlor			13.4	10.03		ug/Kg		75	30 - 101	16	30
Heptachlor			13.4	11.15		ug/Kg		83	30 - 101	26	30
Aldrin			13.4	10.10		ug/Kg		76	21 - 113	17	30
Aldrin			13.4	10.09		ug/Kg		76	21 - 113	14	30
Heptachlor epoxide			13.3	9.775		ug/Kg		73	46 - 106	15	30
Heptachlor epoxide			13.3	9.763		ug/Kg		73	46 - 106	14	30
Endosulfan I			13.3	10.35		ug/Kg		78	45 - 115	15	30
Endosulfan I			13.3	10.98		ug/Kg		82	45 - 115	13	30
Dieldrin			13.4	10.38		ug/Kg		78	48 - 117	14	30
Dieldrin			13.4	10.48		ug/Kg		78	48 - 117	13	30
4,4'-DDE			13.4	10.22		ug/Kg		76	40 - 136	14	30
4,4'-DDE			13.4	10.21		ug/Kg		76	40 - 136	14	30
Endrin			13.4	12.70		ug/Kg		95	58 - 148	14	30
Endrin			13.4	13.04		ug/Kg		97	58 - 148	13	30
Endosulfan II			13.3	10.52		ug/Kg		79	54 - 120	15	30
Endosulfan II			13.3	10.82		ug/Kg		81	54 - 120	13	30
4,4'-DDD			13.4	10.09		ug/Kg		75	55 - 133	14	30
4,4'-DDD			13.4	10.42		ug/Kg		78	55 - 133	14	30
Endosulfan sulfate			13.4	12.09		ug/Kg		90	55 - 119	12	30
Endosulfan sulfate			13.4	12.20		ug/Kg		91	55 - 119	13	30
4,4'-DDT			13.5	12.85		ug/Kg		95	43 - 140	14	30
4,4'-DDT			13.5	12.79		ug/Kg		95	43 - 140	14	30
Methoxychlor			13.3	11.22		ug/Kg		84	45 - 156	14	30
Methoxychlor			13.3	11.51		ug/Kg		86	45 - 156	17	30
Endrin ketone			13.4	10.02		ug/Kg		75	56 - 107	11	30
Endrin ketone			13.4	10.28		ug/Kg		77	56 - 107	12	30
Endrin aldehyde			13.4	10.29		ug/Kg		77	23 - 145	14	30
Endrin aldehyde			13.4	11.24		ug/Kg		84	23 - 145	14	30
cis-Chlordane			13.4	10.16		ug/Kg		76	44 - 111	14	30
cis-Chlordane			13.4	10.09		ug/Kg		75	44 - 111	13	30
trans-Chlordane			13.4	10.23		ug/Kg		76	50 - 109	15	30
trans-Chlordane			13.4	10.26		ug/Kg		77	50 - 109	13	30
Alachlor			13.4	9.218		ug/Kg		69	53 - 114	15	30
Alachlor			13.4	8.799		ug/Kg		66	53 - 114	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*62*		*30 - 150*
Tetrachloro-m-xylene	*65*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*88*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*75*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-16375/1-A
Matrix: Solid
Analysis Batch: 16418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16375

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1
PCB-1221	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1
PCB-1232	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1
PCB-1242	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1
PCB-1248	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1
PCB-1254	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1
PCB-1260	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1
PCB-1262	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1
PCB-1268	ND		20.0		ug/Kg		10/17/22 09:22	10/18/22 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*10/17/22 09:22*	*10/18/22 13:01*	*1*
Tetrachloro-m-xylene	*84*		*30 - 150*	*10/17/22 09:22*	*10/18/22 13:01*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*30 - 150*	*10/17/22 09:22*	*10/18/22 13:01*	*1*
DCB Decachlorobiphenyl (Surr)	*75*		*30 - 150*	*10/17/22 09:22*	*10/18/22 13:01*	*1*

Lab Sample ID: LCS 620-16375/2-A
Matrix: Solid
Analysis Batch: 16418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16375

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	143.4		ug/Kg		86	61 - 112		
PCB-1016			167	153.1		ug/Kg		92	61 - 112		
PCB-1260			167	109.8		ug/Kg		66	63 - 105		
PCB-1260			167	122.8		ug/Kg		74	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*30 - 150*
Tetrachloro-m-xylene	*81*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*85*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*81*		*30 - 150*

Lab Sample ID: LCSD 620-16375/3-A
Matrix: Solid
Analysis Batch: 16418

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16375

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	152.1		ug/Kg		91	61 - 112	6	30
PCB-1016			167	156.9		ug/Kg		94	61 - 112	2	30
PCB-1260			167	115.5		ug/Kg		69	63 - 105	5	30
PCB-1260			167	125.1		ug/Kg		75	63 - 105	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*80*		*30 - 150*
Tetrachloro-m-xylene	*80*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*101*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*94*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-16143/1-A
Matrix: Solid
Analysis Batch: 16217

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16143

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		10/11/22 08:15	10/12/22 11:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*73*		*40 - 140*	*10/11/22 08:15*	*10/12/22 11:15*	*1*
o-Terphenyl (Surr)	*54*		*40 - 140*	*10/11/22 08:15*	*10/12/22 11:15*	*1*

Lab Sample ID: LCS 620-16143/2-A
Matrix: Solid
Analysis Batch: 16217

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16143

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	234.6		mg/Kg		70	22 - 93		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*73*		*40 - 140*
o-Terphenyl (Surr)	*76*		*40 - 140*

Lab Sample ID: LCSD 620-16143/3-A
Matrix: Solid
Analysis Batch: 16217

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16143

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	243.4		mg/Kg		73	22 - 93	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*77*		*40 - 140*
o-Terphenyl (Surr)	*79*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 460-871238/1-A
Matrix: Solid
Analysis Batch: 871489

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 871238

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Arsenic	ND		1.50		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Barium	ND		20.0		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Beryllium	ND		0.200		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Cadmium	ND		0.400		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Chromium	ND		1.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Copper	ND		2.50		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Lead	ND		1.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Manganese	ND		1.50		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Nickel	ND		4.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Selenium	ND		2.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Silver	ND		1.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Thallium	ND		2.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1

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

Lab Sample ID: MB 460-871238/1-A
Matrix: Solid
Analysis Batch: 871489

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 871238

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		5.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1
Zinc	ND		3.00		mg/Kg		10/11/22 09:23	10/12/22 11:48	1

Lab Sample ID: LCSSRM 460-871238/2-A
Matrix: Solid
Analysis Batch: 871489

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 871238

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	111	65.80		mg/Kg		59.3	0.7 - 205.4
Arsenic	112	109.8		mg/Kg		98.0	82.0 - 118.8
Barium	154	149.2		mg/Kg		96.9	81.8 - 118.2
Beryllium	121	116.8		mg/Kg		96.5	82.2 - 118.2
Cadmium	196	194.9		mg/Kg		99.4	82.1 - 118.4
Chromium	103	101.1		mg/Kg		98.2	80.8 - 118.4
Copper	70.4	68.12		mg/Kg		96.8	83.4 - 116.6
Lead	73.2	73.54		mg/Kg		100.5	82.8 - 117.3
Manganese	373	356.6		mg/Kg		95.6	81.5 - 118.5
Nickel	249	253.2		mg/Kg		101.7	81.9 - 118.1
Selenium	215	206.8		mg/Kg		96.2	78.1 - 121.9
Silver	78.5	74.80		mg/Kg		95.3	78.9 - 121.1
Thallium	67.7	70.88		mg/Kg		104.7	80.1 - 120.1
Vanadium	177	174.3		mg/Kg		98.5	78.0 - 122.0
Zinc	360	346.6		mg/Kg		96.3	79.7 - 120.3

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-16299/1-A
Matrix: Solid
Analysis Batch: 16342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16299

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0442		mg/Kg		10/13/22 14:53	10/14/22 14:33	1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 620-16299/2-A ^20
Matrix: Solid
Analysis Batch: 16342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16299

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	3.31	3.785		mg/Kg		114.4	86.1 - 139.9

QC Association Summary

Client: AECOM
Job ID: 620-7487-1
Project/Site: I295/Rt 37 - Johnston, RI

GC/MS VOA

Pre Prep Batch: 16082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-1	B101 (1-3)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 16234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-1	B101 (1-3)	Total/NA	Solid	5035	16082
MB 620-16234/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-16234/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-16234/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 16235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-1	B101 (1-3)	Total/NA	Solid	8260C	16234
MB 620-16234/3-A	Method Blank	Total/NA	Solid	8260C	16234
LCS 620-16234/1-A	Lab Control Sample	Total/NA	Solid	8260C	16234
LCSD 620-16234/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	16234

GC/MS Semi VOA

Analysis Batch: 16147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	8270D	16155

Analysis Batch: 16151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-16155/1-A	Method Blank	Total/NA	Solid	8270D	16155
LCS 620-16155/2-A	Lab Control Sample	Total/NA	Solid	8270D	16155
LCSD 620-16155/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	16155

Prep Batch: 16155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	3546	
MB 620-16155/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-16155/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-16155/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

GC Semi VOA

Prep Batch: 16143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	3546	
MB 620-16143/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-16143/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-16143/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 16217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	8100	16143
MB 620-16143/1-A	Method Blank	Total/NA	Solid	8100	16143
LCS 620-16143/2-A	Lab Control Sample	Total/NA	Solid	8100	16143
LCSD 620-16143/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	16143

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

GC Semi VOA

Prep Batch: 16375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	3546	
MB 620-16375/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-16375/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-16375/4-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-16375/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
LCSD 620-16375/5-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 16414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	8081B	16375
MB 620-16375/1-A	Method Blank	Total/NA	Solid	8081B	16375
LCS 620-16375/4-A	Lab Control Sample	Total/NA	Solid	8081B	16375
LCSD 620-16375/5-A	Lab Control Sample Dup	Total/NA	Solid	8081B	16375

Analysis Batch: 16418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	8082A	16375
MB 620-16375/1-A	Method Blank	Total/NA	Solid	8082A	16375
LCS 620-16375/2-A	Lab Control Sample	Total/NA	Solid	8082A	16375
LCSD 620-16375/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	16375

Metals

Prep Batch: 16299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	7471B	
MB 620-16299/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-16299/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 16342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	7471B	16299
MB 620-16299/1-A	Method Blank	Total/NA	Solid	7471B	16299
LCSSRM 620-16299/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	16299

Prep Batch: 871238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	3050B	
MB 460-871238/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-871238/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 871489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	6010D	871238
MB 460-871238/1-A	Method Blank	Total/NA	Solid	6010D	871238
LCSSRM 460-871238/2-A	Lab Control Sample	Total/NA	Solid	6010D	871238

General Chemistry

Analysis Batch: 16108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-2	B101/RW1 (0-4)	Total/NA	Solid	Moisture	

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

General Chemistry

Analysis Batch: 16297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7487-1	B101 (1-3)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Job ID: 620-7487-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: B101 (1-3)
Lab Sample ID: 620-7487-1
Date Collected: 10/03/22 09:00
Matrix: Solid
Date Received: 10/07/22 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	16297	EDJ	EET NE	10/18/22 11:04

Client Sample ID: B101 (1-3)
Lab Sample ID: 620-7487-1
Date Collected: 10/03/22 09:00
Matrix: Solid
Date Received: 10/07/22 14:52
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			16082	KFS	EET NE	10/04/22 12:30
Total/NA	Prep	5035			16234	CLR	EET NE	10/12/22 13:35
Total/NA	Analysis	8260C		1	16235	CLR	EET NE	10/12/22 18:32

Client Sample ID: B101/RW1 (0-4)
Lab Sample ID: 620-7487-2
Date Collected: 10/04/22 10:50
Matrix: Solid
Date Received: 10/07/22 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	16108	DWC	EET NE	10/10/22 10:16

Client Sample ID: B101/RW1 (0-4)
Lab Sample ID: 620-7487-2
Date Collected: 10/04/22 10:50
Matrix: Solid
Date Received: 10/07/22 14:52
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			16155	BMS	EET NE	10/11/22 09:08
Total/NA	Analysis	8270D		1	16147	JS	EET NE	10/11/22 20:08
Total/NA	Prep	3546			16375	BMS	EET NE	10/17/22 09:24
Total/NA	Analysis	8081B		1	16414	SFL	EET NE	10/18/22 13:53
Total/NA	Prep	3546			16375	BMS	EET NE	10/17/22 09:24
Total/NA	Analysis	8082A		1	16418	SFL	EET NE	10/18/22 13:55
Total/NA	Prep	3546			16143	BMS	EET NE	10/11/22 08:15
Total/NA	Analysis	8100		1	16217	JS	EET NE	10/13/22 11:41
Total/NA	Prep	3050B			871238	NNW	EET EDI	10/11/22 09:23
Total/NA	Analysis	6010D		2	871489	CDC	EET EDI	10/12/22 12:23
Total/NA	Prep	7471B			16299	DWC	EET NE	10/13/22 14:53
Total/NA	Analysis	7471B		1	16342	CAJ	EET NE	10/14/22 15:07

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-7487-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene

Laboratory: Eurofins New England (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
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride

Laboratory: Eurofins New England (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
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Pyrene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	11-10-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-23

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-7487-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins Edison (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-23
Pennsylvania	NELAP	68-00522	02-28-23
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET NE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET NE
8081B	Organochlorine Pesticides (GC)	SW846	EET NE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET NE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	EET NE
6010D	Metals (ICP)	SW846	EET EDI
7471B	Mercury (CVAA)	SW846	EET NE
Moisture	Percent Moisture	EPA	EET NE
3050B	Preparation, Metals	SW846	EET EDI
3546	Microwave Extraction	SW846	EET NE
5035	Closed System Purge and Trap	SW846	EET NE
7471B	Preparation, Mercury	SW846	EET NE
Frozen Preserve	Freezing Samples	None	EET NE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7487-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-7487-1	B101 (1-3)	Solid	10/03/22 09:00	10/07/22 14:52
620-7487-2	B101/RW1 (0-4)	Solid	10/04/22 10:50	10/07/22 14:52

7487

620-7487 Chain of Custody

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ver ng and

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive
Agawam, MA 01001
(413) 789-9018

☑ 646 Camp Avenue
N Kingstown, RI 02852
(401) 732-3400

Special Handling:

☑ TAT - Date Needed. standard

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To Patrick Haskell
AECOM
10 Orms Street, Suite 400
Providence, RI 02904
Telephone #: 978-866-9078
Project Mgr: Rich Prior

Invoice To Rich Prior
richard.prior@aecom.com
and AECOM drop box

P O No 144832 Quote #:

Project No 60680132
Site Name: Route 37/I-295 Interchange
Location. Cranston State: RI
Sampler(s): E. DaSilva

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Analysis: VOCs	PP13 Metals + Ba, Mn, V	PCBs	Chlorinated Pesticides	PAHs	TPH 8100M			Check if chlorinated
											List Preservative Code below: 7/9								
01	B101 (1-3)	10/3/2022	9:00 AM	G	S	3					x								☐
02	B101/RW1 (0-4)	10/3/2022	10:50 AM	C	S		3					x	x	x	x	x			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other: _____
State-specific reporting standards.

Relinquished by:	Received by:	Date:	Time:	Temp °C
		10-7-22	14:10	Observed 0.6
		10/7/22	14:52	Correction Factor +0.1
				Corrected 0.7
				IR ID # 6

☐ EDD format:
☑ E-mail to patrick.haskell@aecom.com
abigail.brakenwagen@aecom.com

Condition upon receipt: Custody Seals. ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☒ DI VOA Frozen ☐ Soil Jar Frozen

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10/18/2022

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-6644.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Rhode Island	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Rhode Island		Job #: 620-7487-1
Address: 777 New Durham Road, ,	Due Date Requested: 10/17/2022			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: I295/Rt 37 - Johnston, RI	Project #: 62001238			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	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)	6010D/3050B PP13+Ba,Mn,V	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
B101/RW1 (0-4) (620-7487-2)	10/4/22	10:50 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	10/7/22 17:52	ENC	[signature] Fedex		
2				[signature] Fedex	10/8/22 8:50	ETA
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: Present	Cooler Temperature(s) °C and Other Remarks: 0.6 / 0.6 IR9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-7487-1

Login Number: 7487
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-7487-1

Login Number: 7487
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 10/10/22 12:21 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-7659-1
Client Project/Site: I295/Rt 37 - Johnston, RI

For:
AECOM
10 Orms Street
Suite 405
Providence, Rhode Island 02904

Attn: Patrick Haskell

Authorized for release by:
10/26/2022 5:55:40 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: AECOM
Job ID: 620-7659-1
Project/Site: I295/Rt 37 - Johnston, RI

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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)
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

Case Narrative

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7659-1

Job ID: 620-7659-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-7659-1

Comments
No additional comments.

Receipt
The samples were received on 10/14/2022 3:59 PM. 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 was 2.3º C.

GC/MS VOA
Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: Tetrahydrofuran, Isopropyl ether, Acrylonitrile, Vinyl chloride, Ethyl ether, 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane, and Tetrachloroethene.
(CCVIS 620-16427/3)

Method 8260C: The laboratory control sample (LCS) for preparation batch 620-16425 and analytical batch 620-16427 recovered outside control limits for the following analytes: Carbon tetrachloride, tert-Butylbenzene, Tetrachloroethene, and Chloromethane. According to 8260C requirements, as long as <10% of analytes in the LCS/D fall outside the 70-130% but within 50-150%, no re-analysis is required. Since the affected target compounds meet this criteria, the data have been reported and qualified.

Method 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 620-16425 and analytical batch 620-16427 recovered outside control limits for the following analytes: Tetrachloroethene, Tetrahydrofuran, and Chloromethane. According to 8260C requirements, as long as <10% of analytes in the LCS/D fall outside the 70-130% but within 50-150%, no re-analysis is required. Since the affected target compounds meet this criteria, the data have been reported and qualified.

Methods 8260, 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-16308 and 620-16425 and analytical batch 620-16427 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 7471B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 620-16392 and analytical batch 620-16449 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

Detection Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7659-1

Client Sample ID: SB09 (0-2) — Lab Sample ID: 620-7659-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
TEPH (C9-C36)	644		73.8		mg/Kg	1	☼	8100	Total/NA
Chromium	5.88		2.17		mg/Kg	2	☼	6010D	Total/NA
Copper	5.65		5.42		mg/Kg	2	☼	6010D	Total/NA
Lead	7.00		2.17		mg/Kg	2	☼	6010D	Total/NA
Manganese	144		3.25		mg/Kg	2	☼	6010D	Total/NA
Zinc	39.9		6.51		mg/Kg	2	☼	6010D	Total/NA
Mercury	0.0803		0.0429		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB06 (0-2) — Lab Sample ID: 620-7659-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	85.3		73.2		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	74.7		73.2		ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	107		73.2		ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	79.6		73.2		ug/Kg	1	☼	8270D	Total/NA
Chrysene	93.6		73.2		ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	193		73.2		ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	78.1		73.2		ug/Kg	1	☼	8270D	Total/NA
Pyrene	148		73.2		ug/Kg	1	☼	8270D	Total/NA
4,4'-DDE	206		87.6		ug/Kg	10	☼	8081B	Total/NA
4,4'-DDT	57.7		8.76		ug/Kg	1	☼	8081B	Total/NA
TEPH (C9-C36)	133		14.8		mg/Kg	1	☼	8100	Total/NA
Arsenic	3.72		3.26		mg/Kg	2	☼	6010D	Total/NA
Beryllium	0.701		0.435		mg/Kg	2	☼	6010D	Total/NA
Chromium	20.7		2.17		mg/Kg	2	☼	6010D	Total/NA
Copper	23.0		5.43		mg/Kg	2	☼	6010D	Total/NA
Lead	121		2.17		mg/Kg	2	☼	6010D	Total/NA
Manganese	199		3.26		mg/Kg	2	☼	6010D	Total/NA
Vanadium	18.0		10.9		mg/Kg	2	☼	6010D	Total/NA
Zinc	111		6.52		mg/Kg	2	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7659-1

Client Sample ID: SB09 (0-2)
Date Collected: 10/13/22 13:00
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-1
Matrix: Solid
Percent Solids: 89.5

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Acetone	ND		33.4		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Acrylonitrile	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Benzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Bromobenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Bromochloromethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Bromodichloromethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Bromoform	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Bromomethane	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
2-Butanone (MEK)	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
n-Butylbenzene	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
sec-Butylbenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
tert-Butylbenzene	ND	*+	3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Carbon disulfide	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Carbon tetrachloride	ND	*+	3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Chlorobenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Chloroethane	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Chloroform	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Chloromethane	ND	*-	6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
2-Chlorotoluene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
4-Chlorotoluene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2-Dibromo-3-Chloropropane	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Dibromochloromethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2-Dibromoethane (EDB)	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Dibromomethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2-Dichlorobenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,3-Dichlorobenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,4-Dichlorobenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Dichlorodifluoromethane (Freon 12)	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,1-Dichloroethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2-Dichloroethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,1-Dichloroethene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
cis-1,2-Dichloroethene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
trans-1,2-Dichloroethene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2-Dichloropropane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,3-Dichloropropane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
2,2-Dichloropropane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,1-Dichloropropene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
cis-1,3-Dichloropropene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
trans-1,3-Dichloropropene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Ethylbenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Hexachlorobutadiene	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
2-Hexanone (MBK)	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Isopropylbenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
4-Isopropyltoluene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Methyl tert-butyl ether	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
4-Methyl-2-pentanone (MIBK)	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Methylene Chloride	ND		6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Naphthalene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1

Client Sample ID: SB09 (0-2)
Date Collected: 10/13/22 13:00
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-1
Matrix: Solid
Percent Solids: 89.5

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Styrene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,1,1,2-Tetrachloroethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,1,2,2-Tetrachloroethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Tetrachloroethene	ND	*+	3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Toluene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2,3-Trichlorobenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2,4-Trichlorobenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,3,5-Trichlorobenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,1,1-Trichloroethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,1,2-Trichloroethane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Trichloroethene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Trichlorofluoromethane (Freon 11)	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2,3-Trichloropropane	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,2,4-Trimethylbenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,3,5-Trimethylbenzene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Vinyl chloride	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
m,p-Xylene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
o-Xylene	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Tetrahydrofuran	ND	*-	6.68		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Ethyl ether	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Tert-amyl methyl ether	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Ethyl tert-butyl ether	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
di-Isopropyl ether	ND		3.34		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
tert-Butanol	ND		66.8		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
1,4-Dioxane	ND		66.8		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
trans-1,4-Dichloro-2-butene	ND		16.7		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1
Ethanol	ND		668		ug/Kg	☼	10/18/22 09:34	10/18/22 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*10/18/22 09:34*	*10/18/22 19:55*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*10/18/22 09:34*	*10/18/22 19:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*10/18/22 09:34*	*10/18/22 19:55*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*	*10/18/22 09:34*	*10/18/22 19:55*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
2-Methylnaphthalene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Acenaphthene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Acenaphthylene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Anthracene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Benzo[a]anthracene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Benzo[a]pyrene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Benzo[b]fluoranthene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Benzo[g,h,i]perylene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Benzo[k]fluoranthene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Chrysene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Dibenz(a,h)anthracene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Fluoranthene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1

Client Sample ID: SB09 (0-2)
Date Collected: 10/13/22 13:00
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-1
Matrix: Solid
Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Indeno[1,2,3-cd]pyrene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Naphthalene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Phenanthrene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1
Pyrene	ND		370		ug/Kg	☼	10/21/22 08:36	10/25/22 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*68*		*30 - 130*	*10/21/22 08:36*	*10/25/22 16:37*	*1*
2-Fluorobiphenyl (Surr)	*77*		*30 - 130*	*10/21/22 08:36*	*10/25/22 16:37*	*1*
Terphenyl-d14 (Surr)	*62*		*30 - 130*	*10/21/22 08:36*	*10/25/22 16:37*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
beta-BHC	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
delta-BHC	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
gamma-BHC (Lindane)	ND		2.19		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Heptachlor	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Aldrin	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Heptachlor epoxide	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Endosulfan I	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Dieldrin	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
4,4'-DDE	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Endrin	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Endosulfan II	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
4,4'-DDD	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Endosulfan sulfate	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
4,4'-DDT	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Methoxychlor	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Endrin ketone	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Endrin aldehyde	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
cis-Chlordane	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
trans-Chlordane	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Toxaphene	ND		110		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1
Alachlor	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*44*		*30 - 150*	*10/20/22 15:07*	*10/26/22 16:33*	*1*
Tetrachloro-m-xylene	*52*		*30 - 150*	*10/20/22 15:07*	*10/26/22 16:33*	*1*
DCB Decachlorobiphenyl (Surr)	*72*		*30 - 150*	*10/20/22 15:07*	*10/26/22 16:33*	*1*
DCB Decachlorobiphenyl (Surr)	*67*		*30 - 150*	*10/20/22 15:07*	*10/26/22 16:33*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1
PCB-1221	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1
PCB-1232	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1
PCB-1242	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1
PCB-1248	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1
PCB-1254	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1

Client Sample ID: SB09 (0-2)

Date Collected: 10/13/22 13:00
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-1

Matrix: Solid
Percent Solids: 89.5

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1
PCB-1262	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1
PCB-1268	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*30 - 150*	*10/20/22 15:07*	*10/21/22 18:09*	*1*
Tetrachloro-m-xylene	*62*		*30 - 150*	*10/20/22 15:07*	*10/21/22 18:09*	*1*
DCB Decachlorobiphenyl (Surr)	*83*		*30 - 150*	*10/20/22 15:07*	*10/21/22 18:09*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*30 - 150*	*10/20/22 15:07*	*10/21/22 18:09*	*1*

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**644**		73.8		mg/Kg	☼	10/21/22 09:18	10/24/22 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*59*		*40 - 140*	*10/21/22 09:18*	*10/24/22 12:55*	*1*
o-Terphenyl (Surr)	*54*		*40 - 140*	*10/21/22 09:18*	*10/24/22 12:55*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.34		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Arsenic	ND		3.25		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Barium	ND		43.4		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Beryllium	ND		0.434		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Cadmium	ND		0.868		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Chromium	**5.88**		2.17		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Copper	**5.65**		5.42		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Lead	**7.00**		2.17		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Manganese	**144**		3.25		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Nickel	ND		8.68		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Selenium	ND		4.34		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Silver	ND		2.17		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Thallium	ND		4.34		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Vanadium	ND		10.8		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2
Zinc	**39.9**		6.51		mg/Kg	☼	10/19/22 09:45	10/20/22 19:23	2

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0803**		0.0429		mg/Kg	☼	10/17/22 11:40	10/18/22 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	**10.5**		0.1		%			10/19/22 09:45	1
Percent Solids (EPA Moisture)	**89.5**		0.1		%			10/19/22 09:45	1

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7659-1

Client Sample ID: SB06 (0-2)
Date Collected: 10/13/22 09:45
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-2
Matrix: Solid
Percent Solids: 89.3

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Acetone	ND		35.7		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Acrylonitrile	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Benzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Bromobenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Bromochloromethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Bromodichloromethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Bromoform	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Bromomethane	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
2-Butanone (MEK)	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
n-Butylbenzene	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
sec-Butylbenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
tert-Butylbenzene	ND	*+	3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Carbon disulfide	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Carbon tetrachloride	ND	*+	3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Chlorobenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Chloroethane	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Chloroform	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Chloromethane	ND	*-	7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
2-Chlorotoluene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
4-Chlorotoluene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2-Dibromo-3-Chloropropane	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Dibromochloromethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2-Dibromoethane (EDB)	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Dibromomethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2-Dichlorobenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,3-Dichlorobenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,4-Dichlorobenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Dichlorodifluoromethane (Freon 12)	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,1-Dichloroethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2-Dichloroethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,1-Dichloroethene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
cis-1,2-Dichloroethene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
trans-1,2-Dichloroethene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2-Dichloropropane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,3-Dichloropropane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
2,2-Dichloropropane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,1-Dichloropropene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
cis-1,3-Dichloropropene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
trans-1,3-Dichloropropene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Ethylbenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Hexachlorobutadiene	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
2-Hexanone (MBK)	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Isopropylbenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
4-Isopropyltoluene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Methyl tert-butyl ether	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
4-Methyl-2-pentanone (MIBK)	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Methylene Chloride	ND		7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Naphthalene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1

Client Sample ID: SB06 (0-2)
Date Collected: 10/13/22 09:45
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-2
Matrix: Solid
Percent Solids: 89.3

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Styrene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,1,1,2-Tetrachloroethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,1,2,2-Tetrachloroethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Tetrachloroethene	ND	*+	3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Toluene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2,3-Trichlorobenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2,4-Trichlorobenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,3,5-Trichlorobenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,1,1-Trichloroethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,1,2-Trichloroethane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Trichloroethene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Trichlorofluoromethane (Freon 11)	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2,3-Trichloropropane	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,2,4-Trimethylbenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,3,5-Trimethylbenzene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Vinyl chloride	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
m,p-Xylene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
o-Xylene	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Tetrahydrofuran	ND	*-	7.14		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Ethyl ether	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Tert-amyl methyl ether	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Ethyl tert-butyl ether	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
di-Isopropyl ether	ND		3.57		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
tert-Butanol	ND		71.4		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
1,4-Dioxane	ND		71.4		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
trans-1,4-Dichloro-2-butene	ND		17.8		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1
Ethanol	ND		714		ug/Kg	☼	10/18/22 09:34	10/18/22 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*10/18/22 09:34*	*10/18/22 20:20*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*10/18/22 09:34*	*10/18/22 20:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*	*10/18/22 09:34*	*10/18/22 20:20*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*	*10/18/22 09:34*	*10/18/22 20:20*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
2-Methylnaphthalene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Acenaphthene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Acenaphthylene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Anthracene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Benzo[a]anthracene	**85.3**		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Benzo[a]pyrene	**74.7**		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Benzo[b]fluoranthene	**107**		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Benzo[g,h,i]perylene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Benzo[k]fluoranthene	**79.6**		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Chrysene	**93.6**		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Dibenz(a,h)anthracene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Fluoranthene	**193**		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1

Client Sample ID: SB06 (0-2)
Date Collected: 10/13/22 09:45
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-2
Matrix: Solid
Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Indeno[1,2,3-cd]pyrene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Naphthalene	ND		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Phenanthrene	**78.1**		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1
Pyrene	**148**		73.2		ug/Kg	☼	10/21/22 08:36	10/21/22 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*51*		*30 - 130*	*10/21/22 08:36*	*10/21/22 19:47*	*1*
2-Fluorobiphenyl (Surr)	*59*		*30 - 130*	*10/21/22 08:36*	*10/21/22 19:47*	*1*
Terphenyl-d14 (Surr)	*66*		*30 - 130*	*10/21/22 08:36*	*10/21/22 19:47*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
beta-BHC	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
delta-BHC	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
gamma-BHC (Lindane)	ND		2.19		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Heptachlor	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Aldrin	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Heptachlor epoxide	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Endosulfan I	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Dieldrin	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
4,4'-DDE	**206**		87.6		ug/Kg	☼	10/20/22 15:07	10/26/22 17:21	10
Endrin	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Endosulfan II	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
4,4'-DDD	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Endosulfan sulfate	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
4,4'-DDT	**57.7**		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Methoxychlor	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Endrin ketone	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Endrin aldehyde	ND		8.76		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
cis-Chlordane	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
trans-Chlordane	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Toxaphene	ND		110		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1
Alachlor	ND		5.48		ug/Kg	☼	10/20/22 15:07	10/26/22 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*43*		*30 - 150*	*10/20/22 15:07*	*10/26/22 16:49*	*1*
Tetrachloro-m-xylene	*54*		*30 - 150*	*10/20/22 15:07*	*10/26/22 16:49*	*1*
DCB Decachlorobiphenyl (Surr)	*66*		*30 - 150*	*10/20/22 15:07*	*10/26/22 16:49*	*1*
DCB Decachlorobiphenyl (Surr)	*63*		*30 - 150*	*10/20/22 15:07*	*10/26/22 16:49*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1
PCB-1221	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1
PCB-1232	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1
PCB-1242	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1
PCB-1248	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1
PCB-1254	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1

Client Sample ID: SB06 (0-2)
Date Collected: 10/13/22 09:45
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-2
Matrix: Solid
Percent Solids: 89.3

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1
PCB-1262	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1
PCB-1268	ND		21.9		ug/Kg	☼	10/20/22 15:07	10/21/22 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*30 - 150*	*10/20/22 15:07*	*10/21/22 18:26*	*1*
Tetrachloro-m-xylene	*63*		*30 - 150*	*10/20/22 15:07*	*10/21/22 18:26*	*1*
DCB Decachlorobiphenyl (Surr)	*83*		*30 - 150*	*10/20/22 15:07*	*10/21/22 18:26*	*1*
DCB Decachlorobiphenyl (Surr)	*87*		*30 - 150*	*10/20/22 15:07*	*10/21/22 18:26*	*1*

Method: SW846 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	**133**		14.8		mg/Kg	☼	10/21/22 09:18	10/24/22 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*59*		*40 - 140*	*10/21/22 09:18*	*10/24/22 11:39*	*1*
o-Terphenyl (Surr)	*54*		*40 - 140*	*10/21/22 09:18*	*10/24/22 11:39*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.35		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Arsenic	**3.72**		3.26		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Barium	ND		43.5		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Beryllium	**0.701**		0.435		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Cadmium	ND		0.869		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Chromium	**20.7**		2.17		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Copper	**23.0**		5.43		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Lead	**121**		2.17		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Manganese	**199**		3.26		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Nickel	ND		8.69		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Selenium	ND		4.35		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Silver	ND		2.17		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Thallium	ND		4.35		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Vanadium	**18.0**		10.9		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2
Zinc	**111**		6.52		mg/Kg	☼	10/19/22 09:45	10/20/22 19:27	2

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0453		mg/Kg	☼	10/17/22 11:40	10/18/22 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	**10.7**		0.1		%			10/19/22 09:45	1
Percent Solids (EPA Moisture)	**89.3**		0.1		%			10/19/22 09:45	1

Surrogate Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7659-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-7659-1	SB09 (0-2)	94	102	104	109
620-7659-2	SB06 (0-2)	100	104	101	108
LCS 620-16425/1-A	Lab Control Sample	98	102	95	103
LCSD 620-16425/2-A	Lab Control Sample Dup	96	104	95	104
MB 620-16425/3-A	Method Blank	98	102	97	103

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(30-130)	(30-130)
620-7659-1	SB09 (0-2)	68	77	62
620-7659-2	SB06 (0-2)	51	59	66
LCS 620-16552/2-A	Lab Control Sample	62	64	62
LCSD 620-16552/3-A	Lab Control Sample Dup	73	73	67
MB 620-16552/1-A	Method Blank	65	70	69

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-7659-1	SB09 (0-2)	44	52	72	67
620-7659-2	SB06 (0-2)	43	54	66	63
LCS 620-16541/4-A	Lab Control Sample	67	77	79	84
LCSD 620-16541/5-A	Lab Control Sample Dup	59	71	71	78
MB 620-16541/1-A	Method Blank	68	71	81	88

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-7659-1	SB09 (0-2)	63	62	83	89

Surrogate Summary

Client: AECOM
Job ID: 620-7659-1
Project/Site: I295/Rt 37 - Johnston, RI

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
620-7659-2	SB06 (0-2)	66	63	83	87
LCS 620-16541/2-A	Lab Control Sample	70	68	78	95
LCSD 620-16541/3-A	Lab Control Sample Dup	72	69	88	99
MB 620-16541/1-A	Method Blank	67	61	80	84

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	OTPH
Lab Sample ID	Client Sample ID	(40-140)	(40-140)
620-7659-1	SB09 (0-2)	59	54
620-7659-2	SB06 (0-2)	59	54
LCS 620-16567/2-A	Lab Control Sample	64	84
LCSD 620-16567/3-A	Lab Control Sample Dup	74	71
MB 620-16567/1-A	Method Blank	63	47

Surrogate Legend

1COD = 1-Chlorooctadecane (Surr)

OTPH = o-Terphenyl (Surr)

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7659-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-16425/3-A
Matrix: Solid
Analysis Batch: 16427

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16425

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Acetone	ND		50.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Acrylonitrile	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Benzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Bromobenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Bromochloromethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Bromodichloromethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Bromoform	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Bromomethane	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
2-Butanone (MEK)	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
n-Butylbenzene	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
sec-Butylbenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
tert-Butylbenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Carbon disulfide	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Carbon tetrachloride	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Chlorobenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Chloroethane	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Chloroform	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Chloromethane	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
2-Chlorotoluene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
4-Chlorotoluene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Dibromochloromethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2-Dibromoethane (EDB)	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Dibromomethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2-Dichlorobenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,3-Dichlorobenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,4-Dichlorobenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Dichlorodifluoromethane (Freon 12)	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,1-Dichloroethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2-Dichloroethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,1-Dichloroethene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
cis-1,2-Dichloroethene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
trans-1,2-Dichloroethene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2-Dichloropropane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,3-Dichloropropane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
2,2-Dichloropropane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,1-Dichloropropene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
cis-1,3-Dichloropropene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
trans-1,3-Dichloropropene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Ethylbenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Hexachlorobutadiene	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
2-Hexanone (MBK)	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Isopropylbenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
4-Isopropyltoluene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Methyl tert-butyl ether	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Methylene Chloride	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-16425/3-A
Matrix: Solid
Analysis Batch: 16427

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16425

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
N-Propylbenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Styrene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,1,1,2-Tetrachloroethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,1,2,2-Tetrachloroethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Tetrachloroethene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Toluene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2,3-Trichlorobenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2,4-Trichlorobenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,3,5-Trichlorobenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,1,1-Trichloroethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,1,2-Trichloroethane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Trichloroethene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Trichlorofluoromethane (Freon 11)	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2,3-Trichloropropane	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,2,4-Trimethylbenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,3,5-Trimethylbenzene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Vinyl chloride	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
m,p-Xylene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
o-Xylene	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Tetrahydrofuran	ND		10.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Ethyl ether	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Tert-amyl methyl ether	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Ethyl tert-butyl ether	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
di-Isopropyl ether	ND		5.00		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
tert-Butanol	ND		100		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
1,4-Dioxane	ND		100		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
trans-1,4-Dichloro-2-butene	ND		25.0		ug/Kg		10/18/22 09:34	10/18/22 12:36	1
Ethanol	ND		1000		ug/Kg		10/18/22 09:34	10/18/22 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*10/18/22 09:34*	*10/18/22 12:36*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*10/18/22 09:34*	*10/18/22 12:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*10/18/22 09:34*	*10/18/22 12:36*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*10/18/22 09:34*	*10/18/22 12:36*	*1*

Lab Sample ID: LCS 620-16425/1-A
Matrix: Solid
Analysis Batch: 16427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	23.17		ug/Kg		116	70 - 130
Acetone	20.0	16.76	J	ug/Kg		84	70 - 130
Acrylonitrile	20.0	14.83		ug/Kg		74	70 - 130
Benzene	20.0	20.11		ug/Kg		101	70 - 130
Bromobenzene	20.0	22.83		ug/Kg		114	70 - 130
Bromochloromethane	20.0	23.64		ug/Kg		118	70 - 130
Bromodichloromethane	20.0	21.74		ug/Kg		109	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-16425/1-A
Matrix: Solid
Analysis Batch: 16427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	21.97		ug/Kg		110	70 - 130
Bromomethane	20.0	20.95		ug/Kg		105	70 - 130
2-Butanone (MEK)	20.0	14.03		ug/Kg		70	70 - 130
n-Butylbenzene	20.0	18.90		ug/Kg		95	70 - 130
sec-Butylbenzene	20.0	21.38		ug/Kg		107	70 - 130
tert-Butylbenzene	20.0	26.17	*+	ug/Kg		131	70 - 130
Carbon disulfide	20.0	18.95		ug/Kg		95	70 - 130
Carbon tetrachloride	20.0	26.25	*+	ug/Kg		131	70 - 130
Chlorobenzene	20.0	20.47		ug/Kg		102	70 - 130
Chloroethane	20.0	17.90		ug/Kg		90	70 - 130
Chloroform	20.0	21.40		ug/Kg		107	70 - 130
Chloromethane	20.0	13.48	*-	ug/Kg		67	70 - 130
2-Chlorotoluene	20.0	20.39		ug/Kg		102	70 - 130
4-Chlorotoluene	20.0	19.84		ug/Kg		99	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	19.33		ug/Kg		97	70 - 130
Dibromochloromethane	20.0	24.12		ug/Kg		121	70 - 130
1,2-Dibromoethane (EDB)	20.0	21.93		ug/Kg		110	70 - 130
Dibromomethane	20.0	21.00		ug/Kg		105	70 - 130
1,2-Dichlorobenzene	20.0	20.72		ug/Kg		104	70 - 130
1,3-Dichlorobenzene	20.0	22.77		ug/Kg		114	70 - 130
1,4-Dichlorobenzene	20.0	20.55		ug/Kg		103	70 - 130
Dichlorodifluoromethane (Freon 12)	20.0	19.16		ug/Kg		96	70 - 130
1,1-Dichloroethane	20.0	18.17		ug/Kg		91	70 - 130
1,2-Dichloroethane	20.0	21.00		ug/Kg		105	70 - 130
1,1-Dichloroethene	20.0	22.34		ug/Kg		112	70 - 130
cis-1,2-Dichloroethene	20.0	21.73		ug/Kg		109	70 - 130
trans-1,2-Dichloroethene	20.0	22.36		ug/Kg		112	70 - 130
1,2-Dichloropropane	20.0	17.31		ug/Kg		87	70 - 130
1,3-Dichloropropane	20.0	19.01		ug/Kg		95	70 - 130
2,2-Dichloropropane	20.0	22.87		ug/Kg		114	70 - 130
1,1-Dichloropropene	20.0	21.61		ug/Kg		108	70 - 130
cis-1,3-Dichloropropene	20.0	20.25		ug/Kg		101	70 - 130
trans-1,3-Dichloropropene	20.0	20.58		ug/Kg		103	70 - 130
Ethylbenzene	20.0	19.98		ug/Kg		100	70 - 130
Hexachlorobutadiene	20.0	24.60		ug/Kg		123	70 - 130
2-Hexanone (MBK)	20.0	14.12		ug/Kg		71	70 - 130
Isopropylbenzene	20.0	21.37		ug/Kg		107	70 - 130
4-Isopropyltoluene	20.0	21.20		ug/Kg		106	70 - 130
Methyl tert-butyl ether	20.0	20.48		ug/Kg		102	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	14.18		ug/Kg		71	70 - 130
Methylene Chloride	20.0	20.35		ug/Kg		102	70 - 130
Naphthalene	20.0	20.62		ug/Kg		103	70 - 130
N-Propylbenzene	20.0	20.12		ug/Kg		101	70 - 130
Styrene	20.0	20.39		ug/Kg		102	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.90		ug/Kg		109	70 - 130
1,1,2,2-Tetrachloroethane	20.0	16.10		ug/Kg		80	70 - 130
Tetrachloroethene	20.0	28.01	*+	ug/Kg		140	70 - 130
Toluene	20.0	22.18		ug/Kg		111	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-16425/1-A
Matrix: Solid
Analysis Batch: 16427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichlorobenzene	20.0	20.99		ug/Kg		105	70 - 130
1,2,4-Trichlorobenzene	20.0	23.71		ug/Kg		119	70 - 130
1,3,5-Trichlorobenzene	20.0	21.75		ug/Kg		109	70 - 130
1,1,1-Trichloroethane	20.0	24.51		ug/Kg		123	70 - 130
1,1,2-Trichloroethane	20.0	19.45		ug/Kg		97	70 - 130
Trichloroethene	20.0	23.37		ug/Kg		117	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	24.77		ug/Kg		124	70 - 130
1,2,3-Trichloropropane	20.0	16.38		ug/Kg		82	70 - 130
1,2,4-Trimethylbenzene	20.0	21.14		ug/Kg		106	70 - 130
1,3,5-Trimethylbenzene	20.0	21.58		ug/Kg		108	70 - 130
Vinyl chloride	20.0	15.84		ug/Kg		79	70 - 130
m,p-Xylene	20.0	20.16		ug/Kg		101	70 - 130
o-Xylene	20.0	20.15		ug/Kg		101	70 - 130
Tetrahydrofuran	20.0	14.15		ug/Kg		71	70 - 130
Ethyl ether	20.0	16.04		ug/Kg		80	70 - 130
Tert-amyl methyl ether	20.0	19.97		ug/Kg		100	70 - 130
Ethyl tert-butyl ether	20.0	18.21		ug/Kg		91	70 - 130
di-Isopropyl ether	20.0	14.55		ug/Kg		73	70 - 130
tert-Butanol	200	174.5		ug/Kg		87	70 - 130
1,4-Dioxane	200	200.4		ug/Kg		100	70 - 130
trans-1,4-Dichloro-2-butene	20.0	18.87	J	ug/Kg		94	70 - 130
Ethanol	400	306.5	J	ug/Kg		77	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 620-16425/2-A
Matrix: Solid
Analysis Batch: 16427

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16425

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	22.31		ug/Kg		112	70 - 130	4	30
Acetone	20.0	15.69	J	ug/Kg		78	70 - 130	7	30
Acrylonitrile	20.0	13.92		ug/Kg		70	70 - 130	6	30
Benzene	20.0	19.88		ug/Kg		99	70 - 130	1	30
Bromobenzene	20.0	22.14		ug/Kg		111	70 - 130	3	30
Bromochloromethane	20.0	22.92		ug/Kg		115	70 - 130	3	30
Bromodichloromethane	20.0	21.04		ug/Kg		105	70 - 130	3	30
Bromoform	20.0	21.24		ug/Kg		106	70 - 130	3	30
Bromomethane	20.0	21.03		ug/Kg		105	70 - 130	0	30
2-Butanone (MEK)	20.0	15.10		ug/Kg		75	70 - 130	7	30
n-Butylbenzene	20.0	17.81		ug/Kg		89	70 - 130	6	30
sec-Butylbenzene	20.0	20.50		ug/Kg		102	70 - 130	4	30
tert-Butylbenzene	20.0	25.78		ug/Kg		129	70 - 130	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-16425/2-A
Matrix: Solid
Analysis Batch: 16427

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16425

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide	20.0	18.29		ug/Kg		91	70 - 130	4	30
Carbon tetrachloride	20.0	25.98		ug/Kg		130	70 - 130	1	30
Chlorobenzene	20.0	19.53		ug/Kg		98	70 - 130	5	30
Chloroethane	20.0	17.54		ug/Kg		88	70 - 130	2	30
Chloroform	20.0	21.01		ug/Kg		105	70 - 130	2	30
Chloromethane	20.0	12.64	*-	ug/Kg		63	70 - 130	6	30
2-Chlorotoluene	20.0	18.61		ug/Kg		93	70 - 130	9	30
4-Chlorotoluene	20.0	18.97		ug/Kg		95	70 - 130	4	30
1,2-Dibromo-3-Chloropropane	20.0	18.83		ug/Kg		94	70 - 130	3	30
Dibromochloromethane	20.0	23.44		ug/Kg		117	70 - 130	3	30
1,2-Dibromoethane (EDB)	20.0	21.36		ug/Kg		107	70 - 130	3	30
Dibromomethane	20.0	20.52		ug/Kg		103	70 - 130	2	30
1,2-Dichlorobenzene	20.0	19.96		ug/Kg		100	70 - 130	4	30
1,3-Dichlorobenzene	20.0	22.04		ug/Kg		110	70 - 130	3	30
1,4-Dichlorobenzene	20.0	19.82		ug/Kg		99	70 - 130	4	30
Dichlorodifluoromethane (Freon 12)	20.0	18.29		ug/Kg		91	70 - 130	5	30
1,1-Dichloroethane	20.0	17.90		ug/Kg		90	70 - 130	1	30
1,2-Dichloroethane	20.0	20.27		ug/Kg		101	70 - 130	4	30
1,1-Dichloroethene	20.0	21.55		ug/Kg		108	70 - 130	4	30
cis-1,2-Dichloroethene	20.0	20.72		ug/Kg		104	70 - 130	5	30
trans-1,2-Dichloroethene	20.0	21.20		ug/Kg		106	70 - 130	5	30
1,2-Dichloropropane	20.0	17.16		ug/Kg		86	70 - 130	1	30
1,3-Dichloropropane	20.0	18.56		ug/Kg		93	70 - 130	2	30
2,2-Dichloropropane	20.0	22.29		ug/Kg		111	70 - 130	3	30
1,1-Dichloropropene	20.0	20.97		ug/Kg		105	70 - 130	3	30
cis-1,3-Dichloropropene	20.0	19.46		ug/Kg		97	70 - 130	4	30
trans-1,3-Dichloropropene	20.0	20.00		ug/Kg		100	70 - 130	3	30
Ethylbenzene	20.0	18.86		ug/Kg		94	70 - 130	6	30
Hexachlorobutadiene	20.0	23.05		ug/Kg		115	70 - 130	6	30
2-Hexanone (MBK)	20.0	14.75		ug/Kg		74	70 - 130	4	30
Isopropylbenzene	20.0	20.64		ug/Kg		103	70 - 130	3	30
4-Isopropyltoluene	20.0	20.35		ug/Kg		102	70 - 130	4	30
Methyl tert-butyl ether	20.0	19.74		ug/Kg		99	70 - 130	4	30
4-Methyl-2-pentanone (MIBK)	20.0	14.48		ug/Kg		72	70 - 130	2	30
Methylene Chloride	20.0	19.82		ug/Kg		99	70 - 130	3	30
Naphthalene	20.0	19.85		ug/Kg		99	70 - 130	4	30
N-Propylbenzene	20.0	19.36		ug/Kg		97	70 - 130	4	30
Styrene	20.0	19.56		ug/Kg		98	70 - 130	4	30
1,1,1,2-Tetrachloroethane	20.0	20.76		ug/Kg		104	70 - 130	5	30
1,1,2,2-Tetrachloroethane	20.0	15.27		ug/Kg		76	70 - 130	5	30
Tetrachloroethene	20.0	27.06	*+	ug/Kg		135	70 - 130	3	30
Toluene	20.0	21.63		ug/Kg		108	70 - 130	3	30
1,2,3-Trichlorobenzene	20.0	20.55		ug/Kg		103	70 - 130	2	30
1,2,4-Trichlorobenzene	20.0	22.46		ug/Kg		112	70 - 130	5	30
1,3,5-Trichlorobenzene	20.0	20.70		ug/Kg		104	70 - 130	5	30
1,1,1-Trichloroethane	20.0	23.72		ug/Kg		119	70 - 130	3	30
1,1,2-Trichloroethane	20.0	18.95		ug/Kg		95	70 - 130	3	30
Trichloroethene	20.0	22.88		ug/Kg		114	70 - 130	2	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-16425/2-A
Matrix: Solid
Analysis Batch: 16427

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16425

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	23.37		ug/Kg		117	70 - 130	6	30
1,2,3-Trichloropropane			20.0	15.96		ug/Kg		80	70 - 130	3	30
1,2,4-Trimethylbenzene			20.0	20.46		ug/Kg		102	70 - 130	3	30
1,3,5-Trimethylbenzene			20.0	20.70		ug/Kg		104	70 - 130	4	30
Vinyl chloride			20.0	15.57		ug/Kg		78	70 - 130	2	30
m,p-Xylene			20.0	19.65		ug/Kg		98	70 - 130	3	30
o-Xylene			20.0	19.36		ug/Kg		97	70 - 130	4	30
Tetrahydrofuran			20.0	12.36	*-	ug/Kg		62	70 - 130	13	30
Ethyl ether			20.0	15.30		ug/Kg		77	70 - 130	5	30
Tert-amyl methyl ether			20.0	19.72		ug/Kg		99	70 - 130	1	30
Ethyl tert-butyl ether			20.0	17.60		ug/Kg		88	70 - 130	3	30
di-Isopropyl ether			20.0	14.10		ug/Kg		70	70 - 130	3	30
tert-Butanol			200	167.1		ug/Kg		84	70 - 130	4	30
1,4-Dioxane			200	195.9		ug/Kg		98	70 - 130	2	30
trans-1,4-Dichloro-2-butene			20.0	17.80	J	ug/Kg		89	70 - 130	6	30
Ethanol			400	283.0	J	ug/Kg		71	70 - 130	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 620-16552/1-A
Matrix: Solid
Analysis Batch: 16557

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16552

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
2-Methylnaphthalene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Acenaphthene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Acenaphthylene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Anthracene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Benzo[a]anthracene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Benzo[a]pyrene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Benzo[b]fluoranthene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Benzo[g,h,i]perylene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Benzo[k]fluoranthene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Chrysene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Dibenz(a,h)anthracene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Fluoranthene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Fluorene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Indeno[1,2,3-cd]pyrene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Naphthalene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Phenanthrene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1
Pyrene	ND		66.7		ug/Kg		10/21/22 08:36	10/21/22 17:26	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	65		30 - 130	10/21/22 08:36	10/21/22 17:26	1
2-Fluorobiphenyl (Surr)	70		30 - 130	10/21/22 08:36	10/21/22 17:26	1
Terphenyl-d14 (Surr)	69		30 - 130	10/21/22 08:36	10/21/22 17:26	1

Lab Sample ID: LCS 620-16552/2-A
Matrix: Solid
Analysis Batch: 16557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1670	1033		ug/Kg		62	40 - 140
2-Methylnaphthalene	1670	1151		ug/Kg		69	40 - 140
Acenaphthene	1670	993.6		ug/Kg		60	40 - 140
Acenaphthylene	1670	1080		ug/Kg		65	40 - 140
Anthracene	1670	1252		ug/Kg		75	40 - 140
Benzo[a]anthracene	1670	1189		ug/Kg		71	40 - 140
Benzo[a]pyrene	1670	1220		ug/Kg		73	40 - 140
Benzo[b]fluoranthene	1670	1211		ug/Kg		73	40 - 140
Benzo[g,h,i]perylene	1670	1196		ug/Kg		72	40 - 140
Benzo[k]fluoranthene	1670	1049		ug/Kg		63	40 - 140
Chrysene	1670	1217		ug/Kg		73	40 - 140
Dibenz(a,h)anthracene	1670	1189		ug/Kg		71	40 - 140
Fluoranthene	1670	1162		ug/Kg		70	40 - 140
Fluorene	1670	1070		ug/Kg		64	40 - 140
Indeno[1,2,3-cd]pyrene	1670	1092		ug/Kg		65	40 - 140
Naphthalene	1670	959.1		ug/Kg		58	40 - 140
Phenanthrene	1670	1156		ug/Kg		69	40 - 140
Pyrene	1670	1131		ug/Kg		68	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	62		30 - 130
2-Fluorobiphenyl (Surr)	64		30 - 130
Terphenyl-d14 (Surr)	62		30 - 130

Lab Sample ID: LCSD 620-16552/3-A
Matrix: Solid
Analysis Batch: 16557

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16552

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1670	1277		ug/Kg		77	40 - 140	21	30
2-Methylnaphthalene	1670	1433		ug/Kg		86	40 - 140	22	30
Acenaphthene	1670	1225		ug/Kg		74	40 - 140	21	30
Acenaphthylene	1670	1335		ug/Kg		80	40 - 140	21	30
Anthracene	1670	1511		ug/Kg		91	40 - 140	19	30
Benzo[a]anthracene	1670	1436		ug/Kg		86	40 - 140	19	30
Benzo[a]pyrene	1670	1450		ug/Kg		87	40 - 140	17	30
Benzo[b]fluoranthene	1670	1525		ug/Kg		91	40 - 140	23	30
Benzo[g,h,i]perylene	1670	1451		ug/Kg		87	40 - 140	19	30
Benzo[k]fluoranthene	1670	1244		ug/Kg		75	40 - 140	17	30
Chrysene	1670	1335		ug/Kg		80	40 - 140	9	30
Dibenz(a,h)anthracene	1670	1373		ug/Kg		82	40 - 140	14	30
Fluoranthene	1670	1382		ug/Kg		83	40 - 140	17	30

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

Lab Sample ID: LCSD 620-16552/3-A
Matrix: Solid
Analysis Batch: 16557

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16552

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			1670	1328		ug/Kg		80	40 - 140	22	30
Indeno[1,2,3-cd]pyrene			1670	1326		ug/Kg		80	40 - 140	19	30
Naphthalene			1670	1180		ug/Kg		71	40 - 140	21	30
Phenanthrene			1670	1380		ug/Kg		83	40 - 140	18	30
Pyrene			1670	1281		ug/Kg		77	40 - 140	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*73*		*30 - 130*
2-Fluorobiphenyl (Surr)	*73*		*30 - 130*
Terphenyl-d14 (Surr)	*67*		*30 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 620-16541/1-A
Matrix: Solid
Analysis Batch: 16708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16541

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
beta-BHC	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
delta-BHC	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
gamma-BHC (Lindane)	ND		2.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Heptachlor	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Aldrin	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Heptachlor epoxide	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Endosulfan I	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Dieldrin	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
4,4'-DDE	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Endrin	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Endosulfan II	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
4,4'-DDD	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Endosulfan sulfate	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
4,4'-DDT	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Methoxychlor	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Endrin ketone	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Endrin aldehyde	ND		8.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
cis-Chlordane	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
trans-Chlordane	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Toxaphene	ND		100		ug/Kg		10/20/22 15:07	10/26/22 15:46	1
Alachlor	ND		5.00		ug/Kg		10/20/22 15:07	10/26/22 15:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*30 - 150*	*10/20/22 15:07*	*10/26/22 15:46*	*1*
Tetrachloro-m-xylene	*71*		*30 - 150*	*10/20/22 15:07*	*10/26/22 15:46*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*30 - 150*	*10/20/22 15:07*	*10/26/22 15:46*	*1*
DCB Decachlorobiphenyl (Surr)	*88*		*30 - 150*	*10/20/22 15:07*	*10/26/22 15:46*	*1*

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

Lab Sample ID: LCS 620-16541/4-A
Matrix: Solid
Analysis Batch: 16708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16541

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	13.4	9.605		ug/Kg		72	27 - 108
alpha-BHC	13.4	10.35		ug/Kg		77	27 - 108
beta-BHC	13.3	10.94		ug/Kg		82	50 - 114
beta-BHC	13.3	12.37		ug/Kg		93	50 - 114
delta-BHC	13.4	9.178		ug/Kg		68	41 - 101
delta-BHC	13.4	9.987		ug/Kg		74	41 - 101
gamma-BHC (Lindane)	13.5	10.67		ug/Kg		79	40 - 110
gamma-BHC (Lindane)	13.5	11.35		ug/Kg		84	40 - 110
Heptachlor	13.4	10.11		ug/Kg		76	30 - 101
Heptachlor	13.4	10.78		ug/Kg		81	30 - 101
Aldrin	13.4	10.41		ug/Kg		78	21 - 113
Aldrin	13.4	12.06		ug/Kg		90	21 - 113
Heptachlor epoxide	13.3	10.46		ug/Kg		78	46 - 106
Heptachlor epoxide	13.3	11.40		ug/Kg		86	46 - 106
Endosulfan I	13.3	10.67		ug/Kg		80	45 - 115
Endosulfan I	13.3	11.90		ug/Kg		89	45 - 115
Dieldrin	13.4	10.78		ug/Kg		81	48 - 117
Dieldrin	13.4	11.99		ug/Kg		90	48 - 117
4,4'-DDE	13.4	10.93		ug/Kg		81	40 - 136
4,4'-DDE	13.4	12.23		ug/Kg		91	40 - 136
Endrin	13.4	13.94		ug/Kg		104	58 - 148
Endrin	13.4	15.00		ug/Kg		112	58 - 148
Endosulfan II	13.3	11.00		ug/Kg		82	54 - 120
Endosulfan II	13.3	12.03		ug/Kg		90	54 - 120
4,4'-DDD	13.4	11.07		ug/Kg		83	55 - 133
4,4'-DDD	13.4	12.54		ug/Kg		94	55 - 133
Endosulfan sulfate	13.4	11.19		ug/Kg		83	55 - 119
Endosulfan sulfate	13.4	12.00		ug/Kg		89	55 - 119
4,4'-DDT	13.5	10.85		ug/Kg		81	43 - 140
4,4'-DDT	13.5	12.46		ug/Kg		93	43 - 140
Methoxychlor	13.3	12.37		ug/Kg		93	45 - 156
Methoxychlor	13.3	12.96		ug/Kg		97	45 - 156
Endrin ketone	13.4	9.956		ug/Kg		74	56 - 107
Endrin ketone	13.4	10.80		ug/Kg		81	56 - 107
Endrin aldehyde	13.4	9.979		ug/Kg		74	23 - 145
Endrin aldehyde	13.4	11.75		ug/Kg		88	23 - 145
cis-Chlordane	13.4	10.76		ug/Kg		80	44 - 111
cis-Chlordane	13.4	11.52		ug/Kg		86	44 - 111
trans-Chlordane	13.4	11.96		ug/Kg		89	50 - 109
trans-Chlordane	13.4	11.74		ug/Kg		88	50 - 109
Alachlor	13.4	11.12		ug/Kg		83	53 - 114
Alachlor	13.4	12.22		ug/Kg		91	53 - 114

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*67*		*30 - 150*
Tetrachloro-m-xylene	*77*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*79*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*84*		*30 - 150*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LCSD 620-16541/5-A
Matrix: Solid
Analysis Batch: 16708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16541

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			13.4	8.318		ug/Kg		62	27 - 108	14	30
alpha-BHC			13.4	9.198		ug/Kg		69	27 - 108	12	30
beta-BHC			13.3	9.411		ug/Kg		71	50 - 114	15	30
beta-BHC			13.3	10.98		ug/Kg		82	50 - 114	12	30
delta-BHC			13.4	7.887		ug/Kg		59	41 - 101	15	30
delta-BHC			13.4	8.729		ug/Kg		65	41 - 101	13	30
gamma-BHC (Lindane)			13.5	9.334		ug/Kg		69	40 - 110	13	30
gamma-BHC (Lindane)			13.5	10.03		ug/Kg		75	40 - 110	12	30
Heptachlor			13.4	8.878		ug/Kg		66	30 - 101	13	30
Heptachlor			13.4	9.604		ug/Kg		72	30 - 101	12	30
Aldrin			13.4	9.094		ug/Kg		68	21 - 113	13	30
Aldrin			13.4	10.10		ug/Kg		76	21 - 113	18	30
Heptachlor epoxide			13.3	9.241		ug/Kg		69	46 - 106	12	30
Heptachlor epoxide			13.3	10.16		ug/Kg		76	46 - 106	12	30
Endosulfan I			13.3	9.369		ug/Kg		70	45 - 115	13	30
Endosulfan I			13.3	10.64		ug/Kg		80	45 - 115	11	30
Dieldrin			13.4	9.466		ug/Kg		71	48 - 117	13	30
Dieldrin			13.4	10.74		ug/Kg		80	48 - 117	11	30
4,4'-DDE			13.4	9.627		ug/Kg		72	40 - 136	13	30
4,4'-DDE			13.4	11.00		ug/Kg		82	40 - 136	11	30
Endrin			13.4	12.11		ug/Kg		90	58 - 148	14	30
Endrin			13.4	13.32		ug/Kg		99	58 - 148	12	30
Endosulfan II			13.3	9.690		ug/Kg		73	54 - 120	13	30
Endosulfan II			13.3	10.88		ug/Kg		82	54 - 120	10	30
4,4'-DDD			13.4	9.776		ug/Kg		73	55 - 133	12	30
4,4'-DDD			13.4	11.25		ug/Kg		84	55 - 133	11	30
Endosulfan sulfate			13.4	9.788		ug/Kg		73	55 - 119	13	30
Endosulfan sulfate			13.4	10.94		ug/Kg		81	55 - 119	9	30
4,4'-DDT			13.5	9.607		ug/Kg		71	43 - 140	12	30
4,4'-DDT			13.5	11.29		ug/Kg		84	43 - 140	10	30
Methoxychlor			13.3	10.81		ug/Kg		81	45 - 156	13	30
Methoxychlor			13.3	11.60		ug/Kg		87	45 - 156	11	30
Endrin ketone			13.4	8.780		ug/Kg		66	56 - 107	13	30
Endrin ketone			13.4	9.916		ug/Kg		74	56 - 107	9	30
Endrin aldehyde			13.4	9.167		ug/Kg		68	23 - 145	8	30
Endrin aldehyde			13.4	10.75		ug/Kg		80	23 - 145	9	30
cis-Chlordane			13.4	9.527		ug/Kg		71	44 - 111	12	30
cis-Chlordane			13.4	10.35		ug/Kg		77	44 - 111	11	30
trans-Chlordane			13.4	9.532		ug/Kg		71	50 - 109	23	30
trans-Chlordane			13.4	10.53		ug/Kg		79	50 - 109	11	30
Alachlor			13.4	9.892		ug/Kg		74	53 - 114	12	30
Alachlor			13.4	9.367		ug/Kg		70	53 - 114	26	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*59*		*30 - 150*
Tetrachloro-m-xylene	*71*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*71*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*78*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-16541/1-A
Matrix: Solid
Analysis Batch: 16570

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16541

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1
PCB-1221	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1
PCB-1232	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1
PCB-1242	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1
PCB-1248	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1
PCB-1254	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1
PCB-1260	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1
PCB-1262	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1
PCB-1268	ND		20.0		ug/Kg		10/20/22 15:07	10/21/22 16:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*30 - 150*	*10/20/22 15:07*	*10/21/22 16:26*	*1*
Tetrachloro-m-xylene	*61*		*30 - 150*	*10/20/22 15:07*	*10/21/22 16:26*	*1*
DCB Decachlorobiphenyl (Surr)	*80*		*30 - 150*	*10/20/22 15:07*	*10/21/22 16:26*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*30 - 150*	*10/20/22 15:07*	*10/21/22 16:26*	*1*

Lab Sample ID: LCS 620-16541/2-A
Matrix: Solid
Analysis Batch: 16570

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16541

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			167	118.3		ug/Kg		71	61 - 112		
PCB-1016			167	117.6		ug/Kg		71	61 - 112		
PCB-1260			167	126.9		ug/Kg		76	63 - 105		
PCB-1260			167	133.1		ug/Kg		80	63 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*30 - 150*
Tetrachloro-m-xylene	*68*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*78*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*95*		*30 - 150*

Lab Sample ID: LCSD 620-16541/3-A
Matrix: Solid
Analysis Batch: 16570

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16541

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			167	118.5		ug/Kg		71	61 - 112	0	30
PCB-1016			167	116.7		ug/Kg		70	61 - 112	1	30
PCB-1260			167	132.3		ug/Kg		79	63 - 105	4	30
PCB-1260			167	149.2		ug/Kg		89	63 - 105	11	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*72*		*30 - 150*
Tetrachloro-m-xylene	*69*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*88*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*99*		*30 - 150*

Method: 8100 - Polynuclear Aromatic Hydrocarbons (PAHs) (GC)

Lab Sample ID: MB 620-16567/1-A
Matrix: Solid
Analysis Batch: 16592

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16567

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
TEPH (C9-C36)	ND		13.3		mg/Kg		10/21/22 09:18	10/24/22 09:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane (Surr)	*63*		*40 - 140*	*10/21/22 09:18*	*10/24/22 09:33*	*1*
o-Terphenyl (Surr)	*47*		*40 - 140*	*10/21/22 09:18*	*10/24/22 09:33*	*1*

Lab Sample ID: LCS 620-16567/2-A
Matrix: Solid
Analysis Batch: 16592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16567

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
TEPH (C9-C36)			333	197.5		mg/Kg		59	22 - 93		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*64*		*40 - 140*
o-Terphenyl (Surr)	*84*		*40 - 140*

Lab Sample ID: LCSD 620-16567/3-A
Matrix: Solid
Analysis Batch: 16592

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16567

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TEPH (C9-C36)			333	216.2		mg/Kg		65	22 - 93	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane (Surr)	*74*		*40 - 140*
o-Terphenyl (Surr)	*71*		*40 - 140*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 460-872823/1-A
Matrix: Solid
Analysis Batch: 873100

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 872823

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Arsenic	ND		1.50		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Barium	ND		20.0		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Beryllium	ND		0.200		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Cadmium	ND		0.400		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Chromium	ND		1.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Copper	ND		2.50		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Lead	ND		1.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Manganese	ND		1.50		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Nickel	ND		4.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Selenium	ND		2.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Silver	ND		1.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Thallium	ND		2.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1

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

Lab Sample ID: MB 460-872823/1-A
Matrix: Solid
Analysis Batch: 873100

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 872823

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		5.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1
Zinc	ND		3.00		mg/Kg		10/19/22 09:45	10/20/22 15:50	1

Lab Sample ID: LCSSRM 460-872823/2-A
Matrix: Solid
Analysis Batch: 873100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 872823

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			111	76.10		mg/Kg		68.6	0.7 - 205.4		
Arsenic			112	108.9		mg/Kg		97.3	82.0 - 118.8		
Barium			154	152.4		mg/Kg		99.0	81.8 - 118.2		
Beryllium			121	120.0		mg/Kg		99.2	82.2 - 118.2		
Cadmium			196	196.5		mg/Kg		100.2	82.1 - 118.4		
Chromium			103	102.0		mg/Kg		99.0	80.8 - 118.4		
Copper			70.4	67.50		mg/Kg		95.9	83.4 - 116.6		
Lead			73.2	74.94		mg/Kg		102.4	82.8 - 117.3		
Manganese			373	362.2		mg/Kg		97.1	81.5 - 118.5		
Nickel			249	255.2		mg/Kg		102.5	81.9 - 118.1		
Selenium			215	204.8		mg/Kg		95.3	78.1 - 121.9		
Silver			78.5	73.04		mg/Kg		93.0	78.9 - 121.1		
Thallium			67.7	71.48		mg/Kg		105.6	80.1 - 120.1		
Vanadium			177	171.5		mg/Kg		96.9	78.0 - 122.0		
Zinc			360	345.6		mg/Kg		96.0	79.7 - 120.3		

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 620-16392/1-A
Matrix: Solid
Analysis Batch: 16449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16392

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0494		mg/Kg		10/17/22 11:36	10/18/22 15:57	1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 620-16392/2-A ^20
Matrix: Solid
Analysis Batch: 16449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16392

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			3.31	3.146		mg/Kg		95.1	86.1 - 139.9		

QC Association Summary

Client: AECOM
Job ID: 620-7659-1
Project/Site: I295/Rt 37 - Johnston, RI

GC/MS VOA

Pre Prep Batch: 16346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	Frozen Preserve	
620-7659-2	SB06 (0-2)	Total/NA	Solid	Frozen Preserve	

Prep Batch: 16425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	5035	16346
620-7659-2	SB06 (0-2)	Total/NA	Solid	5035	16346
MB 620-16425/3-A	Method Blank	Total/NA	Solid	5035	
LCS 620-16425/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 620-16425/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 16427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	8260C	16425
620-7659-2	SB06 (0-2)	Total/NA	Solid	8260C	16425
MB 620-16425/3-A	Method Blank	Total/NA	Solid	8260C	16425
LCS 620-16425/1-A	Lab Control Sample	Total/NA	Solid	8260C	16425
LCSD 620-16425/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	16425

GC/MS Semi VOA

Prep Batch: 16552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	3546	
620-7659-2	SB06 (0-2)	Total/NA	Solid	3546	
MB 620-16552/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-16552/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-16552/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 16557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-2	SB06 (0-2)	Total/NA	Solid	8270D	16552
MB 620-16552/1-A	Method Blank	Total/NA	Solid	8270D	16552
LCS 620-16552/2-A	Lab Control Sample	Total/NA	Solid	8270D	16552
LCSD 620-16552/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	16552

Analysis Batch: 16654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	8270D	16552

GC Semi VOA

Prep Batch: 16541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	3546	
620-7659-2	SB06 (0-2)	Total/NA	Solid	3546	
MB 620-16541/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-16541/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 620-16541/4-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-16541/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 16541 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 620-16541/5-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Prep Batch: 16567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	3546	
620-7659-2	SB06 (0-2)	Total/NA	Solid	3546	
MB 620-16567/1-A	Method Blank	Total/NA	Solid	3546	
LCS 620-16567/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 620-16567/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 16570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	8082A	16541
620-7659-2	SB06 (0-2)	Total/NA	Solid	8082A	16541
MB 620-16541/1-A	Method Blank	Total/NA	Solid	8082A	16541
LCS 620-16541/2-A	Lab Control Sample	Total/NA	Solid	8082A	16541
LCSD 620-16541/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	16541

Analysis Batch: 16592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	8100	16567
620-7659-2	SB06 (0-2)	Total/NA	Solid	8100	16567
MB 620-16567/1-A	Method Blank	Total/NA	Solid	8100	16567
LCS 620-16567/2-A	Lab Control Sample	Total/NA	Solid	8100	16567
LCSD 620-16567/3-A	Lab Control Sample Dup	Total/NA	Solid	8100	16567

Analysis Batch: 16708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	8081B	16541
620-7659-2	SB06 (0-2)	Total/NA	Solid	8081B	16541
620-7659-2	SB06 (0-2)	Total/NA	Solid	8081B	16541
MB 620-16541/1-A	Method Blank	Total/NA	Solid	8081B	16541
LCS 620-16541/4-A	Lab Control Sample	Total/NA	Solid	8081B	16541
LCSD 620-16541/5-A	Lab Control Sample Dup	Total/NA	Solid	8081B	16541

Metals

Prep Batch: 16392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	7471B	
620-7659-2	SB06 (0-2)	Total/NA	Solid	7471B	
MB 620-16392/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 620-16392/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 16449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	7471B	16392
620-7659-2	SB06 (0-2)	Total/NA	Solid	7471B	16392
MB 620-16392/1-A	Method Blank	Total/NA	Solid	7471B	16392
LCSSRM 620-16392/2-A ^20	Lab Control Sample	Total/NA	Solid	7471B	16392

QC Association Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7659-1

Metals

Prep Batch: 872823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	3050B	
620-7659-2	SB06 (0-2)	Total/NA	Solid	3050B	
MB 460-872823/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-872823/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 873100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	6010D	872823
620-7659-2	SB06 (0-2)	Total/NA	Solid	6010D	872823
MB 460-872823/1-A	Method Blank	Total/NA	Solid	6010D	872823
LCSSRM 460-872823/2-A	Lab Control Sample	Total/NA	Solid	6010D	872823

General Chemistry

Analysis Batch: 16454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-7659-1	SB09 (0-2)	Total/NA	Solid	Moisture	
620-7659-2	SB06 (0-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM
Job ID: 620-7659-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: SB09 (0-2)
Lab Sample ID: 620-7659-1
Date Collected: 10/13/22 13:00
Matrix: Solid
Date Received: 10/14/22 15:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	16454	ZLH	EET NE	10/19/22 09:45

Client Sample ID: SB09 (0-2)
Lab Sample ID: 620-7659-1
Date Collected: 10/13/22 13:00
Matrix: Solid
Date Received: 10/14/22 15:59
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			16346	KFS	EET NE	10/14/22 19:25
Total/NA	Prep	5035			16425	CLR	EET NE	10/18/22 09:34
Total/NA	Analysis	8260C		1	16427	CLR	EET NE	10/18/22 19:55
Total/NA	Prep	3546			16552	BMS	EET NE	10/21/22 08:36
Total/NA	Analysis	8270D		1	16654	JS	EET NE	10/25/22 16:37
Total/NA	Prep	3546			16541	BMS	EET NE	10/20/22 15:07
Total/NA	Analysis	8081B		1	16708	SFL	EET NE	10/26/22 16:33
Total/NA	Prep	3546			16541	BMS	EET NE	10/20/22 15:07
Total/NA	Analysis	8082A		1	16570	SFL	EET NE	10/21/22 18:09
Total/NA	Prep	3546			16567	BMS	EET NE	10/21/22 09:18
Total/NA	Analysis	8100		1	16592	JS	EET NE	10/24/22 12:55
Total/NA	Prep	3050B			872823	FBT	EET EDI	10/19/22 09:45
Total/NA	Analysis	6010D		2	873100	CDC	EET EDI	10/20/22 19:23
Total/NA	Prep	7471B			16392	DWC	EET NE	10/17/22 11:40
Total/NA	Analysis	7471B		1	16449	CAJ	EET NE	10/18/22 16:28

Client Sample ID: SB06 (0-2)
Lab Sample ID: 620-7659-2
Date Collected: 10/13/22 09:45
Matrix: Solid
Date Received: 10/14/22 15:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	16454	ZLH	EET NE	10/19/22 09:45

Client Sample ID: SB06 (0-2)
Lab Sample ID: 620-7659-2
Date Collected: 10/13/22 09:45
Matrix: Solid
Date Received: 10/14/22 15:59
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Pre Prep	Frozen Preserve			16346	KFS	EET NE	10/14/22 19:25
Total/NA	Prep	5035			16425	CLR	EET NE	10/18/22 09:34
Total/NA	Analysis	8260C		1	16427	CLR	EET NE	10/18/22 20:20
Total/NA	Prep	3546			16552	BMS	EET NE	10/21/22 08:36
Total/NA	Analysis	8270D		1	16557	JS	EET NE	10/21/22 19:47
Total/NA	Prep	3546			16541	BMS	EET NE	10/20/22 15:07
Total/NA	Analysis	8081B		1	16708	SFL	EET NE	10/26/22 16:49
Total/NA	Prep	3546			16541	BMS	EET NE	10/20/22 15:07
Total/NA	Analysis	8081B		10	16708	SFL	EET NE	10/26/22 17:21

Lab Chronicle

Client: AECOM
Job ID: 620-7659-1
Project/Site: I295/Rt 37 - Johnston, RI

Client Sample ID: SB06 (0-2)
Date Collected: 10/13/22 09:45
Date Received: 10/14/22 15:59

Lab Sample ID: 620-7659-2
Matrix: Solid
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			16541	BMS	EET NE	10/20/22 15:07
Total/NA	Analysis	8082A		1	16570	SFL	EET NE	10/21/22 18:26
Total/NA	Prep	3546			16567	BMS	EET NE	10/21/22 09:18
Total/NA	Analysis	8100		1	16592	JS	EET NE	10/24/22 11:39
Total/NA	Prep	3050B			872823	FBT	EET EDI	10/19/22 09:45
Total/NA	Analysis	6010D		2	873100	CDC	EET EDI	10/20/22 19:27
Total/NA	Prep	7471B			16392	DWC	EET NE	10/17/22 11:40
Total/NA	Analysis	7471B		1	16449	CAJ	EET NE	10/18/22 16:26

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-7659-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins New England

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

Authority	Program	Identification Number	Expiration Date
Rhode Island	State	LAI00368	12-30-22

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
7471B	7471B	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Alachlor
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	cis-Chlordane
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	Endrin ketone
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor
8081B	3546	Solid	Toxaphene
8081B	3546	Solid	trans-Chlordane
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260
8082A	3546	Solid	PCB-1262
8082A	3546	Solid	PCB-1268
8100	3546	Solid	TEPH (C9-C36)
8260C	5035	Solid	1,1,1,2-Tetrachloroethane
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1,2-Trichlorotrifluoroethane (Freon 113)
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,1-Dichloropropene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,3-Trichloropropane
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trimethylbenzene

Laboratory: Eurofins New England (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
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane (EDB)
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3,5-Trichlorobenzene
8260C	5035	Solid	1,3,5-Trimethylbenzene
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,3-Dichloropropane
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2,2-Dichloropropane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Chlorotoluene
8260C	5035	Solid	2-Hexanone (MBK)
8260C	5035	Solid	4-Chlorotoluene
8260C	5035	Solid	4-Isopropyltoluene
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromobenzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dibromomethane
8260C	5035	Solid	Dichlorodifluoromethane (Freon 12)
8260C	5035	Solid	di-Isopropyl ether
8260C	5035	Solid	Ethanol
8260C	5035	Solid	Ethyl ether
8260C	5035	Solid	Ethyl tert-butyl ether
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Hexachlorobutadiene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	m,p-Xylene
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylene Chloride

Laboratory: Eurofins New England (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
8260C	5035	Solid	Naphthalene
8260C	5035	Solid	n-Butylbenzene
8260C	5035	Solid	N-Propylbenzene
8260C	5035	Solid	o-Xylene
8260C	5035	Solid	sec-Butylbenzene
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tert-amyl methyl ether
8260C	5035	Solid	tert-Butanol
8260C	5035	Solid	tert-Butylbenzene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Tetrahydrofuran
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	trans-1,4-Dichloro-2-butene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane (Freon 11)
8260C	5035	Solid	Vinyl chloride
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Pyrene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	11-10-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-23

Accreditation/Certification Summary

Client: AECOM
Job ID: 620-7659-1
Project/Site: I295/Rt 37 - Johnston, RI

Laboratory: Eurofins Edison (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-23
Pennsylvania	NELAP	68-00522	02-28-23
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: AECOM
Job ID: 620-7659-1
Project/Site: I295/Rt 37 - Johnston, RI

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET NE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET NE
8081B	Organochlorine Pesticides (GC)	SW846	EET NE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET NE
8100	Polynuclear Aromatic Hydrocarbons (PAHs) (GC)	SW846	EET NE
6010D	Metals (ICP)	SW846	EET EDI
7471B	Mercury (CVAA)	SW846	EET NE
Moisture	Percent Moisture	EPA	EET NE
3050B	Preparation, Metals	SW846	EET EDI
3546	Microwave Extraction	SW846	EET NE
5035	Closed System Purge and Trap	SW846	EET NE
7471B	Preparation, Mercury	SW846	EET NE
Frozen Preserve	Freezing Samples	None	EET NE

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET NE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: AECOM
Project/Site: I295/Rt 37 - Johnston, RI

Job ID: 620-7659-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-7659-1	SB09 (0-2)	Solid	10/13/22 13:00	10/14/22 15:59
620-7659-2	SB06 (0-2)	Solid	10/13/22 09:45	10/14/22 15:59

1659

620-7659 Chain of Custody

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CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

☒ Standard TAT - 7 to 10 business days

☐ Rush TAT - Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Patrick Haskell (AECOM)
10 Orms Street, Suite 400
Providence, RI 02904

Telephone #: 401-854-2808
Project Mgr: Katie Scancarello (AECOM)

Invoice To AECOM

P O No. 144832 Quote #: _____

Project No: 60680132
Site Name: Cranston Cannon
Location: Cranston, RI State: RI
Sampler(s): Richard Munschauer

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass (8oz)	# of Clear Glass	# of Plastic	Analysis: VOCs	TPH	PAHs	PCBs	RI 16 metals	Pesticides	Check if chlorinated
01	SB09 (0-2)	10/13/22	945	G	SO	3	3			X	X	X	X	X	X	☐
02	SB06 (0-2)	10/13/22	1300	G	SO	3	3			X	X	X	X	X	X	☐
																☐
							10-13-22									☐
																☐
																☐
																☐
																☐
																☐
																☐
																☐

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Richard Munschauer		10/14/22	1457
		10/14/22	1559

Temp °C
Observed 2.2
Correction Factor +0.1
Corrected 2.3
IR ID # 6

☐ EDD format:
☒ E-mail to. Patrick.Haskell@aecom.com
Katie.Scancarello@aecom.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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10/26/2022

Sample Shipping Address. 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum

Rev Jan 2020

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-6762.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Rhode Island	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Rhode Island		Job #: 620-7659-1
Address: 777 New Durham Road, ,	Due Date Requested: 10/24/2022			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: I295/Rt 37 - Johnston, RI	Project #: 62001238			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	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)	6010D/3050B PP13+Ba,Mn,V	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB09 (0-2) (620-7659-1)	10/13/22	09:45 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	10/14/22 1531	EMS	FedEx		
2	Relinquished by:	Date/Time:	Company	Received by: Angela Carrillo	Date/Time: 10/15/22 10:30	Company EMSED
3	Relinquished by:	Date/Time:	Company	Received by: via Fedex	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.: ~~NOEC~~ Present	Cooler Temperature(s) °C and Other Remarks: 0.1/0.1 IRTM

Ver: 06/08/2021

10/26/2022

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-6773.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Rhode Island	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Rhode Island		Job #: 620-7659-1
Address: 777 New Durham Road, ,	Due Date Requested: 10/25/2022			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: I295/Rt 37 - Johnston, RI	Project #: 62001238			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	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)	6010D/3050B PP13+Ba,Mn,V	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB06 (0-2) (620-7659-2)	10/13/22	09:45 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/17/22 17:31	ENE	FEDEX		
2	Relinquished by:	Date/Time:	Company	Received by: Angela Casalla via FEDEX	Date/Time: 10/18/22 9:50	Company ENE
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: Present	Cooler Temperature(s) °C and Other Remarks: 0.4/0.4 IR#9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-7659-1

Login Number: 7659
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-7659-1

Login Number: 7659
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 10/17/22 12:04 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 620-7659-1

Login Number: 7659
List Number: 3
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 10/18/22 11:42 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	