Stantec Consulting Services Inc.
2211 Congress St Suite 380, Portland, ME 04102

May 13, 2022
File: 179450125

Attention: Ryan Barnes, P.E., CPESC
2360 Congress Street
Portland, ME 04102

Dear Ryan,

Reference: Limited Subsurface Investigation Summary
Saco Interchange Improvements Exits 35 & 36

Stantec Consulting Services Inc. (Stantec) is pleased to present this letter summarizing a limited subsurface investigation performed for the right of way (ROW) associated with the Maine Turnpike Authority (MTA) Saco Interchange project (the Project). This investigation was completed as a follow up to Stantec's Limited Environmental Review report dated March 26, 2021, in which several areas of concern (AOCs) were identified based on historical documentation. Subsequent follow-up discussions with MTA and further review of additional documentation narrowed the focus to three specific AOCs:

- A gasoline station at 337 North Street (Route 112), which has a history of soil and groundwater contamination;
- The original Exit 5 tollhouse, where historical plans depict the presence of one or more fuel tanks, but no information on soil and groundwater quality at the time of either tank removal was identified; and
- The former Saco Public Works facility at 351 North Street (Route 112) (now owned by Allegiance Trucks) which adjoins the Project area and historical releases from on-site from on-site underground storage tanks (USTs) may have impacted groundwater within the Project area.

Stantec developed a scope of work and sampling plan to determine whether special soil and/or groundwater handling may be required during construction in the above-mentioned areas as a result of impacts by oil and/or hazardous materials (OHM). This evaluation was anticipated to assist in the development of soil specifications and contractor bid documents.

SAMPLING SUMMARY

Stantec proposed to drill up to 12 soil borings using a direct-push drill rig at locations targeted to assess areas of potential impact within proposed construction areas. In addition to the standard Dig Safe System, Inc. (Dig Safe) and Ok-To-Dig (Maine Public Utilities Commission) Stantec contracted Ground Penetrating Radar Systems, LLC (GPRS) to perform utility locating and contacted the Saco Public Works Department to review locations of known town-owned utilities.

New England Boring Contractors, Inc. (NEBC) drilled 12 soil borings (SB-1 through SB-12; Figures 1, 2, and 3) between April 11 and April 13, 2022 using a Vactor and GeoProbe 6712DT drill rig. Borings were advanced to depths between 10 and 20 feet below grade based on the depth of proposed construction work. Refusal was encountered in two borings. The following table summarizes the boring identification and location, the proposed construction work and depth, and the planned and as-drilled depths.

Reference: **Limited Environmental Review**
Saco Interchange Improvements Exits 35 & 36

Boring ID	Location	Proposed Work	Proposed Work Depth (ft)	Planned/Actual Boring Depth (ft)
SB-1	Former tollhouse	Light post foundation*	7	15/13.5 refusal
SB-2		Light post foundation*	7	15/15
SB-3		Road base*	2	15/13 refusal
SB-4		Install catch basin	8	15/15
SB-5	Former Public Works	24" RCP installation	8-9	15/15
SB-6	Gas Station/ Lund Road intersection	Install catch basin	8	15/15
SB-7		Remove catch basin	6	10/10
SB-8		Drilled shaft	15	20/20
SB-9		Adjust catch basin	3	10/10
SB-10		Shoulder construction	3	10/10
SB-11		Install catch basin	7	10/10
SB-12		Install catch basin	7	10/10

* = SB-1, SB-2, and SB-3 were primarily drilled to assess a former fuel tank location
RCP = reinforced concrete pipe

NEBC used vacuum excavation and a hand auger to clear each location for utilities to the maximum depth possible up to eight feet below grade. Stantec collected undisturbed soil samples from the clearing activities using a hand auger and collected continuous soil samples from five-foot cores during drilling operations.

A Stantec scientist characterized soil at each location and evaluated for the presence of total organic vapors (TOVs) using visual, olfactory and headspace screening data using a photoionization detector (PID). PID screening values ranged from 0.0 to 1.7 parts per million by volume (ppmv) and are included in the attached boring logs. Stantec collected soil samples for laboratory analysis of volatile petroleum hydrocarbons (VPH) with target analytes and Extractable Petroleum Hydrocarbons (EPH) with target analytes based on the depth of proposed construction, the depth of the water table, measured TOVs, and visual/olfactory evidence of OHM. Up to two samples from each boring were planned: one biased towards the depth interval displaying the greatest field evidence of impacts, and one to define the vertical limits of impacts. The following table summarizes the proposed depth of construction, the depth of the water table, and the depth of the soil samples submitted for laboratory analysis of VPH and EPH.

Reference: **Limited Environmental Review**
Saco Interchange Improvements Exits 35 & 36

Boring ID	Proposed Work Depth	Water Table Depth	Sample Interval Depth
SB-1	7	3.5	2-3
SB-2	7	4-5	1-3, 5-7, 10-12
SB-3	2	7	5-7
SB-4	8	8	5-7
SB-5	8-9	8	5-7
SB-6	8	4.5	5-6
SB-7	6	4-5	5-6
SB-8	15	4-7*	5-6, 10-11
SB-9	3	4-7*	1-3, 5-7
SB-10	3	4-7*	1-3, 5-6
SB-11	7	4-7*	5-7
SB-12	7	4-7*	5-6

Depths in feet below ground surface
* = water table difficult to estimate due to low hydraulic conductivity in fine-grained material

Following completion of each boring, NEBC installed a one-inch diameter temporary groundwater monitoring well screen for the purpose of collecting groundwater samples. Stantec developed the wells by removing water until it ran clear in order to improve the hydraulic connection with the surrounding aquifer and to reduce turbidity in the collected samples. Stantec then immediately collected groundwater samples for laboratory analysis of VPH and EPH using a peristaltic pump and polyethylene tubing. The temporary wells were removed once the sampling was complete, and the borehole annulus was filled with drill cuttings and sand.

GENERAL SUBSURFACE CONDITIONS

Generally, Stantec observed a sand unit overlying a marine silt and clay unit (the Presumpscot Formation). In some cases, a lower till unit was observed below the Presumpscot Formation. Although not specifically identified, portions of the sand unit are likely to be anthropogenic fill. These observations from the subsurface assessment are corroborated by borings drilled in similar locations by Stantec in 2019 and 2020 for geotechnical evaluation.

The depth to the water table varies across the Project area. Groundwater depths measured in temporary wells ranged between 3.5 to 8 feet below grade during this investigation. Groundwater measurements represent conditions at the times and locations indicated, but will vary with season, precipitation, and influence from utilities. Depth to water is noted on the attached boring logs.

Reference: **Limited Environmental Review**
Saco Interchange Improvements Exits 35 & 36

RESULTS

Soil

Stantec submitted 17 soil samples to Alpha Analytical, Inc. for VPH and EPH analysis. Samples from SB-1 and SB-2 (location of the former tollhouse) and SB-7, SB-9, SB-10, and SB-11 (area of the gas station and intersection of Lund Road) contained detectable concentrations of petroleum hydrocarbons and/or target analytes including polycyclic aromatic hydrocarbons (PAHs). The complete soil analytical results are summarized in Table 1. The laboratory analytical data sheets are attached. The following table provides an overview of soil sampling results.

Boring ID	Proposed Work Depth	Sample Interval Depth	Analytical Detections	Notes/ Regulatory Implication	Location
SB-1	7	2-3	PAHs	No criteria exceedances	Tollhouse
SB-2	7	1-3	ND	No criteria exceedances	
		5-7	EPH, VPH	VPH and naphthalene exceed leaching to groundwater and beneficial reuse criteria	
		10-12	ND	No criteria exceedances	
SB-3	2	5-7	ND	No criteria exceedances	
SB-4	8	5-7	ND	No criteria exceedances	
SB-5	8-9	5-7	ND	No criteria exceedances	Public works
SB-6	8	5-6	ND	No criteria exceedances	Gas station/Lund Road
SB-7	6	5-6	PAHs	No criteria exceedances	
SB-8	15	5-6	ND	No criteria exceedances	
		10-11	ND	No criteria exceedances	
SB-9	3	1-3	EPH fractions/PAHs	No criteria exceedances	
		5-7	PAHs	No criteria exceedances	
SB-10	3	1-3	EPH fractions/PAHs	No criteria exceedances	
		5-6	PAHs	No criteria exceedances	
SB-11	7	5-7	PAHs	No criteria exceedances	
SB-12	7	5-6	ND	No criteria exceedances	

ND = analytes not detected
Depths in feet below surface grade
PAHs = polycyclic aromatic hydrocarbons (EPH targets)

Reference: **Limited Environmental Review**
Saco Interchange Improvements Exits 35 & 36

Groundwater

Stantec submitted 11 groundwater samples to Alpha for laboratory analysis of VPH and EPH. Stantec was unable to collect a groundwater sample from SB-10 due to low permeability and recharge. Wells SB-2, SB-5, SB-6, SB-8, and SB-9 contained detectable concentrations of petroleum. The table below summarizes detected concentrations, and the complete groundwater analytical results are summarized in Table 2 attached. Laboratory analytical data sheets are attached.

	SB-2	SB-5	SB-6	SB-8	SB-9
	Tollhouse	Public works	Gas station/Lund Road		
C9-C18 aliphatics	< 100	**106**	< 100	< 100	< 100
C19-C36 aliphatics	< 100	**303**	**154**	**1,140**	< 100
C11-C22 aromatics	**120**	< 100	< 100	< 100	**110**
Naphthalene	**0.672**	< 0.4	< 0.4	< 0.4	< 0.4
2-methylnaphthalene	**2.11**	< 0.4	< 0.4	< 0.4	< 0.4
C5-C8 aliphatics	< 50	< 50	< 50	< 50	**232**
C9-C12 aliphatics	< 50	< 50	< 50	< 50	**84.5**
C9-C10 aromatics	< 50	< 50	< 50	< 50	**185**
Methyl tert butyl ether	< 3	< 3	< 3	< 3	**23.4**

Results in ug/L
Blue/bold = analyte detected
< 100 = result is less than the laboratory reporting limit of 100 ug/L

DATA USABILITY

A data usability evaluation takes into account field quality control measures and laboratory quality control measures. Stantec collected trip blanks, but the samples were not listed on the chain of custody and the laboratory therefore did not analyze them (see below). No duplicate samples were collected. According to Alpha, "the samples were received in accordance with the chain of custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted" below.

Stantec also reviewed the data quality narrative accompanying the laboratory reports, which included the following non conformances:

- L2218995-06: The surrogate recovery was outside the acceptance criteria for chloro-octadecane (23%); however, re-extraction achieved a similar result: chloro-octadecane (33%). The results of both extractions are reported; however, all associated compounds are considered to have a potential bias.
- L2219199-09 and -10: A sample identified as "TRIP BLANKS" was received, but not listed on the Chain of Custody. This sample was not analyzed.
- L2218759-06: The sample was received above the appropriate pH for the EPH with MS Targets analysis. The laboratory added additional HCl to a pH <2.
- L2218759-10 (VPH): The pH of the sample was greater than two.

Reference: **Limited Environmental Review**
Saco Interchange Improvements Exits 35 & 36

All data are of known and acceptable quality as qualified, based on EPA and laboratory control limits and the data quality objectives of the project. These data are considered acceptable for their intended use.

DISCUSSION

Soil

As noted above, no analytes were detected above laboratory reporting limits in soil samples collected from borings SB-3, SB-4, SB-5, SB-6, SB-8, and SB-12. Furthermore, no VPH or EPH fractions were detected in samples collected from borings SB-1, SB-7, or SB-11; however, samples collected from these borings contained low levels of PAHs consistent with background concentrations for urban developed areas (AMEC Environment & Incrastructure, Inc., 2012).

Within the former Exit 5 tollhouse area, concentrations of EPH and VPH fractions were detected in the soil sample collected from a depth of five to seven feet below grade at SB-2 indicating the presence of petroleum contamination. Although the detected concentrations were below commercial and construction/excavation worker Remedial Action Guidelines (RAGs), the concentrations of C9-C10 aromatics and naphthalene exceeded beneficial use criteria (Maine DEP Solid Waste Management Rules: Chapter 418 Beneficial Use of Solid Wastes, 2018).

Within the area of the gas station/Lund Road intersection, EPH fractions were detected in samples collected from a depth of one to three feet below grade at SB-9 and SB-10 indicating the presence of petroleum contamination. The detected concentrations were below commercial and construction/excavation worker RAGs and beneficial reuse criteria.

Groundwater

Groundwater samples collected from SB-1, SB-3, SB-4, SB-7, SB-11, and SB-12 did not contain concentrations of analytes above laboratory reporting limits.

Within the former Exit 5 tollhouse location, an area of limited petroleum contamination was observed within the area of SB-2 where EPH fractions, naphthalene, and 2-methylnaphthalene were observed. Detected concentrations did not exceed RAGs or Maximum Exposure Guidelines (MEGs) (Table 2).

Within the area of the former Saco Public Works facility, groundwater at SB-5 contained detectable concentrations of EPH fractions. Detected concentrations did not exceed RAGs or MEGs (Table 2).

Within the area of the gas station/Lund Road intersection, groundwater samples collected from SB-6, SB-8, and SB-9 contained detectable concentrations of EPH fractions, VPH fractions, and/or methyl tert butyl ether (MTBE). Detected concentrations did not exceed construction worker RAGs or MEGs (Table 2).

Stantec notes that it is possible that local soil and groundwater conditions will vary along with contaminant concentrations, and other contaminants at concentrations greater than applicable criteria may be encountered at locations within the Project area.

SOIL MANAGEMENT

As described above, the assessment identified the presence of soil contamination at locations within the project limits. Soil concentrations in the sampled locations did not exceed RAGs, which suggests that it may be appropriate to return excavated soil to trenches from which it is excavated. However, as noted above, local variability in contaminant concentrations may exist. Due to the observed presence of contamination, an

Environmental Media Management Plan (EMPP) should be prepared in advance of construction activities. We anticipate that the EMPP will outline the procedures to be taken by the contractor to ensure the appropriate management of impacted soil and groundwater during site disturbance activities. Specifically, the plan, which should be prepared by an Environmental Professional, should outline procedures to be undertaken in areas of potential contamination including:

- Procedure for screening, documenting, sampling, and reporting, if necessary, the presence of impacted soil;
- Practices for minimizing tracking of impacted soil or producing impacted dust;
- Practices and procedures for stockpiling impacted soil;
- Characterizing stockpiled soil;
- Options for soil disposal or reuse and selecting a disposal facility; and
- Procedures for loading and transporting impacted soil.

Stantec notes that the contractor should consider the time required to characterize soil, secure acceptance at a disposal facility, and prepare shipping documents. Impacted soil should be reused to the extent feasible in the immediate area from which it was removed.

GROUNDWATER MANAGEMENT

As described above, low-level groundwater contamination was observed in the area of the former Exit 5 tollhouse, in the area of the former Saco Public Works facility, and in the area of the gas station/Lund Road intersection. Concentrations of petroleum in the sampled areas does not exceed applicable MEGs or RAGs. However, as noted above, variability in contaminant concentrations may exist such that exceedances may be present within the construction area. Due to the observed presence of contamination, an EMPP outlining the procedures to be taken by the contractor to ensure the appropriate management of impacted soil and groundwater during site-disturbance activities should be prepared in advance of construction activities. We anticipate that the EMPP will specify procedures for handling potentially contaminated groundwater including containerization, sampling, discharge, and/or disposal. Stantec notes that the contractor should consider the time that may be required to secure any permits required for selected discharge and/or disposal alternatives.

CONCLUSIONS

Relatively low-level concentrations of petroleum were identified in soil at two locations:

- the former Exit 5 tollhouse area in the vicinity of a mapped heating oil tank
- the vicinity of the gasoline station at the intersection of Lund Road

Similarly, relatively low concentrations of petroleum were identified in groundwater at all three AOCs.

RECOMMENDATIONS

Given observations of petroleum contamination at each of the three AOCs, Stantec recommends development of an EMMP in advance of site-disturbance activities.

Soil encountered during the project may differ from the soil represented by the chemical testing reported above. The contractor should assume responsibility for fully characterizing excess soil for off-site disposal or reuse purposes.

Reference: **Limited Environmental Review**
Saco Interchange Improvements Exits 35 & 36

Stantec notes that although the Limited Environmental Review report dated March 26, 2021 did not indicate the presence of suspect impacts outside of the investigated areas, if there are any visual or olfactory indications that contamination is present during construction, work should stop and MTA should be notified

Please do not hesitate to contact us with any questions.

Regards,

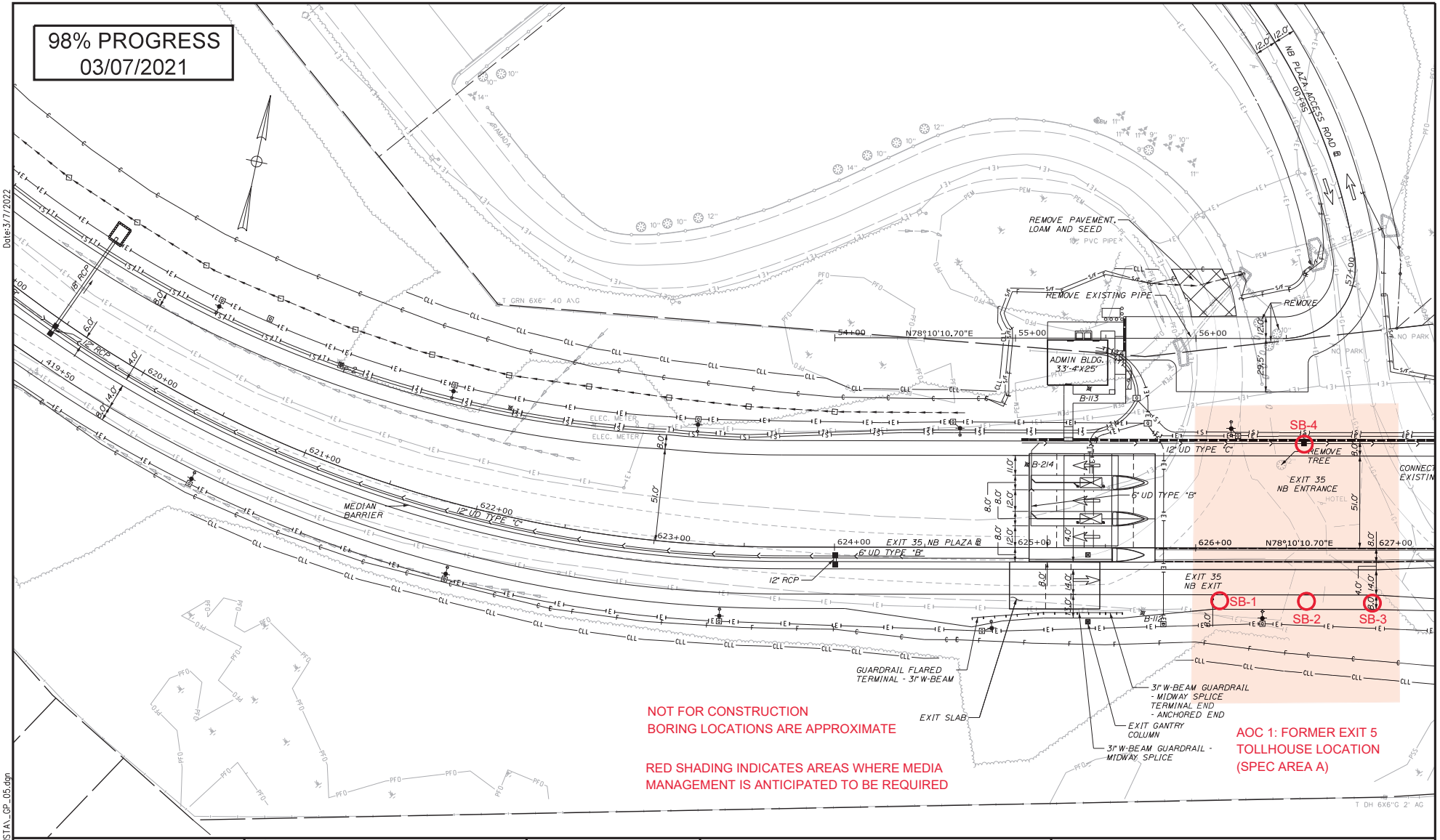
Stantec Consulting Services Inc.

Nathan Gardner
Project Manager
Phone: 774 353 7174
nathan.gardner@stantec.com

Attachment: Figures 1, 2, 3
Table 1: EPH and VPH in Soil
Table 2: EPH and VPH in Groundwater
Boring Logs
Laboratory Analytical Data Sheets

FIGURES

98% PROGRESS
03/07/2021



NOT FOR CONSTRUCTION
BORING LOCATIONS ARE APPROXIMATE

RED SHADING INDICATES AREAS WHERE MEDIA MANAGEMENT IS ANTICIPATED TO BE REQUIRED

AOC 1: FORMER EXIT 5 TOLLHOUSE LOCATION (SPEC AREA A)

Date:3/7/2022

Filename: ...\00\HIGHWAY\MSTA_GP_05.dgn

Scale: 25 0 25 50
Scale of Feet

No.	Revision	By	Date

Designed by: Stantec

CONSULTANT PROJECT MANAGER: LAUREN MEEK, P.E.

	By	Date		By	Date
Designed	PLP	10\21	Checked	LEM	10\21
Drawn	THG	10\21	In Charge of	LEM	10\21

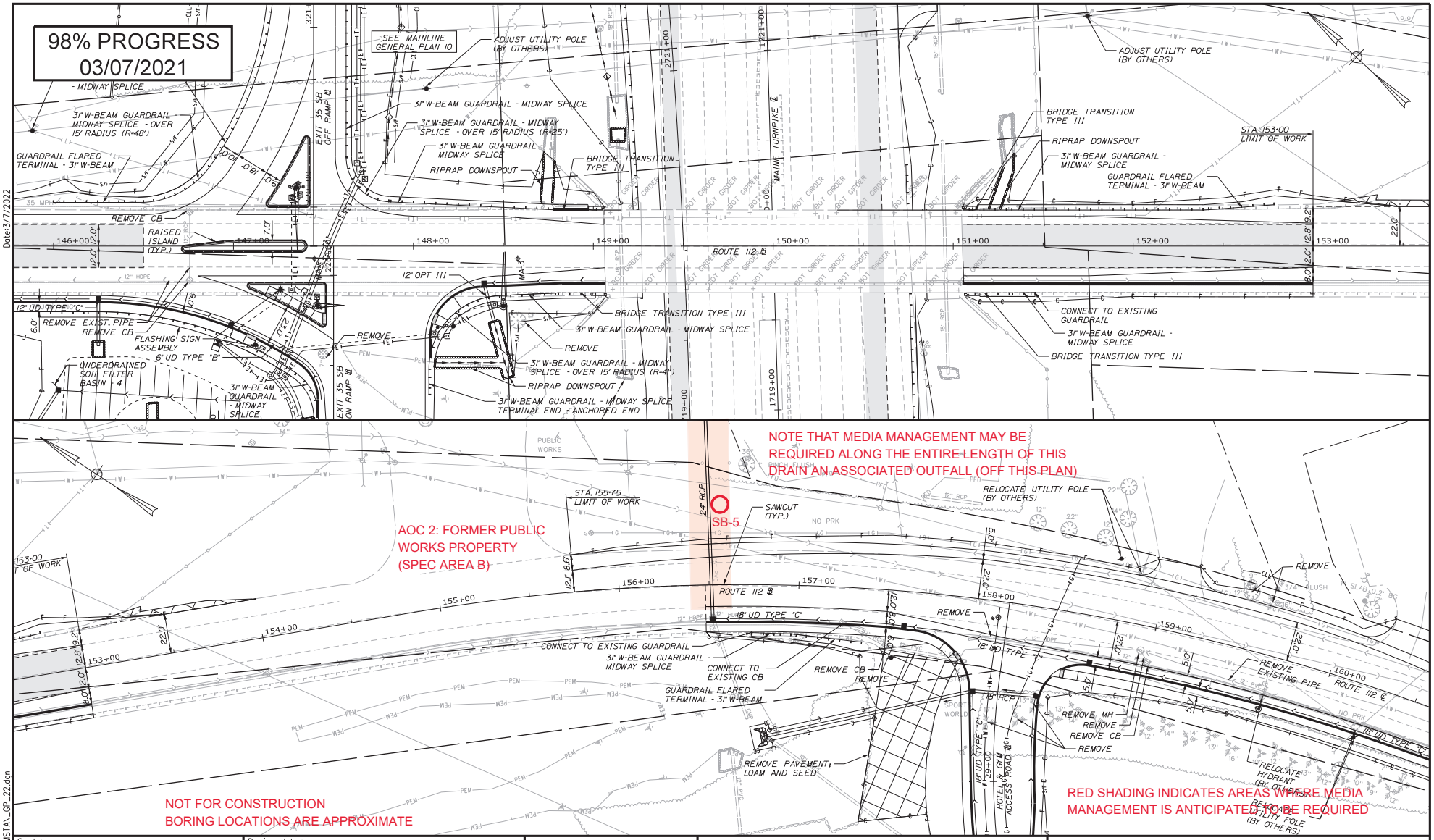
STANTEC CONSULTING SERVICES INC.
2211 CONGRESS STREET SUITE 380
PORTLAND, ME 04102
TEL (207) 887-3448
FAX (207) 883-3376

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH NORWOOD, IV, PE, PTOE

FIGURE 1



Date:3/7/2022

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Scale: 25 0 25 50
Scale of Feet

No.	Revision	By	Date

Designed by: Stantec

CONSULTANT PROJECT MANAGER: LAUREN MEEK, P.E.

	By	Date		By	Date
Designed	PLP	10\21	Checked	LEM	10\21
Drawn	THG	10\21	In Charge of	LEM	10\21

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MAINE TURNPIKE

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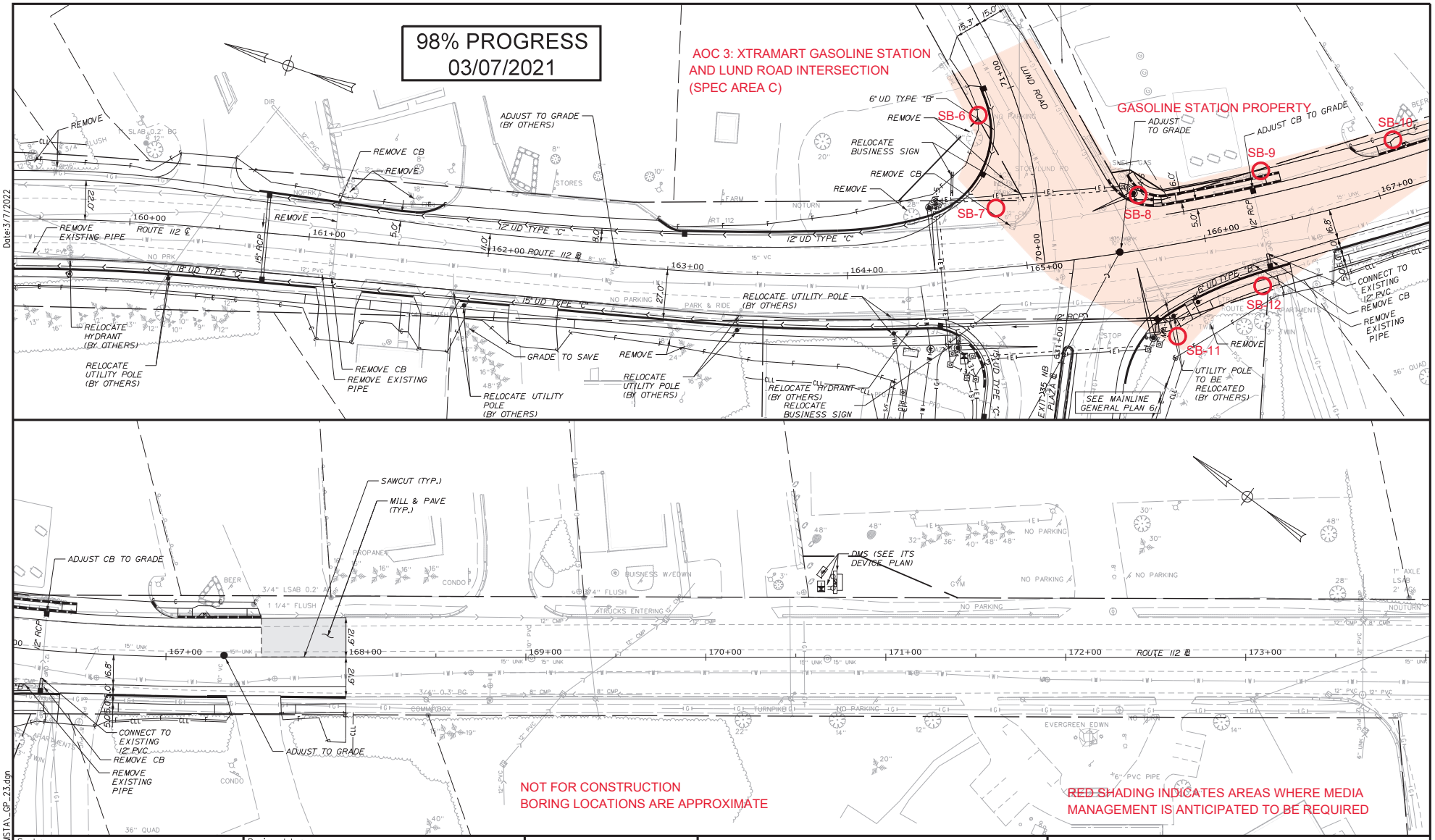
FIGURE 2



Date:3/7/2022

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Scale: 25 0 25 50
Scale of Feet

No.	Revision	By	Date

Designed by: Stantec

CONSULTANT PROJECT MANAGER: LAUREN MEEK, P.E.

	By	Date		By	Date
Designed	PLP	10\21	Checked	LEM	10\21
Drawn	THG	10\21	In Charge of	LEM	10\21

STANTEC CONSULTING SERVICES INC.
2211 CONGRESS STREET SUITE 380
PORTLAND, ME 04102
TEL (207) 887-3448
FAX (207) 883-3376

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH NORWOOD, IV, PE, PTOE

FIGURE 3

TABLES

Table 1: EPH and VPH in Soil
Saco Interchange Project
Saco, Maine
mg/kg

LOCATION	*Excavation/ Construction Worker RAGs (2021)*	*Leaching to Groundwater RAGs (2021)*	*Urban Developed Areas Background TV UPL (2012)*	*Urban Fill Background TV UPL (2012)*	*Beneficial Use ch 418 (2018)*	SB-1	SB-2	SB-2	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-8	SB-9	SB-9	SB-10	SB-10	SB-11	SB-12
DEPTH						(2'-3')	(2'-3')	(5'-7')	(10'-12')	(5'-7')	(5'-7')	(5'-7')	(5'-6')	(5'-6')	(5'-6')	(10'-11')	(1'-3')	(5'-7')	(1'-3')	(5'-6')	(5'-7')	(5'-6')
LOCATION (2)						Former Exit 5 Tollhouse area						Former Public Works					Gas station/Lund Road intersection					
SAMPLING DATE						4/13/2022	4/13/2022	4/13/2022	4/13/2022	4/12/2022	4/13/2022	4/12/2022	4/12/2022	4/12/2022	4/11/2022	4/11/2022	4/11/2022	4/11/2022	4/11/2022	4/11/2022	4/11/2022	4/11/2022
LAB SAMPLE ID						L2219199-01	L2219199-03	L2219199-04	L2219199-05	L2218995-01	L2219199-07	L2218995-03	L2218995-05	L2218995-07	L2218759-01	L2218759-02	L2218759-04	L2218759-05	L2218759-07	L2218759-08	L2218759-09	L2218759-11
Solids, Total %	*NA*	*NA*	*NA*	*NA*	*NA*	88	77.8	81.5	75.3	79.2	89.5	87.8	76.9	78.7	78.6	71.8	87.3	81.9	84.5	79	76.2	76.5
EPH w/Targets via GCMS-SIM																						
C9-C18 Aliphatics	*4,800*	*26,000*			*1,350*	< 7.22	< 8.05	**106**	< 8.54	< 8.39	< 7	< 7.23	< 8.36	< 8.39	< 8.06	< 9.04	< 7.27	< 7.87	< 7.48	< 8.07	< 8.23	< 8.32
C19-C36 Aliphatics	*100,000*				*10,000*	< 7.22	< 8.05	**39.3**	< 8.54	< 8.39	< 7	< 7.23	< 8.36	< 8.39	< 8.06	< 9.04	**7.76**	< 7.87	**16.4**	< 8.07	< 8.23	< 8.32
C11-C22 Aromatics, Adjusted	*74,000*	*340*			*230*	< 7.22	< 8.05	**83.3**	< 8.54	< 8.39	< 7	< 7.23	< 8.36	< 8.39	< 8.06	< 9.04	**12.4**	< 7.87	**11.6**	< 8.07	< 8.23	< 8.32
Naphthalene	*130*	*0.21*	*0.22*	*0.82*	*0.078*	**0.07**	< 0.032	**0.184**	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	< 0.029	< 0.032	< 0.03	< 0.032	< 0.033	< 0.033
2-Methylnaphthalene	*960*	*10*	*0.089*	*0.41*	*2.7*	< 0.029	< 0.032	**1.16**	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	< 0.029	< 0.032	< 0.03	< 0.032	< 0.033	< 0.033
Acenaphthylene	*48,000*	*290*	*0.39*	*1.35*	*74*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.109**	< 0.032	< 0.03	< 0.032	< 0.033	< 0.033
Acenaphthene	*48,000*	*300*	*0.20*	*3.53*	*78*	< 0.029	< 0.032	**0.084**	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	< 0.029	< 0.032	< 0.03	< 0.032	< 0.033	< 0.033
Fluorene	*96,000*	*300*	*0.29*	*4.37*	*75*	< 0.029	< 0.032	**0.212**	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.035**	< 0.032	< 0.03	< 0.032	< 0.033	< 0.033
Phenanthrene	*72,000*	*320*	*1.6*	*6.1*	*83*	**0.069**	< 0.032	**0.306**	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.31**	**0.048**	**0.17**	< 0.032	**0.137**	< 0.033
Anthracene	*100,000*	*3,200*	*0.40*	*6.69*	*825*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.074**	< 0.032	**0.033**	< 0.032	< 0.033	< 0.033
Fluoranthene	*24,000*	*4,900*	*3.2*	*10.5*	*2,790*	**0.032**	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	**0.037**	< 0.032	< 0.036	**0.928**	**0.128**	**0.474**	< 0.032	**0.249**	< 0.033
Pyrene	*72,000*	*720*	*2.8*	*9.5*	*2,090*	< 0.029	< 0.032	**0.051**	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	**0.034**	< 0.032	< 0.036	**0.889**	**0.118**	**0.408**	< 0.032	**0.219**	< 0.033
Benzo(a)anthracene	*1,700*	*5.8*	*1.6*	*26.8*	*13*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.463**	**0.064**	**0.225**	< 0.032	**0.103**	< 0.033
Chrysene	*100,000*	*5,000*	*2.2*	*6.4*	*1,340*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.569**	**0.081**	**0.259**	< 0.032	**0.128**	< 0.033
Benzo(b)fluoranthene	*1,700*	*170*	*1.9*	*6.8*	*13*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.727**	**0.114**	**0.376**	< 0.032	**0.166**	< 0.033
Benzo(k)fluoranthene	*17,000*	*1,600*	*0.76*	*12.44*	*134*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.288**	**0.04**	**0.15**	< 0.032	**0.068**	< 0.033
Benzo(a)pyrene	*9.9*	*16*	*1.7*	*5.2*	*1.3*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.564**	**0.082**	**0.268**	< 0.032	**0.128**	< 0.033
Indeno(1,2,3-cd)Pyrene	*1,700*	*540*	*0.74*	*3.32*	*13*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.256**	**0.087**	**0.148**	< 0.032	**0.062**	< 0.033
Dibenzo(a,h)anthracene	*170*	*53*	*0.28*	*4.52*	*1.3*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.048**	< 0.032	< 0.03	< 0.032	< 0.033	< 0.033
Benzo(ghi)perylene	*72,000*	*100,000*	*0.79*	*15.68*	*2,090*	< 0.029	< 0.032	< 0.032	< 0.034	< 0.034	< 0.028	< 0.029	< 0.033	< 0.034	< 0.032	< 0.036	**0.222**	**0.089**	**0.135**	**0.033**	**0.052**	< 0.033
Volatile Petroleum Hydrocarbons																						
C9-C10 Aromatics	*2,600*	*15*			*37.5*	< 6.76	< 7.38	**50.5**	< 7.65	< 8.58	< 5.82	< 6.23	< 7.44	< 7.61	< 9.48	< 13	< 6.94	< 6.57	< 7.51	< 7.32	< 8.06	< 7.96
C5-C8 Aliphatics, Adjusted	*430*	*92*			*700*	< 6.76	< 7.38	< 6.65	< 7.65	< 8.58	< 5.82	< 6.23	< 7.44	< 7.61	< 9.48	< 13	< 6.94	< 6.57	< 7.51	< 7.32	< 8.06	< 7.96
C9-C12 Aliphatics, Adjusted	*2,300*	*5,800*			*1,350*	< 6.76	< 7.38	**32.1**	< 7.65	< 8.58	< 5.82	< 6.23	< 7.44	< 7.61	< 9.48	< 13	< 6.94	< 6.57	< 7.51	< 7.32	< 8.06	< 7.96
Benzene	*240*	*0.13*			*0.029*	< 0.135	< 0.148	< 0.133	< 0.153	< 0.172	< 0.116	< 0.125	< 0.149	< 0.152	< 0.19	< 0.26	< 0.139	< 0.131	< 0.15	< 0.146	< 0.161	< 0.159
Toluene	*820*	*42*			*10*	< 0.135	< 0.148	< 0.133	< 0.153	< 0.172	< 0.116	< 0.125	< 0.149	< 0.152	< 0.19	< 0.26	< 0.139	< 0.131	< 0.15	< 0.146	< 0.161	< 0.159
Ethylbenzene	*470*	*0.92*			*0.22*	< 0.135	< 0.148	< 0.133	< 0.153	< 0.172	< 0.116	< 0.125	< 0.149	< 0.152	< 0.19	< 0.26	< 0.139	< 0.131	< 0.15	< 0.146	< 0.161	< 0.159
p/m-Xylene					*2.5*	< 0.135	< 0.148	< 0.133	< 0.153	< 0.172	< 0.116	< 0.125	< 0.149	< 0.152	< 0.19	< 0.26	< 0.139	< 0.131	< 0.15	< 0.146	< 0.161	< 0.159
o-Xylene						< 0.135	< 0.148	< 0.133	< 0.153	< 0.172	< 0.116	< 0.125	< 0.149	< 0.152	< 0.19	< 0.26	< 0.139	< 0.131	< 0.15	< 0.146	< 0.161	< 0.159
Methyl tert butyl ether	*8,200*	*1.8*			*0.079*	< 0.068	< 0.074	< 0.067	< 0.077	< 0.086	< 0.058	< 0.062	< 0.074	< 0.076	< 0.095	< 0.13	< 0.069	< 0.066	< 0.075	< 0.073	< 0.081	< 0.08
Naphthalene	*130*	*0.21*			*0.078*	< 0.271	< 0.295	**1.55**	< 0.306	< 0.343	< 0.233	< 0.249	< 0.298	< 0.304	< 0.379	< 0.521	< 0.278	< 0.263	< 0.3	< 0.293	< 0.322	< 0.318

< 7 = not detected at the laboratory reporting limit of 7 mg/kg
Blue/bold = detected
NA = not applicable
Red shading = excceds applicable criteria
Light green shading = laboratory reporting limit exceeds applicable criteria

Table 2: EPH and VPH in Groundwater
Saco Interchange Project
Saco, Maine
ug/L

LOCATION	*Construction Worker RAGs (2021)*	*MEGs for Drinking Water (2016)*	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6		SB-7	SB-8	SB-9	SB-11	SB-12
			Former Exit 5 Tollhouse area				Former Public Works	Gas station/Lund Road intersection						
SAMPLING DATE			4/13/2022	4/13/2022	4/12/2022	4/13/2022	4/12/2022	4/12/2022	4/12/2022	4/12/2022	4/11/2022	4/11/2022	4/11/2022	4/11/2022
LAB SAMPLE ID			L2219199-02	L2219199-06	L2218995-02	L2219199-08	L2218995-04	L2218995-06*	L2218995-06 R1*	L2218995-08	L2218759-03	L2218759-06	L2218759-10	L2218759-12
EPH w/Targets via GCMS-SIM														
C9-C18 Aliphatics	*3,900*	*700*	< 100	< 100	< 100	< 100	**106**	< 100	< 100	< 100	< 100	< 100	< 100	< 100
C19-C36 Aliphatics	*100,000*	*10,000*	< 100	< 100	< 100	< 100	**303**	**154**	**200**	< 100	**1,140**	< 100	< 100	< 100
C11-C22 Aromatics, Adjusted	*100,000*		< 100	**120**	< 100	< 100	< 100	< 100	< 100	< 100	< 100	**110**	< 100	< 100
Naphthalene	*19*	*10*	< 0.4	**0.672**	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
2-Methylnaphthalene	*1,500*	*30*	< 0.4	**2.11**	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Acenaphthylene	*71,000*		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Acenaphthene	*74,000*	*400*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Fluorene	*100,000*	*300*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Phenanthrene	*58,000*		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Anthracene	*100,000*	*2,000*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Fluoranthene	*100,000*	*300*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Pyrene	*36,000*	*200*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Benzo(a)anthracene	*470*	*0.5*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chrysene	*100,000*	*50*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Benzo(b)fluoranthene	*100,000*	*0.5*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Benzo(k)fluoranthene	*100,000*	*5*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Benzo(a)pyrene	*11,000*	*0.05*	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Indeno(1,2,3-cd)Pyrene	*100,000*	*0.5*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Dibenzo(a,h)anthracene	*26,000*	*0.05*	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Benzo(ghi)perylene	*100,000*		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Volatile Petroleum Hydrocarbons														
C9-C10 Aromatics	*2,700*	*200*	< 50	< 50	< 50	< 50	< 50	< 50	NT	< 50	< 50	**185**	< 50	< 50
C5-C8 Aliphatics, Adjusted	*960*		< 50	< 50	< 50	< 50	< 50	< 50	NT	< 50	< 50	**232**	< 50	< 50
C9-C12 Aliphatics, Adjusted	*3,700*		< 50	< 50	< 50	< 50	< 50	< 50	NT	< 50	< 50	**84.3**	< 50	< 50
Benzene	*350*	*4*	< 2	< 2	< 2	< 2	< 2	< 2	NT	< 2	< 2	< 2	< 2	< 2
Toluene	*24,000*	*600*	< 2	< 2	< 2	< 2	< 2	< 2	NT	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	*1,400*	*30*	< 2	< 2	< 2	< 2	< 2	< 2	NT	< 2	< 2	< 2	< 2	< 2
p/m-Xylene			< 2	< 2	< 2	< 2	< 2	< 2	NT	< 2	< 2	< 2	< 2	< 2
o-Xylene			< 2	< 2	< 2	< 2	< 2	< 2	NT	< 2	< 2	< 2	< 2	< 2
Methyl tert butyl ether	*13,000*	*35*	< 3	< 3	< 3	< 3	< 3	< 3	NT	< 3	< 3	**23.4**	< 3	< 3
Naphthalene	*19*	*10*	< 4	< 4	< 4	< 4	< 4	< 4	NT	< 4	< 4	< 4	< 4	< 4

< 100 = not detected at the laboratory reporting limit of 100 ug/L
Blue/bold = detected
NT = not tested
Light green shading = laboratory reporting limit exceeds applicable criteria
*L2218995-06: The surrogate recovery was outside the acceptance criteria for chloro-octadecane (23%); however, re-extraction achieved a similar result: chloro-octadecane (33%). The results of both extractions are reported; however, all associated compounds are considered to have a potential bias

BORING LOGS

Stantec BOREHOLE LOG SB-1

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-1

EXPLORATION DATE 4/13/2022 to 4/13/2022 GROUND EL. WATER LEVEL 3.5 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmv)
0		Dry, tan, medium to fine SAND, trace gravel, trace silt		▽	HAND					0.5
5		0" - 50" Damp, gray, CLAY and silt, with fine sand seams			PUSH	1	60			0.6
10		50" - 60" Wet, gray/brown, fine, sandy SILT 0" - 30" Wet, gray/brown, medium to fine, sandy SILT			PUSH	2	56			0.4
		30" - 36" Damp, gray, CLAY and silt Refusal at 13.5 feet below ground surface.								
15		Bottom of boring at 13.5 feet below ground surface. SB-1 (2'-3') Sampled at 10:25 SB-1 (GW) Sampled at 11:00								
20										

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec BOREHOLE LOG SB-2

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-2

EXPLORATION DATE 4/13/2022 to 4/13/2022 GROUND EL. WATER LEVEL 4.5 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
							in.			
0		Damp, brown, medium to fine SAND and clayey silt			HAND					0.1
5		0" - 20" Wet, gray, coarse to medium, SAND, trace gravel, trace silt		▽						
		20" - 40" Damp, gray, CLAY and silt			PUSH	1	40			0.4
10		0" - 34" Damp, gray, CLAY, and silt			PUSH	2	60			0.5
		34" - 60" Wet, gray, clayey SILT								
15		Bottom of boring at 15.0 feet below ground surface. SB-2 (2'-3') Sampled at 09:35 SB-2 (5'-7') Sampled at 09:15 SB-2 (10'-12') Sampled at 09:25 SB-2 (GW) Sampled at 10:40								
20										

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

Stantec BOREHOLE LOG SB-3

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-3

EXPLORATION DATE 4/12/2022 to 4/12/2022 GROUND EL. WATER LEVEL 7.0 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
0		Medium to fine, silty SAND, and gravel		▽	HAND					0.1
5		Damp, olive brown, SILT and clay, with fine sand			PUSH	1	60			0.4
10		Damp, olive brown, fine SAND and silt, some gravel Refusal at 13.0 feet.			PUSH	2	-			0.3
15		Bottom of boring at 13.0 feet below ground surface on bedrock. SB-3 (5'-7') Sampled at 13:30 SB-3 (GW) Sampled at 14:00								
20										

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec BOREHOLE LOG SB-4

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125
LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-4
EXPLORATION DATE 4/13/2022 to 4/13/2022 GROUND EL. WATER LEVEL 8.0 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
0										
		Damp, brown, medium to fine SAND and silt			HAND					0.1
5		Damp, brown, coarse to fine, SAND, trace cobbles, trace gravel, trace silt		▽	PUSH	1	50			0.6
10		Damp, olive brown, CLAY and silt, with fine sand seams			PUSH	2	60			0.2
15		Bottom of broing at 15.0 feet below ground surface. SB-4 (5'-7') Sampled at 11:40 SB-4 (GW) Sampled at 12:15								
20										

Undrained Shear Strength - tsf
1 2 3 4
Water Content & Atterberg Limits W_P W W_L
Dynamic Penetration Test, blows/foot ★
Standard Penetration Test, blows/foot ●
10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test
□ Field Vane Test ■ Remolded
✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec BOREHOLE LOG SB-5

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-5

EXPLORATION DATE 4/12/2022 to 4/12/2022 GROUND EL. WATER LEVEL 8.0 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
0		Damp, tan, coarse to medium SAND, some gravel, some silt			HAND					0.2
5		0" - 20" Damp, gray, medium to fine SAND and silt, trace gravel 20" - 38" Wet, tan, medium to fine SAND, some silt		▽	PUSH	1	38			0.6
10		Wet, tan, coarse to medium, SAND and silt, trace gravel, trace clayey silt			PUSH	2	60			0.2
15		Bottom of boring at 15.0 feet below ground surface. SB-5 (5'-7') Sampled at 12:15 SB-5 (GW) Sampled at 12:40								
20										

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec BOREHOLE LOG SB-6

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-6

EXPLORATION DATE 4/12/2022 to 4/12/2022 GROUND EL. WATER LEVEL 4.5 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY (in.)	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
0		Damp, brown/gray, coarse to medium, SAND, trace gravel, trace silt		▽	HAND					0.2
5		Wet, brown, SILT and clay, with fine sand seam at 7.5'			PUSH	1	60			0.1
10		Wet, gray, silty CLAY, some fine sand seams			PUSH	2	60			0.2
15		Bottom of boring at 15.0 feet below ground surface. SB-6 (5'-6') Sampled at 09:00 SB-6 (GW) Sampled at 09:30								
20										

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec BOREHOLE LOG SB-7

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-7

EXPLORATION DATE 4/12/2022 to 4/12/2022 GROUND EL. WATER LEVEL 4.5 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SPT blows / 6"	SPT N-Value	PID (ppmV)
0		Damp, brown, fine sandy SILT, trace gravel		▽	HAND					0.2
5		0" - 20" Wet, tan, medium to fine SAND, some silt								
		20"- 48" Wet, brown/gray, SILT and clay, with fine sand seams			PUSH	1	48			0.2
10		Bottom of boring at 10.0 feet below ground surface. SB-7 (5'-6') Sampled at 10:05 SB-7 (GW) Sampled at 10:40								
15										
20										

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec BOREHOLE LOG SB-8

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-8

EXPLORATION DATE 4/11/2022 to 4/11/2022 GROUND EL. WATER LEVEL 4-7 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
0										
		Damp, brown, medium to fine SAND and gravel			HAND					0.2
5		Damp, olive brown, CLAY and silt			PUSH	1	60			1.1
10		Wet, olive brown, CLAY and silt, with medium sand lenses, trace coarse sand			PUSH	2	40			1.7
15		Wet, gray, medium to fine SAND and silt Refusal at 19.5 feet below ground surface.			PUSH		38			0.2
20		Bottom of boring at 19.5 feet below ground surface.								

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

Continued Next Page

Stantec

BOREHOLE LOG

SB-8

CLIENT **Maine Turnpike Authority** STATION _____ PROJECT No. **179450125**

LOCATION **Exit 35/36 Interchange, Saco, Maine** OFFSET _____ EXPLORATION No. **SB-8**

EXPLORATION DATE **4/11/2022 to 4/11/2022** GROUND EL. _____ WATER LEVEL **4-7** DATUM **NAVD88**

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SPT blows / 6"	SPT N-Value	PID (ppmV)
							in.			
20		SB-8 (5'-6') Sampled at 14:30 SB-8 (10'-11') Sampled at 14:45 SB-8 (GW) Sampled at 15:00								
25										
30										
35										
40										

Undrained Shear Strength - tsf

1 2 3 4

Water Content & Atterberg Limits W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

Stantec BOREHOLE LOG SB-9

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-9

EXPLORATION DATE 4/11/2022 to 4/11/2022 GROUND EL. WATER LEVEL 4.2 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
							in.			
0		Dry, medium to fine SAND and gravel, trace cobbles		▽	HAND					0.2
5		0" - 24" Damp, gray, medium to fine SAND								
		24" - 60" Damp, gray, CLAY and silt, some fine sand seams			PUSH	1	-			0.3
10		Bottom of boring at 10.0 feet below ground surface. SB-9 (1'-3') Sampled at 13:25 SB-9 (5'-7') Sampled at 13:35 SB-9 (GW) Sampled at 13:45								
15										
20										

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec

BOREHOLE LOG

SB-10

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-10

EXPLORATION DATE 4/11/2022 to 4/11/2022 GROUND EL. WATER LEVEL 4-7 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
0		Damp, brown, medium to fine SAND and silt			HAND					0.1
5		Damp, brown/tan, CLAY and silt			PUSH	1	60			0.6
10		Bottom of boring at 10.0 feet below ground surface. SB-10 (1'-3') Sampled at 12:25 SB-10 (5'-6') Sampled at 12:35 Dry well								
15										
20										

Undrained Shear Strength - tsf

1 2 3 4

Water Content & Atterberg Limits W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec

BOREHOLE LOG

SB-11

CLIENT **Maine Turnpike Authority** STATION _____ PROJECT No. **179450125**

LOCATION **Exit 35/36 Interchange, Saco, Maine** OFFSET _____ EXPLORATION No. **SB-11**

EXPLORATION DATE **4/11/2022 to 4/11/2022** GROUND EL. _____ WATER LEVEL **7.1** DATUM **NAVD88**

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
0										
		Damp, brown/tan, silty SAND, trace gravel			HAND					0.0
5		Wet, gray, SILT and clay, with fine sand seams								
		Wet, brown/tan, CLAY and silt, trace fine sand seams		▽	PUSH	1	36			0.1
10		Bottom of boring at 10.0 feet below ground surface. SB-11 (5'-7') Sampled at 09:30 SB-11 (GW) Sampled at 10:00								
15										
20										

Undrained Shear Strength - tsf

1 2 3 4

Water Content & Atterberg Limits W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

Stantec BOREHOLE LOG SB-12

CLIENT Maine Turnpike Authority STATION PROJECT No. 179450125

LOCATION Exit 35/36 Interchange, Saco, Maine OFFSET EXPLORATION No. SB-12

EXPLORATION DATE 4/11/2022 to 4/11/2022 GROUND EL. WATER LEVEL 4-7 DATUM NAVD88

DEPTH (ft)	ELEVATION (ft)	MATERIAL DESCRIPTION	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY in.	SAMPLES SPT blows / 6"	SAMPLES SPT N-Value	PID (ppmV)
0										
		Damp, brown, fine sandy SILT			HAND					0.1
5		Damp, brown/tan, CLAY and silt, with fine sand seam at 8 feet			PUSH	1	60			0.5
10		Bottom of boring at 10.0 feet below ground surface. SB-12 (5'-6') Sampled at 11:00 SB-12 (GW) Sampled at 11:30								
15										
20										

Undrained Shear Strength - tsf: 1 2 3 4

Water Content & Atterberg Limits: W_P W W_L

Dynamic Penetration Test, blows/foot ★

Standard Penetration Test, blows/foot ●

10 20 30 40 50 60 70 80 90

Driller: ; Supervisor: Jason Ward; Rig Type: NEB Geoprobe 6712DT, Direct Push Sampler

△ Unconfined Compression Test

□ Field Vane Test ■ Remolded

✖ Pocket Penetrometer / Torvane

STN13-GEO-I-VOC 179450125 - SACO_USE_STA_OFF_LIBRARY.GPJ JW NHP.GDT 5/12/22

LABORATORY DATA

ANALYTICAL REPORT

Lab Number:	L2218759
Client:	Stantec 5 Dartmouth Drive Suite 200 Auburn, NH 03032
ATTN:	Nat Gardner
Phone:	(603) 669-8600
Project Name:	SACO
Project Number:	179450125/1956.08
Report Date:	04/25/22

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2218759-01	SB-8 (5'-6')	SOIL	SACO, ME	04/11/22 14:30	04/11/22
L2218759-02	SB-8 (10'-11')	SOIL	SACO, ME	04/11/22 14:45	04/11/22
L2218759-03	SB-8	WATER	SACO, ME	04/11/22 15:00	04/11/22
L2218759-04	SB-9 (1'-3')	SOIL	SACO, ME	04/11/22 13:25	04/11/22
L2218759-05	SB-9 (5'-7')	SOIL	SACO, ME	04/11/22 13:35	04/11/22
L2218759-06	SB-9	WATER	SACO, ME	04/11/22 13:45	04/11/22
L2218759-07	SB-10 (1'-3')	SOIL	SACO, ME	04/11/22 12:25	04/11/22
L2218759-08	SB-10 (5'-6')	SOIL	SACO, ME	04/11/22 12:35	04/11/22
L2218759-09	SB-11 (5'-7')	SOIL	SACO, ME	04/11/22 09:30	04/11/22
L2218759-10	SB-11	WATER	SACO, ME	04/11/22 10:00	04/11/22
L2218759-11	SB-12 (5'-6')	SOIL	SACO, ME	04/11/22 11:00	04/11/22
L2218759-12	SB-12	WATER	SACO, ME	04/11/22 11:30	04/11/22

Project Name:	SACO	**Lab Number:**	L2218759
Project Number:	179450125/1956.08	**Report Date:**	04/25/22

Case Narrative

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

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

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

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

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

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

Project Name:	SACO	**Lab Number:**	L2218759
Project Number:	179450125/1956.08	**Report Date:**	04/25/22

Case Narrative (continued)

Sample Receipt

L2218759-06: The sample was received above the appropriate pH for the EPH with MS Targets analysis. The laboratory added additional HCl to a pH <2.

VPH

L2218759-10: The pH of the sample was greater than two.

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

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 04/25/22

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-01
Client ID: SB-8 (5'-6')
Sample Location: SACO, ME
Date Collected: 04/11/22 14:30
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/19/22 01:14
Analyst: MKS
Percent Solids: 79%

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.3:1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	9.48	--	1
C9-C12 Aliphatics	ND		mg/kg	9.48	--	1
C9-C10 Aromatics	ND		mg/kg	9.48	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	9.48	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	9.48	--	1
Benzene	ND		mg/kg	0.190	--	1
Toluene	ND		mg/kg	0.190	--	1
Ethylbenzene	ND		mg/kg	0.190	--	1
p/m-Xylene	ND		mg/kg	0.190	--	1
o-Xylene	ND		mg/kg	0.190	--	1
Methyl tert butyl ether	ND		mg/kg	0.095	--	1
Naphthalene	ND		mg/kg	0.379	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	116		70-130
2,5-Dibromotoluene-FID	108		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-01			Date Collected:	04/11/22 14:30
Client ID:	SB-8 (5'-6')			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/12/22 06:54
Analytical Date:	04/13/22 18:06	M.S. Analytical Date:	04/13/22 15:18	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/13/22
Percent Solids:	79%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.06	--	1
C19-C36 Aliphatics	ND		mg/kg	8.06	--	1
C11-C22 Aromatics	ND		mg/kg	8.06	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.06	--	1
Naphthalene	ND		mg/kg	0.032	--	1
2-Methylnaphthalene	ND		mg/kg	0.032	--	1
Acenaphthylene	ND		mg/kg	0.032	--	1
Acenaphthene	ND		mg/kg	0.032	--	1
Fluorene	ND		mg/kg	0.032	--	1
Phenanthrene	ND		mg/kg	0.032	--	1
Anthracene	ND		mg/kg	0.032	--	1
Fluoranthene	ND		mg/kg	0.032	--	1
Pyrene	ND		mg/kg	0.032	--	1
Benzo(a)anthracene	ND		mg/kg	0.032	--	1
Chrysene	ND		mg/kg	0.032	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.032	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.032	--	1
Benzo(a)pyrene	ND		mg/kg	0.032	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.032	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.032	--	1
Benzo(ghi)perylene	ND		mg/kg	0.032	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-01
Client ID: SB-8 (5'-6')
Sample Location: SACO, ME
Date Collected: 04/11/22 14:30
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	70		40-140
o-Terphenyl	65		40-140
2-Fluorobiphenyl	77		40-140
2-Bromonaphthalene	76		40-140
O-Terphenyl-MS	85		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-02
Client ID: SB-8 (10'-11')
Sample Location: SACO, ME
Date Collected: 04/11/22 14:45
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/19/22 01:44
Analyst: MKS
Percent Solids: 72%

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1.6:1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	13.0	--	1
C9-C12 Aliphatics	ND		mg/kg	13.0	--	1
C9-C10 Aromatics	ND		mg/kg	13.0	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	13.0	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	13.0	--	1
Benzene	ND		mg/kg	0.260	--	1
Toluene	ND		mg/kg	0.260	--	1
Ethylbenzene	ND		mg/kg	0.260	--	1
p/m-Xylene	ND		mg/kg	0.260	--	1
o-Xylene	ND		mg/kg	0.260	--	1
Methyl tert butyl ether	ND		mg/kg	0.130	--	1
Naphthalene	ND		mg/kg	0.521	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	121		70-130
2,5-Dibromotoluene-FID	113		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-02			Date Collected:	04/11/22 14:45
Client ID:	SB-8 (10'-11')			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/12/22 06:54
Analytical Date:	04/13/22 18:31	M.S. Analytical Date:	04/13/22 15:34	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/13/22
Percent Solids:	72%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	9.04	--	1
C19-C36 Aliphatics	ND		mg/kg	9.04	--	1
C11-C22 Aromatics	ND		mg/kg	9.04	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	9.04	--	1
Naphthalene	ND		mg/kg	0.036	--	1
2-Methylnaphthalene	ND		mg/kg	0.036	--	1
Acenaphthylene	ND		mg/kg	0.036	--	1
Acenaphthene	ND		mg/kg	0.036	--	1
Fluorene	ND		mg/kg	0.036	--	1
Phenanthrene	ND		mg/kg	0.036	--	1
Anthracene	ND		mg/kg	0.036	--	1
Fluoranthene	ND		mg/kg	0.036	--	1
Pyrene	ND		mg/kg	0.036	--	1
Benzo(a)anthracene	ND		mg/kg	0.036	--	1
Chrysene	ND		mg/kg	0.036	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.036	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.036	--	1
Benzo(a)pyrene	ND		mg/kg	0.036	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.036	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.036	--	1
Benzo(ghi)perylene	ND		mg/kg	0.036	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-02
Client ID: SB-8 (10'-11')
Sample Location: SACO, ME
Date Collected: 04/11/22 14:45
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	69		40-140
o-Terphenyl	61		40-140
2-Fluorobiphenyl	72		40-140
2-Bromonaphthalene	72		40-140
O-Terphenyl-MS	78		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-03
Client ID: SB-8
Sample Location: SACO, ME
Date Collected: 04/11/22 15:00
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/15/22 17:57
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	96		70-130
2,5-Dibromotoluene-FID	92		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-03			Date Collected:	04/11/22 15:00
Client ID:	SB-8			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 04:11
Analytical Date:	04/17/22 20:20	M.S. Analytical Date:	04/18/22 16:05	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	1140		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-03
Client ID: SB-8
Sample Location: SACO, ME
Date Collected: 04/11/22 15:00
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	57		40-140
o-Terphenyl	77		40-140
2-Fluorobiphenyl	71		40-140
2-Bromonaphthalene	71		40-140
O-Terphenyl-MS	97		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-04	Date Collected:	04/11/22 13:25
Client ID:	SB-9 (1'-3')	Date Received:	04/11/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/19/22 02:14		
Analyst:	MKS		
Percent Solids:	87%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	6.94	--	1
C9-C12 Aliphatics	ND		mg/kg	6.94	--	1
C9-C10 Aromatics	ND		mg/kg	6.94	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.94	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.94	--	1
Benzene	ND		mg/kg	0.139	--	1
Toluene	ND		mg/kg	0.139	--	1
Ethylbenzene	ND		mg/kg	0.139	--	1
p/m-Xylene	ND		mg/kg	0.139	--	1
o-Xylene	ND		mg/kg	0.139	--	1
Methyl tert butyl ether	ND		mg/kg	0.069	--	1
Naphthalene	ND		mg/kg	0.278	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	112		70-130
2,5-Dibromotoluene-FID	105		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-04			Date Collected:	04/11/22 13:25
Client ID:	SB-9 (1'-3')			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/12/22 06:54
Analytical Date:	04/13/22 18:56	M.S. Analytical Date:	04/13/22 15:50	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/13/22
Percent Solids:	87%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.27	--	1
C19-C36 Aliphatics	7.76		mg/kg	7.27	--	1
C11-C22 Aromatics	17.9		mg/kg	7.27	--	1
C11-C22 Aromatics, Adjusted	12.4		mg/kg	7.27	--	1
Naphthalene	ND		mg/kg	0.029	--	1
2-Methylnaphthalene	ND		mg/kg	0.029	--	1
Acenaphthylene	0.109		mg/kg	0.029	--	1
Acenaphthene	ND		mg/kg	0.029	--	1
Fluorene	0.035		mg/kg	0.029	--	1
Phenanthrene	0.310		mg/kg	0.029	--	1
Anthracene	0.074		mg/kg	0.029	--	1
Fluoranthene	0.928		mg/kg	0.029	--	1
Pyrene	0.889		mg/kg	0.029	--	1
Benzo(a)anthracene	0.463		mg/kg	0.029	--	1
Chrysene	0.569		mg/kg	0.029	--	1
Benzo(b)fluoranthene	0.727		mg/kg	0.029	--	1
Benzo(k)fluoranthene	0.288		mg/kg	0.029	--	1
Benzo(a)pyrene	0.564		mg/kg	0.029	--	1
Indeno(1,2,3-cd)Pyrene	0.256		mg/kg	0.029	--	1
Dibenzo(a,h)anthracene	0.048		mg/kg	0.029	--	1
Benzo(ghi)perylene	0.222		mg/kg	0.029	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-04
Client ID: SB-9 (1'-3')
Sample Location: SACO, ME
Date Collected: 04/11/22 13:25
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	65		40-140
o-Terphenyl	61		40-140
2-Fluorobiphenyl	73		40-140
2-Bromonaphthalene	73		40-140
O-Terphenyl-MS	83		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-05
Client ID: SB-9 (5'-7')
Sample Location: SACO, ME
Date Collected: 04/11/22 13:35
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/19/22 02:44
Analyst: MKS
Percent Solids: 82%

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	6.57	--	1
C9-C12 Aliphatics	ND		mg/kg	6.57	--	1
C9-C10 Aromatics	ND		mg/kg	6.57	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.57	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.57	--	1
Benzene	ND		mg/kg	0.131	--	1
Toluene	ND		mg/kg	0.131	--	1
Ethylbenzene	ND		mg/kg	0.131	--	1
p/m-Xylene	ND		mg/kg	0.131	--	1
o-Xylene	ND		mg/kg	0.131	--	1
Methyl tert butyl ether	ND		mg/kg	0.066	--	1
Naphthalene	ND		mg/kg	0.263	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	108		70-130
2,5-Dibromotoluene-FID	102		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-05			Date Collected:	04/11/22 13:35
Client ID:	SB-9 (5'-7')			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/12/22 06:54
Analytical Date:	04/13/22 19:21	M.S. Analytical Date:	04/13/22 16:07	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/13/22
Percent Solids:	82%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.87	--	1
C19-C36 Aliphatics	ND		mg/kg	7.87	--	1
C11-C22 Aromatics	ND		mg/kg	7.87	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.87	--	1
Naphthalene	ND		mg/kg	0.032	--	1
2-Methylnaphthalene	ND		mg/kg	0.032	--	1
Acenaphthylene	ND		mg/kg	0.032	--	1
Acenaphthene	ND		mg/kg	0.032	--	1
Fluorene	ND		mg/kg	0.032	--	1
Phenanthrene	0.048		mg/kg	0.032	--	1
Anthracene	ND		mg/kg	0.032	--	1
Fluoranthene	0.128		mg/kg	0.032	--	1
Pyrene	0.118		mg/kg	0.032	--	1
Benzo(a)anthracene	0.064		mg/kg	0.032	--	1
Chrysene	0.081		mg/kg	0.032	--	1
Benzo(b)fluoranthene	0.114		mg/kg	0.032	--	1
Benzo(k)fluoranthene	0.040		mg/kg	0.032	--	1
Benzo(a)pyrene	0.082		mg/kg	0.032	--	1
Indeno(1,2,3-cd)Pyrene	0.087		mg/kg	0.032	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.032	--	1
Benzo(ghi)perylene	0.089		mg/kg	0.032	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-05
Client ID: SB-9 (5'-7')
Sample Location: SACO, ME
Date Collected: 04/11/22 13:35
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	80		40-140
o-Terphenyl	69		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	82		40-140
O-Terphenyl-MS	92		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-06
Client ID: SB-9
Sample Location: SACO, ME
Date Collected: 04/11/22 13:45
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/15/22 18:28
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	255		ug/l	50.0	--	1
C9-C12 Aliphatics	269		ug/l	50.0	--	1
C9-C10 Aromatics	185		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	232		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	84.3		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	23.4		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	98		70-130
2,5-Dibromotoluene-FID	93		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-06			Date Collected:	04/11/22 13:45
Client ID:	SB-9			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 04:11
Analytical Date:	04/17/22 20:55	M.S. Analytical Date:	04/18/22 16:21	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	110		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	110		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-06
Client ID: SB-9
Sample Location: SACO, ME
Date Collected: 04/11/22 13:45
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	45		40-140
o-Terphenyl	75		40-140
2-Fluorobiphenyl	72		40-140
2-Bromonaphthalene	73		40-140
O-Terphenyl-MS	92		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-07	Date Collected:	04/11/22 12:25
Client ID:	SB-10 (1'-3')	Date Received:	04/11/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/19/22 03:14		
Analyst:	MKS		
Percent Solids:	85%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	7.51	--	1
C9-C12 Aliphatics	ND		mg/kg	7.51	--	1
C9-C10 Aromatics	ND		mg/kg	7.51	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.51	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.51	--	1
Benzene	ND		mg/kg	0.150	--	1
Toluene	ND		mg/kg	0.150	--	1
Ethylbenzene	ND		mg/kg	0.150	--	1
p/m-Xylene	ND		mg/kg	0.150	--	1
o-Xylene	ND		mg/kg	0.150	--	1
Methyl tert butyl ether	ND		mg/kg	0.075	--	1
Naphthalene	ND		mg/kg	0.300	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	98		70-130
2,5-Dibromotoluene-FID	93		70-130

Project Name: SACO **Lab Number:** L2218759

Project Number: 179450125/1956.08 **Report Date:** 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-07			Date Collected:	04/11/22 12:25
Client ID:	SB-10 (1'-3')			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/12/22 06:54
Analytical Date:	04/13/22 19:46	M.S. Analytical Date:	04/13/22 16:23	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/13/22
Percent Solids:	85%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.48	--	1
C19-C36 Aliphatics	16.4		mg/kg	7.48	--	1
C11-C22 Aromatics	14.2		mg/kg	7.48	--	1
C11-C22 Aromatics, Adjusted	11.6		mg/kg	7.48	--	1
Naphthalene	ND		mg/kg	0.030	--	1
2-Methylnaphthalene	ND		mg/kg	0.030	--	1
Acenaphthylene	ND		mg/kg	0.030	--	1
Acenaphthene	ND		mg/kg	0.030	--	1
Fluorene	ND		mg/kg	0.030	--	1
Phenanthrene	0.170		mg/kg	0.030	--	1
Anthracene	0.033		mg/kg	0.030	--	1
Fluoranthene	0.474		mg/kg	0.030	--	1
Pyrene	0.408		mg/kg	0.030	--	1
Benzo(a)anthracene	0.225		mg/kg	0.030	--	1
Chrysene	0.259		mg/kg	0.030	--	1
Benzo(b)fluoranthene	0.376		mg/kg	0.030	--	1
Benzo(k)fluoranthene	0.150		mg/kg	0.030	--	1
Benzo(a)pyrene	0.268		mg/kg	0.030	--	1
Indeno(1,2,3-cd)Pyrene	0.148		mg/kg	0.030	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.030	--	1
Benzo(ghi)perylene	0.135		mg/kg	0.030	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-07
Client ID: SB-10 (1'-3')
Sample Location: SACO, ME
Date Collected: 04/11/22 12:25
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	59		40-140
o-Terphenyl	56		40-140
2-Fluorobiphenyl	64		40-140
2-Bromonaphthalene	63		40-140
O-Terphenyl-MS	76		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-08
Client ID: SB-10 (5'-6')
Sample Location: SACO, ME
Date Collected: 04/11/22 12:35
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/19/22 03:44
Analyst: MKS
Percent Solids: 79%

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	7.32	--	1
C9-C12 Aliphatics	ND		mg/kg	7.32	--	1
C9-C10 Aromatics	ND		mg/kg	7.32	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.32	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.32	--	1
Benzene	ND		mg/kg	0.146	--	1
Toluene	ND		mg/kg	0.146	--	1
Ethylbenzene	ND		mg/kg	0.146	--	1
p/m-Xylene	ND		mg/kg	0.146	--	1
o-Xylene	ND		mg/kg	0.146	--	1
Methyl tert butyl ether	ND		mg/kg	0.073	--	1
Naphthalene	ND		mg/kg	0.293	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	118		70-130
2,5-Dibromotoluene-FID	112		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-08			Date Collected:	04/11/22 12:35
Client ID:	SB-10 (5'-6')			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/12/22 06:54
Analytical Date:	04/13/22 20:11	M.S. Analytical Date:	04/13/22 16:39	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/13/22
Percent Solids:	79%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.07	--	1
C19-C36 Aliphatics	ND		mg/kg	8.07	--	1
C11-C22 Aromatics	ND		mg/kg	8.07	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.07	--	1
Naphthalene	ND		mg/kg	0.032	--	1
2-Methylnaphthalene	ND		mg/kg	0.032	--	1
Acenaphthylene	ND		mg/kg	0.032	--	1
Acenaphthene	ND		mg/kg	0.032	--	1
Fluorene	ND		mg/kg	0.032	--	1
Phenanthrene	ND		mg/kg	0.032	--	1
Anthracene	ND		mg/kg	0.032	--	1
Fluoranthene	ND		mg/kg	0.032	--	1
Pyrene	ND		mg/kg	0.032	--	1
Benzo(a)anthracene	ND		mg/kg	0.032	--	1
Chrysene	ND		mg/kg	0.032	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.032	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.032	--	1
Benzo(a)pyrene	ND		mg/kg	0.032	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.032	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.032	--	1
Benzo(ghi)perylene	0.033		mg/kg	0.032	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-08
Client ID: SB-10 (5'-6')
Sample Location: SACO, ME
Date Collected: 04/11/22 12:35
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	67		40-140
o-Terphenyl	63		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	80		40-140
O-Terphenyl-MS	79		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-09	Date Collected:	04/11/22 09:30
Client ID:	SB-11 (5'-7')	Date Received:	04/11/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/19/22 04:14		
Analyst:	MKS		
Percent Solids:	76%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	8.06	--	1
C9-C12 Aliphatics	ND		mg/kg	8.06	--	1
C9-C10 Aromatics	ND		mg/kg	8.06	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	8.06	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	8.06	--	1
Benzene	ND		mg/kg	0.161	--	1
Toluene	ND		mg/kg	0.161	--	1
Ethylbenzene	ND		mg/kg	0.161	--	1
p/m-Xylene	ND		mg/kg	0.161	--	1
o-Xylene	ND		mg/kg	0.161	--	1
Methyl tert butyl ether	ND		mg/kg	0.081	--	1
Naphthalene	ND		mg/kg	0.322	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	120		70-130
2,5-Dibromotoluene-FID	115		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-09			Date Collected:	04/11/22 09:30
Client ID:	SB-11 (5'-7')			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/12/22 06:54
Analytical Date:	04/13/22 20:36	M.S. Analytical Date:	04/13/22 16:56	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/13/22
Percent Solids:	76%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.23	--	1
C19-C36 Aliphatics	ND		mg/kg	8.23	--	1
C11-C22 Aromatics	8.64		mg/kg	8.23	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.23	--	1
Naphthalene	ND		mg/kg	0.033	--	1
2-Methylnaphthalene	ND		mg/kg	0.033	--	1
Acenaphthylene	ND		mg/kg	0.033	--	1
Acenaphthene	ND		mg/kg	0.033	--	1
Fluorene	ND		mg/kg	0.033	--	1
Phenanthrene	0.137		mg/kg	0.033	--	1
Anthracene	ND		mg/kg	0.033	--	1
Fluoranthene	0.249		mg/kg	0.033	--	1
Pyrene	0.219		mg/kg	0.033	--	1
Benzo(a)anthracene	0.103		mg/kg	0.033	--	1
Chrysene	0.128		mg/kg	0.033	--	1
Benzo(b)fluoranthene	0.166		mg/kg	0.033	--	1
Benzo(k)fluoranthene	0.068		mg/kg	0.033	--	1
Benzo(a)pyrene	0.128		mg/kg	0.033	--	1
Indeno(1,2,3-cd)Pyrene	0.062		mg/kg	0.033	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.033	--	1
Benzo(ghi)perylene	0.052		mg/kg	0.033	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-09
Client ID: SB-11 (5'-7')
Sample Location: SACO, ME
Date Collected: 04/11/22 09:30
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	68		40-140
o-Terphenyl	62		40-140
2-Fluorobiphenyl	74		40-140
2-Bromonaphthalene	72		40-140
O-Terphenyl-MS	81		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-10
Client ID: SB-11
Sample Location: SACO, ME
Date Collected: 04/11/22 10:00
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/15/22 18:58
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	96		70-130
2,5-Dibromotoluene-FID	92		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-10			Date Collected:	04/11/22 10:00
Client ID:	SB-11			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 04:11
Analytical Date:	04/17/22 21:30	M.S. Analytical Date:	04/18/22 16:37	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-10
Client ID: SB-11
Sample Location: SACO, ME
Date Collected: 04/11/22 10:00
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	65		40-140
o-Terphenyl	84		40-140
2-Fluorobiphenyl	78		40-140
2-Bromonaphthalene	80		40-140
O-Terphenyl-MS	97		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-11
Client ID: SB-12 (5'-6')
Sample Location: SACO, ME
Date Collected: 04/11/22 11:00
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/19/22 13:27
Analyst: MKS
Percent Solids: 77%

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	7.96	--	1
C9-C12 Aliphatics	ND		mg/kg	7.96	--	1
C9-C10 Aromatics	ND		mg/kg	7.96	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.96	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.96	--	1
Benzene	ND		mg/kg	0.159	--	1
Toluene	ND		mg/kg	0.159	--	1
Ethylbenzene	ND		mg/kg	0.159	--	1
p/m-Xylene	ND		mg/kg	0.159	--	1
o-Xylene	ND		mg/kg	0.159	--	1
Methyl tert butyl ether	ND		mg/kg	0.080	--	1
Naphthalene	ND		mg/kg	0.318	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	**140**	Q	70-130
2,5-Dibromotoluene-FID	**134**	Q	70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-11			Date Collected:	04/11/22 11:00
Client ID:	SB-12 (5'-6')			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/12/22 06:54
Analytical Date:	04/13/22 21:01	M.S. Analytical Date:	04/13/22 17:12	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/13/22
Percent Solids:	77%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.32	--	1
C19-C36 Aliphatics	ND		mg/kg	8.32	--	1
C11-C22 Aromatics	ND		mg/kg	8.32	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.32	--	1
Naphthalene	ND		mg/kg	0.033	--	1
2-Methylnaphthalene	ND		mg/kg	0.033	--	1
Acenaphthylene	ND		mg/kg	0.033	--	1
Acenaphthene	ND		mg/kg	0.033	--	1
Fluorene	ND		mg/kg	0.033	--	1
Phenanthrene	ND		mg/kg	0.033	--	1
Anthracene	ND		mg/kg	0.033	--	1
Fluoranthene	ND		mg/kg	0.033	--	1
Pyrene	ND		mg/kg	0.033	--	1
Benzo(a)anthracene	ND		mg/kg	0.033	--	1
Chrysene	ND		mg/kg	0.033	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.033	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.033	--	1
Benzo(a)pyrene	ND		mg/kg	0.033	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.033	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.033	--	1
Benzo(ghi)perylene	ND		mg/kg	0.033	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-11
Client ID: SB-12 (5'-6')
Sample Location: SACO, ME
Date Collected: 04/11/22 11:00
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	59		40-140
2-Fluorobiphenyl	75		40-140
2-Bromonaphthalene	74		40-140
O-Terphenyl-MS	80		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-12
Client ID: SB-12
Sample Location: SACO, ME
Date Collected: 04/11/22 11:30
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/15/22 19:28
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	94		70-130
2,5-Dibromotoluene-FID	89		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID:	L2218759-12			Date Collected:	04/11/22 11:30
Client ID:	SB-12			Date Received:	04/11/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 04:11
Analytical Date:	04/17/22 22:05	M.S. Analytical Date:	04/18/22 16:53	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

EPH w/Targets via GCMS-SIM - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-12
Client ID: SB-12
Sample Location: SACO, ME
Date Collected: 04/11/22 11:30
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	75		40-140
2-Fluorobiphenyl	73		40-140
2-Bromonaphthalene	73		40-140
O-Terphenyl-MS	87		40-140

Project Name: SACO **Lab Number:** L2218759

Project Number: 179450125/1956.08 **Report Date:** 04/25/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/13/22 17:41
Analyst: JB

M.S. Analytical Date: 04/24/22 14:46
M.S. Analyst: AH

Extraction Method: EPA 3546
Extraction Date: 04/12/22 06:54
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/13/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01-02,04-05,07-09,11 Batch: WG1626081-1					
C9-C18 Aliphatics	ND		mg/kg	6.35	--
C19-C36 Aliphatics	ND		mg/kg	6.35	--
C11-C22 Aromatics	ND		mg/kg	6.35	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.35	--
Naphthalene	ND		mg/kg	0.025	--
2-Methylnaphthalene	ND		mg/kg	0.025	--
Acenaphthylene	ND		mg/kg	0.025	--
Acenaphthene	ND		mg/kg	0.025	--
Fluorene	ND		mg/kg	0.025	--
Phenanthrene	ND		mg/kg	0.025	--
Anthracene	ND		mg/kg	0.025	--
Fluoranthene	ND		mg/kg	0.025	--
Pyrene	ND		mg/kg	0.025	--
Benzo(a)anthracene	ND		mg/kg	0.025	--
Chrysene	ND		mg/kg	0.025	--
Benzo(b)fluoranthene	ND		mg/kg	0.025	--
Benzo(k)fluoranthene	ND		mg/kg	0.025	--
Benzo(a)pyrene	ND		mg/kg	0.025	--
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.025	--
Dibenzo(a,h)anthracene	ND		mg/kg	0.025	--
Benzo(ghi)perylene	ND		mg/kg	0.025	--

Project Name: SACO **Lab Number:** L2218759

Project Number: 179450125/1956.08 **Report Date:** 04/25/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/13/22 17:41
Analyst: JB
M.S. Analytical Date: 04/24/22 14:46
M.S. Analyst: AH
Extraction Method: EPA 3546
Extraction Date: 04/12/22 06:54
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/13/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01-02,04-05,07-09,11 Batch: WG1626081-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	68		40-140
o-Terphenyl	80		40-140
2-Fluorobiphenyl	95		40-140
2-Bromonaphthalene	95		40-140
O-Terphenyl-MS	**163**	Q	40-140

Project Name: SACO **Lab Number:** L2218759

Project Number: 179450125/1956.08 **Report Date:** 04/25/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/17/22 18:01
Analyst: JB

M.S. Analytical Date: 04/18/22 13:55
M.S. Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/16/22 04:11
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/17/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 03,06,10,12 Batch: WG1627916-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/17/22 18:01
Analyst: JB
M.S. Analytical Date: 04/18/22 13:55
M.S. Analyst: JJW
Extraction Method: EPA 3510C
Extraction Date: 04/16/22 04:11
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/17/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 03,06,10,12 Batch: WG1627916-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	74		40-140
o-Terphenyl	83		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	81		40-140
O-Terphenyl-MS	91		40-140

Project Name: SACO **Lab Number:** L2218759

Project Number: 179450125/1956.08 **Report Date:** 04/25/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/15/22 09:53
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 03,06,10,12 Batch: WG1628457-4					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	88		70-130
2,5-Dibromotoluene-FID	85		70-130

Project Name: SACO **Lab Number:** L2218759

Project Number: 179450125/1956.08 **Report Date:** 04/25/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/18/22 20:14
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-02,04-05,07-09 Batch: WG1628853-4					
C5-C8 Aliphatics	ND		mg/kg	5.00	--
C9-C12 Aliphatics	ND		mg/kg	5.00	--
C9-C10 Aromatics	ND		mg/kg	5.00	--
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.00	--
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.00	--
Benzene	ND		mg/kg	0.100	--
Toluene	ND		mg/kg	0.100	--
Ethylbenzene	ND		mg/kg	0.100	--
p/m-Xylene	ND		mg/kg	0.100	--
o-Xylene	ND		mg/kg	0.100	--
Methyl tert butyl ether	ND		mg/kg	0.050	--
Naphthalene	ND		mg/kg	0.200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	117		70-130
2,5-Dibromotoluene-FID	108		70-130

Project Name: SACO **Lab Number:** L2218759

Project Number: 179450125/1956.08 **Report Date:** 04/25/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/19/22 12:19
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 11 Batch: WG1629168-4					
C5-C8 Aliphatics	ND		mg/kg	5.00	--
C9-C12 Aliphatics	ND		mg/kg	5.00	--
C9-C10 Aromatics	ND		mg/kg	5.00	--
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.00	--
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.00	--
Benzene	ND		mg/kg	0.100	--
Toluene	ND		mg/kg	0.100	--
Ethylbenzene	ND		mg/kg	0.100	--
p/m-Xylene	ND		mg/kg	0.100	--
o-Xylene	ND		mg/kg	0.100	--
Methyl tert butyl ether	ND		mg/kg	0.050	--
Naphthalene	ND		mg/kg	0.200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	109		70-130
2,5-Dibromotoluene-FID	105		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01-02,04-05,07-09,11 Batch: WG1626081-2 WG1626081-3								
C9-C18 Aliphatics	59		56		40-140	5		25
C19-C36 Aliphatics	76		74		40-140	3		25
C11-C22 Aromatics	70		69		40-140	1		25
Naphthalene	78		80		40-140	3		25
2-Methylnaphthalene	86		88		40-140	2		25
Acenaphthylene	92		93		40-140	1		25
Acenaphthene	83		85		40-140	2		25
Fluorene	92		93		40-140	1		25
Phenanthrene	89		90		40-140	1		25
Anthracene	99		100		40-140	1		25
Fluoranthene	100		102		40-140	2		25
Pyrene	99		101		40-140	2		25
Benzo(a)anthracene	107		108		40-140	1		25
Chrysene	93		93		40-140	0		25
Benzo(b)fluoranthene	102		103		40-140	1		25
Benzo(k)fluoranthene	103		104		40-140	1		25
Benzo(a)pyrene	113		115		40-140	2		25
Indeno(1,2,3-cd)Pyrene	77		89		40-140	14		25
Dibenzo(a,h)anthracene	79		88		40-140	11		25
Benzo(ghi)perylene	63		73		40-140	15		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01-02,04-05,07-09,11 Batch: WG1626081-2 WG1626081-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	67		65		40-140
o-Terphenyl	66		64		40-140
2-Fluorobiphenyl	73		76		40-140
2-Bromonaphthalene	72		76		40-140
O-Terphenyl-MS	94		94		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab	Associated sample(s): 03,06,10,12		Batch: WG1627916-2 WG1627916-3					
C9-C18 Aliphatics	68		71		40-140	4		25
C19-C36 Aliphatics	86		87		40-140	1		25
C11-C22 Aromatics	86		94		40-140	9		25
Naphthalene	66		79		40-140	18		25
2-Methylnaphthalene	79		94		40-140	17		25
Acenaphthylene	91		104		40-140	13		25
Acenaphthene	79		90		40-140	13		25
Fluorene	89		100		40-140	12		25
Phenanthrene	82		93		40-140	13		25
Anthracene	88		100		40-140	13		25
Fluoranthene	96		107		40-140	11		25
Pyrene	96		107		40-140	11		25
Benzo(a)anthracene	92		104		40-140	12		25
Chrysene	88		100		40-140	13		25
Benzo(b)fluoranthene	91		101		40-140	10		25
Benzo(k)fluoranthene	91		101		40-140	10		25
Benzo(a)pyrene	103		116		40-140	12		25
Indeno(1,2,3-cd)Pyrene	108		122		40-140	12		25
Dibenzo(a,h)anthracene	103		115		40-140	11		25
Benzo(ghi)perylene	86		94		40-140	9		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 03,06,10,12 Batch: WG1627916-2 WG1627916-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	70		73		40-140
o-Terphenyl	81		90		40-140
2-Fluorobiphenyl	76		85		40-140
2-Bromonaphthalene	76		85		40-140
O-Terphenyl-MS	88		100		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03,06,10,12 Batch: WG1628457-2 WG1628457-3								
C5-C8 Aliphatics	98		110		70-130	12		25
C9-C12 Aliphatics	99		113		70-130	13		25
C9-C10 Aromatics	96		110		70-130	13		25
Benzene	97		111		70-130	14		25
Toluene	98		111		70-130	13		25
Ethylbenzene	99		113		70-130	13		25
p/m-Xylene	100		114		70-130	13		25
o-Xylene	100		113		70-130	13		25
Methyl tert butyl ether	99		114		70-130	14		25
Naphthalene	97		114		70-130	16		25
1,2,4-Trimethylbenzene	96		110		70-130	13		25
Pentane	97		110		70-130	13		25
2-Methylpentane	100		112		70-130	12		25
2,2,4-Trimethylpentane	98		110		70-130	12		25
n-Nonane	101		116		30-130	14		25
n-Decane	99		113		70-130	13		25
n-Butylcyclohexane	98		111		70-130	12		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	95		112		70-130
2,5-Dibromotoluene-FID	90		105		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02,04-05,07-09 Batch: WG1628853-2 WG1628853-3								
C5-C8 Aliphatics	94		104		70-130	10		25
C9-C12 Aliphatics	75		86		70-130	14		25
C9-C10 Aromatics	94		106		70-130	12		25
Benzene	98		110		70-130	12		25
Toluene	98		110		70-130	12		25
Ethylbenzene	98		110		70-130	12		25
p/m-Xylene	98		110		70-130	12		25
o-Xylene	98		110		70-130	12		25
Methyl tert butyl ether	100		114		70-130	13		25
Naphthalene	102		115		70-130	12		25
1,2,4-Trimethylbenzene	94		106		70-130	12		25
Pentane	96		99		70-130	3		25
2-Methylpentane	94		107		70-130	13		25
2,2,4-Trimethylpentane	93		106		70-130	13		25
n-Nonane	85		98		30-130	14		25
n-Decane	**54**	Q	**65**	Q	70-130	17		25
n-Butylcyclohexane	85		96		70-130	12		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	98		110		70-130
2,5-Dibromotoluene-FID	90		101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 11 Batch: WG1629168-2 WG1629168-3								
C5-C8 Aliphatics	105		111		70-130	6		25
C9-C12 Aliphatics	75		85		70-130	13		25
C9-C10 Aromatics	103		108		70-130	5		25
Benzene	105		111		70-130	6		25
Toluene	105		111		70-130	6		25
Ethylbenzene	106		112		70-130	6		25
p/m-Xylene	106		111		70-130	5		25
o-Xylene	106		111		70-130	5		25
Methyl tert butyl ether	106		112		70-130	6		25
Naphthalene	110		117		70-130	6		25
1,2,4-Trimethylbenzene	103		108		70-130	5		25
Pentane	100		105		70-130	5		25
2-Methylpentane	108		114		70-130	5		25
2,2,4-Trimethylpentane	106		112		70-130	6		25
n-Nonane	87		97		30-130	10		25
n-Decane	**49**	Q	**61**	Q	70-130	23		25
n-Butylcyclohexane	88		96		70-130	9		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	107		114		70-130
2,5-Dibromotoluene-FID	103		110		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-01
Client ID: SB-8 (5'-6')
Sample Location: SACO, ME

Date Collected: 04/11/22 14:30
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78.6		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-02
Client ID: SB-8 (10'-11')
Sample Location: SACO, ME

Date Collected: 04/11/22 14:45
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	71.8		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-04
Client ID: SB-9 (1'-3')
Sample Location: SACO, ME

Date Collected: 04/11/22 13:25
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.3		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-05
Client ID: SB-9 (5'-7')
Sample Location: SACO, ME

Date Collected: 04/11/22 13:35
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.9		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-07
Client ID: SB-10 (1'-3')
Sample Location: SACO, ME

Date Collected: 04/11/22 12:25
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.5		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-08
Client ID: SB-10 (5'-6')
Sample Location: SACO, ME

Date Collected: 04/11/22 12:35
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	79.0		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-09
Client ID: SB-11 (5'-7')
Sample Location: SACO, ME

Date Collected: 04/11/22 09:30
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.2		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

SAMPLE RESULTS

Lab ID: L2218759-11
Client ID: SB-12 (5'-6')
Sample Location: SACO, ME

Date Collected: 04/11/22 11:00
Date Received: 04/11/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.5		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218759
Report Date: 04/25/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02,04-05,07-09,11 Batch: WG1626128-2										
Solids, Total	99.9		%	0.100	NA	1	-	04/12/22 10:08	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: SACO

Project Number: 179450125/1956.08

Lab Number: L2218759

Report Date: 04/25/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05,07-09,11 QC Batch ID: WG1626128-1 QC Sample: L2218759-01 Client ID: SB-8 (5'-6')						
Solids, Total	78.6	78.7	%	0		20

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2218759-01A	Vial MeOH preserved	A	NA		5.3	Y	Absent		VPH-DELUX-18(28)
L2218759-01B	Plastic 2oz unpreserved for TS	A	NA		5.3	Y	Absent		ME-TS-2540(7)
L2218759-01C	Glass 60mL/2oz unpreserved	A	NA		5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-02A	Vial MeOH preserved	A	NA		5.3	Y	Absent		VPH-DELUX-18(28)
L2218759-02B	Plastic 2oz unpreserved for TS	A	NA		5.3	Y	Absent		ME-TS-2540(7)
L2218759-02C	Glass 60mL/2oz unpreserved	A	NA		5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-03A	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-03B	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-03C	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-03D	Amber 1000ml HCl preserved	A	<2	<2	5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-03E	Amber 1000ml HCl preserved	A	<2	<2	5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-04A	Vial MeOH preserved	A	NA		5.3	Y	Absent		VPH-DELUX-18(28)
L2218759-04B	Plastic 2oz unpreserved for TS	A	NA		5.3	Y	Absent		ME-TS-2540(7)
L2218759-04C	Glass 60mL/2oz unpreserved	A	NA		5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-05A	Vial MeOH preserved	A	NA		5.3	Y	Absent		VPH-DELUX-18(28)
L2218759-05B	Plastic 2oz unpreserved for TS	A	NA		5.3	Y	Absent		ME-TS-2540(7)
L2218759-05C	Glass 60mL/2oz unpreserved	A	NA		5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-06A	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-06B	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-06C	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-06D	Amber 1000ml HCl preserved	A	4	<2	5.3	N	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-06E	Amber 1000ml HCl preserved	A	<2	<2	5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-07A	Vial MeOH preserved	A	NA		5.3	Y	Absent		VPH-DELUX-18(28)

*Values in parentheses indicate holding time in days

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218759
Report Date: 04/25/22

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2218759-07B	Plastic 2oz unpreserved for TS	A	NA		5.3	Y	Absent		ME-TS-2540(7)
L2218759-07C	Glass 60mL/2oz unpreserved	A	NA		5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-08A	Vial MeOH preserved	A	NA		5.3	Y	Absent		VPH-DELUX-18(28)
L2218759-08B	Plastic 2oz unpreserved for TS	A	NA		5.3	Y	Absent		ME-TS-2540(7)
L2218759-08C	Glass 60mL/2oz unpreserved	A	NA		5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-09A	Vial MeOH preserved	A	NA		5.3	Y	Absent		VPH-DELUX-18(28)
L2218759-09B	Plastic 2oz unpreserved for TS	A	NA		5.3	Y	Absent		ME-TS-2540(7)
L2218759-09C	Glass 60mL/2oz unpreserved	A	NA		5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-10A	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-10B	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-10C	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-10D	Amber 1000ml HCl preserved	A	<2	<2	5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-10E	Amber 1000ml HCl preserved	A	<2	<2	5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-11A	Vial MeOH preserved	A	NA		5.3	Y	Absent		VPH-DELUX-18(28)
L2218759-11B	Plastic 2oz unpreserved for TS	A	NA		5.3	Y	Absent		ME-TS-2540(7)
L2218759-11C	Glass 60mL/2oz unpreserved	A	NA		5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-12A	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-12B	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-12C	Vial HCl preserved	A	NA		5.3	Y	Absent		ME-VPH-DELUX-18(14)
L2218759-12D	Amber 1000ml HCl preserved	A	<2	<2	5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218759-12E	Amber 1000ml HCl preserved	A	<2	<2	5.3	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)

*Values in parentheses indicate holding time in days

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

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Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

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REFERENCES

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

131 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, February 2018, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, June 1, 2018.

135 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, December 2019, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, March 1, 2020.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 2

Date Rec'd in Lab: 4/11/22

ALPHA Job #: L2218759

ALPHA ANALYTICAL — World Class Chemistry
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: STANTEC
Address: 5 DARTMOUTH DR
AUBURN, NH 03032
Phone: 603-496-4674
Email: N.GARDNER@STANTEC.COM

Additional Project Information:
MCP #1/1/19

Project Information

Project Name: SACO JIV
Project Location: SACO, ME
Project #: 194501251195608
Project Manager: NATE GARDNER
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program ____ Criteria ____

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2 / SVOC: ☐ ABN ☐ PAH / METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15 / METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13 / EPH: ☒ Ranges & Targets ☐ Ranges Only / VPH: ☒ Ranges & Targets ☐ Ranges Only / ☐ PCB ☐ PEST / TPH: ☐ Quant Only ☐ Fingerprint	SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do; Sample Comments	TOTAL # BOTTLES
18759-01	SB-8 (5'-6')	4/11/22	1430	SO	JJW	X X		3
-02	SB-8 (10'-11')	4/11/22	1445	SO	JJW	X X		3
-03	SB-8	4/11/22	1500	GW	JJW	X X		5
-04	SB-9 (1'-3')	4/11/22	1325	SO	JJW	X X		3
-05	SB-9 (5'-7')	4/11/22	1335	SO	JJW	X X		3
-06	SB-9	4/11/22	1345	GW	JJW	X X		5
-07	SB-10 (1'-3')	4/11/22	1225	SO	JJW	X X		3
-08	SB-10 (5'-6')	4/11/22	1235	SO	JJW	X X		3
-09	SB-11 (5'-7')	4/11/22	0930	SO	JJW	X X		3
-10	SB-11	4/11/22	1000	GW	JJW	X X		5

Container Type	Preservative
P= Plastic	A= None
A= Amber glass	B= HCl
V= Vial	C= HNO_3
G= Glass	D= H_2SO_4
B= Bacteria cup	E= NaOH
C= Cube	F= MeOH
O= Other	G= $NaHSO_4$
E= Encore	H = $Na_2S_2O_3$
D= BOD Bottle	I= Ascorbic Acid
	J = NH_4Cl
	K= Zn Acetate
	O= Other

	Container Type	Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	4/11/22-1625		4/11/22 16
NHSC	4/11/22 1630	AAL	4/11 1.22
AAL	4/11/22 1830		4/11/22 15:30

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

Serial_No:04252213:43

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL

8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 4/11/22

ALPHA Job #: L2218759

Client Information

Client: Stantec
Address: 5 Dartmouth Dr
Auburn, NH 03032
Phone: 603-498-4674
Email: N.Gardner@Stantec.com

Project Information

Project Name: Saco
Project Location: Saco, ME
Project #: 179450125/1956.08
Project Manager: Nate Gardner
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due:

Additional Project Information:
WSA# 1/1/19

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program ______ Criteria ______

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☒ Ranges & Targets ☐ Ranges Only; VPH: ☒ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO — Filtration: ☐ Field ☐ Lab to do; Preservation: ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	EPH	VPH	Sample Comments	TOTAL # BOTTLES
18759-11	SB-12(5'-6')	4/11/22	1100	SO	JJW	X	X		3
-12	SB-12	4/11/22	1130	GW	JJW	X	X		5

Container Type: P= Plastic, A= Amber glass, V= Vial, G= Glass, B= Bacteria cup, C= Cube, O= Other, E= Encore, D= BOD Bottle

Preservative: A= None, B= HCl, C= HNO_3, D= H_2SO_4, E= NaOH, F= MeOH, G= $NaHSO_4$, H = $Na_2S_2O_3$, I= Ascorbic Acid, J = NH_4Cl, K= Zn Acetate, O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/11/22 - 1625	[signature]	4/11/22 1625
NHSC 4/11/22 1630		F.Hall AAL 4/11/22	1630
F.Hall AAL 4/11/22	1830	[signature]	4/11/22 1830

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

ANALYTICAL REPORT

Lab Number:	L2218995
Client:	Stantec 5 Dartmouth Drive Suite 200 Auburn, NH 03032
ATTN:	Nat Gardner
Phone:	(603) 669-8600
Project Name:	SACO
Project Number:	179450125/1956.08
Report Date:	04/27/22

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2218995-01	SB-3(5'-7')	SOIL	SACO, ME	04/12/22 13:30	04/12/22
L2218995-02	SB-3	WATER	SACO, ME	04/12/22 14:00	04/12/22
L2218995-03	SB-5(5'-7')	SOIL	SACO, ME	04/12/22 12:15	04/12/22
L2218995-04	SB-5	WATER	SACO, ME	04/12/22 12:40	04/12/22
L2218995-05	SB-6(5'-6')	SOIL	SACO, ME	04/12/22 09:00	04/12/22
L2218995-06	SB-6	WATER	SACO, ME	04/12/22 09:30	04/12/22
L2218995-07	SB-7(5'-6')	SOIL	SACO, ME	04/12/22 10:15	04/12/22
L2218995-08	SB-7	WATER	SACO, ME	04/12/22 10:40	04/12/22

Project Name:	SACO	**Lab Number:**	L2218995
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

Case Narrative

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

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

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

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

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

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

Project Name:	SACO	**Lab Number:**	L2218995
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

Case Narrative (continued)

EPH

L2218995-06: The surrogate recovery was outside the acceptance criteria for chloro-octadecane (23%); however, re-extraction achieved a similar result: chloro-octadecane (33%). The results of both extractions are reported; however, all associated compounds are considered to have a potential bias.

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

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 04/27/22

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-01	Date Collected:	04/12/22 13:30
Client ID:	SB-3(5'-7')	Date Received:	04/12/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 17:59		
Analyst:	MKS		
Percent Solids:	79%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Volatile Petroleum Hydrocarbons - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C5-C8 Aliphatics	ND		mg/kg	8.58	--	1
C9-C12 Aliphatics	ND		mg/kg	8.58	--	1
C9-C10 Aromatics	ND		mg/kg	8.58	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	8.58	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	8.58	--	1
Benzene	ND		mg/kg	0.172	--	1
Toluene	ND		mg/kg	0.172	--	1
Ethylbenzene	ND		mg/kg	0.172	--	1
p/m-Xylene	ND		mg/kg	0.172	--	1
o-Xylene	ND		mg/kg	0.172	--	1
Methyl tert butyl ether	ND		mg/kg	0.086	--	1
Naphthalene	ND		mg/kg	0.343	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	107		70-130
2,5-Dibromotoluene-FID	111		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-01			Date Collected:	04/12/22 13:30
Client ID:	SB-3(5'-7')			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/13/22 00:17
Analytical Date:	04/15/22 10:10	M.S. Analytical Date:	04/15/22 20:49	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	DV	Cleanup Date1:	04/14/22
Percent Solids:	79%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.39	--	1
C19-C36 Aliphatics	ND		mg/kg	8.39	--	1
C11-C22 Aromatics	ND		mg/kg	8.39	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.39	--	1
Naphthalene	ND		mg/kg	0.034	--	1
2-Methylnaphthalene	ND		mg/kg	0.034	--	1
Acenaphthylene	ND		mg/kg	0.034	--	1
Acenaphthene	ND		mg/kg	0.034	--	1
Fluorene	ND		mg/kg	0.034	--	1
Phenanthrene	ND		mg/kg	0.034	--	1
Anthracene	ND		mg/kg	0.034	--	1
Fluoranthene	ND		mg/kg	0.034	--	1
Pyrene	ND		mg/kg	0.034	--	1
Benzo(a)anthracene	ND		mg/kg	0.034	--	1
Chrysene	ND		mg/kg	0.034	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.034	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.034	--	1
Benzo(a)pyrene	ND		mg/kg	0.034	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.034	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.034	--	1
Benzo(ghi)perylene	ND		mg/kg	0.034	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-01
Client ID: SB-3(5'-7')
Sample Location: SACO, ME
Date Collected: 04/12/22 13:30
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	73		40-140
o-Terphenyl	66		40-140
2-Fluorobiphenyl	77		40-140
2-Bromonaphthalene	77		40-140
O-Terphenyl-MS	104		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-02
Client ID: SB-3
Sample Location: SACO, ME
Date Collected: 04/12/22 14:00
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/22/22 11:07
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	96		70-130
2,5-Dibromotoluene-FID	89		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-02			Date Collected:	04/12/22 14:00
Client ID:	SB-3			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 00:36
Analytical Date:	04/18/22 13:27	M.S. Analytical Date:	04/18/22 11:13	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-02
Client ID: SB-3
Sample Location: SACO, ME
Date Collected: 04/12/22 14:00
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	41		40-140
o-Terphenyl	60		40-140
2-Fluorobiphenyl	71		40-140
2-Bromonaphthalene	73		40-140
O-Terphenyl-MS	70		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-03	Date Collected:	04/12/22 12:15
Client ID:	SB-5(5'-7')	Date Received:	04/12/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 18:29		
Analyst:	MKS		
Percent Solids:	88%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Volatile Petroleum Hydrocarbons - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C5-C8 Aliphatics	ND		mg/kg	6.23	--	1
C9-C12 Aliphatics	ND		mg/kg	6.23	--	1
C9-C10 Aromatics	ND		mg/kg	6.23	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.23	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.23	--	1
Benzene	ND		mg/kg	0.125	--	1
Toluene	ND		mg/kg	0.125	--	1
Ethylbenzene	ND		mg/kg	0.125	--	1
p/m-Xylene	ND		mg/kg	0.125	--	1
o-Xylene	ND		mg/kg	0.125	--	1
Methyl tert butyl ether	ND		mg/kg	0.062	--	1
Naphthalene	ND		mg/kg	0.249	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	107		70-130
2,5-Dibromotoluene-FID	111		70-130

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-03			Date Collected:	04/12/22 12:15
Client ID:	SB-5(5'-7')			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/13/22 00:17
Analytical Date:	04/15/22 10:34	M.S. Analytical Date:	04/15/22 21:06	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	DV	Cleanup Date1:	04/14/22
Percent Solids:	88%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.23	--	1
C19-C36 Aliphatics	ND		mg/kg	7.23	--	1
C11-C22 Aromatics	ND		mg/kg	7.23	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.23	--	1
Naphthalene	ND		mg/kg	0.029	--	1
2-Methylnaphthalene	ND		mg/kg	0.029	--	1
Acenaphthylene	ND		mg/kg	0.029	--	1
Acenaphthene	ND		mg/kg	0.029	--	1
Fluorene	ND		mg/kg	0.029	--	1
Phenanthrene	ND		mg/kg	0.029	--	1
Anthracene	ND		mg/kg	0.029	--	1
Fluoranthene	ND		mg/kg	0.029	--	1
Pyrene	ND		mg/kg	0.029	--	1
Benzo(a)anthracene	ND		mg/kg	0.029	--	1
Chrysene	ND		mg/kg	0.029	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.029	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.029	--	1
Benzo(a)pyrene	ND		mg/kg	0.029	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.029	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.029	--	1
Benzo(ghi)perylene	ND		mg/kg	0.029	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-03
Client ID: SB-5(5'-7')
Sample Location: SACO, ME
Date Collected: 04/12/22 12:15
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	64		40-140
o-Terphenyl	60		40-140
2-Fluorobiphenyl	70		40-140
2-Bromonaphthalene	69		40-140
O-Terphenyl-MS	101		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-04
Client ID: SB-5
Sample Location: SACO, ME
Date Collected: 04/12/22 12:40
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/22/22 11:37
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	107		70-130
2,5-Dibromotoluene-FID	99		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-04			Date Collected:	04/12/22 12:40
Client ID:	SB-5			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 00:36
Analytical Date:	04/18/22 13:52	M.S. Analytical Date:	04/18/22 11:30	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

EPH w/Targets via GCMS-SIM - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C9-C18 Aliphatics	106		ug/l	100	--	1
C19-C36 Aliphatics	303		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-04
Client ID: SB-5
Sample Location: SACO, ME
Date Collected: 04/12/22 12:40
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	52		40-140
o-Terphenyl	55		40-140
2-Fluorobiphenyl	65		40-140
2-Bromonaphthalene	64		40-140
O-Terphenyl-MS	66		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-05
Client ID: SB-6(5'-6')
Sample Location: SACO, ME
Date Collected: 04/12/22 09:00
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/22/22 19:00
Analyst: MKS
Percent Solids: 77%

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Volatile Petroleum Hydrocarbons - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C5-C8 Aliphatics	ND		mg/kg	7.44	--	1
C9-C12 Aliphatics	ND		mg/kg	7.44	--	1
C9-C10 Aromatics	ND		mg/kg	7.44	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.44	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.44	--	1
Benzene	ND		mg/kg	0.149	--	1
Toluene	ND		mg/kg	0.149	--	1
Ethylbenzene	ND		mg/kg	0.149	--	1
p/m-Xylene	ND		mg/kg	0.149	--	1
o-Xylene	ND		mg/kg	0.149	--	1
Methyl tert butyl ether	ND		mg/kg	0.074	--	1
Naphthalene	ND		mg/kg	0.298	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	108		70-130
2,5-Dibromotoluene-FID	112		70-130

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-05			Date Collected:	04/12/22 09:00
Client ID:	SB-6(5'-6')			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/13/22 00:17
Analytical Date:	04/15/22 10:59	M.S. Analytical Date:	04/15/22 21:22	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	DV	Cleanup Date1:	04/14/22
Percent Solids:	77%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.36	--	1
C19-C36 Aliphatics	ND		mg/kg	8.36	--	1
C11-C22 Aromatics	ND		mg/kg	8.36	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.36	--	1
Naphthalene	ND		mg/kg	0.033	--	1
2-Methylnaphthalene	ND		mg/kg	0.033	--	1
Acenaphthylene	ND		mg/kg	0.033	--	1
Acenaphthene	ND		mg/kg	0.033	--	1
Fluorene	ND		mg/kg	0.033	--	1
Phenanthrene	ND		mg/kg	0.033	--	1
Anthracene	ND		mg/kg	0.033	--	1
Fluoranthene	ND		mg/kg	0.033	--	1
Pyrene	ND		mg/kg	0.033	--	1
Benzo(a)anthracene	ND		mg/kg	0.033	--	1
Chrysene	ND		mg/kg	0.033	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.033	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.033	--	1
Benzo(a)pyrene	ND		mg/kg	0.033	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.033	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.033	--	1
Benzo(ghi)perylene	ND		mg/kg	0.033	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-05
Client ID: SB-6(5'-6')
Sample Location: SACO, ME
Date Collected: 04/12/22 09:00
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	66		40-140
o-Terphenyl	69		40-140
2-Fluorobiphenyl	81		40-140
2-Bromonaphthalene	80		40-140
O-Terphenyl-MS	102		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-06
Client ID: SB-6
Sample Location: SACO, ME
Date Collected: 04/12/22 09:30
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/22/22 12:07
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	108		70-130
2,5-Dibromotoluene-FID	102		70-130

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-06			Date Collected:	04/12/22 09:30
Client ID:	SB-6			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 00:36
Analytical Date:	04/18/22 14:17	M.S. Analytical Date:	04/26/22 12:24	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	200		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-06
Client ID: SB-6
Sample Location: SACO, ME
Date Collected: 04/12/22 09:30
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	**23**	Q	40-140
o-Terphenyl	49		40-140
2-Fluorobiphenyl	62		40-140
2-Bromonaphthalene	64		40-140
O-Terphenyl-MS	69		40-140

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-06	RE		Date Collected:	04/12/22 09:30
Client ID:	SB-6			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/25/22 16:33
Analytical Date:	04/26/22 17:26	M.S. Analytical Date:	04/26/22 12:24	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/26/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	154		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-06	RE	Date Collected:	04/12/22 09:30
Client ID:	SB-6		Date Received:	04/12/22
Sample Location:	SACO, ME		Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	**33**	Q	40-140
o-Terphenyl	57		40-140
2-Fluorobiphenyl	78		40-140
2-Bromonaphthalene	79		40-140
O-Terphenyl-MS	69		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-07	Date Collected:	04/12/22 10:15
Client ID:	SB-7(5'-6')	Date Received:	04/12/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 19:30		
Analyst:	MKS		
Percent Solids:	79%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	7.61	--	1
C9-C12 Aliphatics	ND		mg/kg	7.61	--	1
C9-C10 Aromatics	ND		mg/kg	7.61	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.61	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.61	--	1
Benzene	ND		mg/kg	0.152	--	1
Toluene	ND		mg/kg	0.152	--	1
Ethylbenzene	ND		mg/kg	0.152	--	1
p/m-Xylene	ND		mg/kg	0.152	--	1
o-Xylene	ND		mg/kg	0.152	--	1
Methyl tert butyl ether	ND		mg/kg	0.076	--	1
Naphthalene	ND		mg/kg	0.304	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	102		70-130
2,5-Dibromotoluene-FID	106		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-07			Date Collected:	04/12/22 10:15
Client ID:	SB-7(5'-6')			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/13/22 00:17
Analytical Date:	04/15/22 11:24	M.S. Analytical Date:	04/15/22 21:39	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	DV	Cleanup Date1:	04/14/22
Percent Solids:	79%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.39	--	1
C19-C36 Aliphatics	ND		mg/kg	8.39	--	1
C11-C22 Aromatics	ND		mg/kg	8.39	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.39	--	1
Naphthalene	ND		mg/kg	0.034	--	1
2-Methylnaphthalene	ND		mg/kg	0.034	--	1
Acenaphthylene	ND		mg/kg	0.034	--	1
Acenaphthene	ND		mg/kg	0.034	--	1
Fluorene	ND		mg/kg	0.034	--	1
Phenanthrene	ND		mg/kg	0.034	--	1
Anthracene	ND		mg/kg	0.034	--	1
Fluoranthene	0.037		mg/kg	0.034	--	1
Pyrene	0.034		mg/kg	0.034	--	1
Benzo(a)anthracene	ND		mg/kg	0.034	--	1
Chrysene	ND		mg/kg	0.034	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.034	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.034	--	1
Benzo(a)pyrene	ND		mg/kg	0.034	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.034	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.034	--	1
Benzo(ghi)perylene	ND		mg/kg	0.034	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-07
Client ID: SB-7(5'-6')
Sample Location: SACO, ME
Date Collected: 04/12/22 10:15
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	61		40-140
o-Terphenyl	75		40-140
2-Fluorobiphenyl	86		40-140
2-Bromonaphthalene	85		40-140
O-Terphenyl-MS	104		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-08	Date Collected:	04/12/22 10:40
Client ID:	SB-7	Date Received:	04/12/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Water		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 12:37		
Analyst:	MKS		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	107		70-130
2,5-Dibromotoluene-FID	100		70-130

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2218995-08			Date Collected:	04/12/22 10:40
Client ID:	SB-7			Date Received:	04/12/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/25/22 16:33
Analytical Date:	04/26/22 17:51	M.S. Analytical Date:	04/26/22 12:41	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	AH	Cleanup Date1:	04/26/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-08
Client ID: SB-7
Sample Location: SACO, ME
Date Collected: 04/12/22 10:40
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	42		40-140
o-Terphenyl	68		40-140
2-Fluorobiphenyl	76		40-140
2-Bromonaphthalene	76		40-140
O-Terphenyl-MS	78		40-140

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/15/22 09:45
Analyst: JB

M.S. Analytical Date: 04/15/22 20:33
M.S. Analyst: DV

Extraction Method: EPA 3546
Extraction Date: 04/13/22 00:17
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/14/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01,03,05,07 Batch: WG1626484-1					
C9-C18 Aliphatics	ND		mg/kg	6.44	--
C19-C36 Aliphatics	ND		mg/kg	6.44	--
C11-C22 Aromatics	ND		mg/kg	6.44	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.44	--
Naphthalene	ND		mg/kg	0.026	--
2-Methylnaphthalene	ND		mg/kg	0.026	--
Acenaphthylene	ND		mg/kg	0.026	--
Acenaphthene	ND		mg/kg	0.026	--
Fluorene	ND		mg/kg	0.026	--
Phenanthrene	ND		mg/kg	0.026	--
Anthracene	ND		mg/kg	0.026	--
Fluoranthene	ND		mg/kg	0.026	--
Pyrene	ND		mg/kg	0.026	--
Benzo(a)anthracene	ND		mg/kg	0.026	--
Chrysene	ND		mg/kg	0.026	--
Benzo(b)fluoranthene	ND		mg/kg	0.026	--
Benzo(k)fluoranthene	ND		mg/kg	0.026	--
Benzo(a)pyrene	ND		mg/kg	0.026	--
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.026	--
Dibenzo(a,h)anthracene	ND		mg/kg	0.026	--
Benzo(ghi)perylene	ND		mg/kg	0.026	--

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/15/22 09:45
Analyst: JB
M.S. Analytical Date: 04/15/22 20:33
M.S. Analyst: DV
Extraction Method: EPA 3546
Extraction Date: 04/13/22 00:17
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/14/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01,03,05,07 Batch: WG1626484-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	74		40-140
o-Terphenyl	68		40-140
2-Fluorobiphenyl	78		40-140
2-Bromonaphthalene	78		40-140
O-Terphenyl-MS	104		40-140

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/18/22 10:58
Analyst: MEO

M.S. Analytical Date: 04/18/22 09:02
M.S. Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/16/22 00:36
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/17/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 02,04,06 Batch: WG1627902-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/18/22 10:58
Analyst: MEO

M.S. Analytical Date: 04/18/22 09:02
M.S. Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/16/22 00:36
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/17/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 02,04,06 Batch: WG1627902-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	49		40-140
o-Terphenyl	55		40-140
2-Fluorobiphenyl	65		40-140
2-Bromonaphthalene	66		40-140
O-Terphenyl-MS	72		40-140

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/22/22 10:03
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 02,04,06,08 Batch: WG1630589-4					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	96		70-130
2,5-Dibromotoluene-FID	90		70-130

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/26/22 17:01
Analyst: JB

M.S. Analytical Date: 04/26/22 12:08
M.S. Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 04/25/22 12:17
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/26/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 06,08 Batch: WG1630725-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/26/22 17:01
Analyst: JB
M.S. Analytical Date: 04/26/22 12:08
M.S. Analyst: AH
Extraction Method: EPA 3510C
Extraction Date: 04/25/22 12:17
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/26/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 06,08 Batch: WG1630725-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	79		40-140
o-Terphenyl	77		40-140
2-Fluorobiphenyl	81		40-140
2-Bromonaphthalene	81		40-140
O-Terphenyl-MS	86		40-140

Project Name: SACO **Lab Number:** L2218995

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/22/22 10:06
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01,03,05,07 Batch: WG1630728-4					
C5-C8 Aliphatics	ND		mg/kg	5.00	--
C9-C12 Aliphatics	ND		mg/kg	5.00	--
C9-C10 Aromatics	ND		mg/kg	5.00	--
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.00	--
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.00	--
Benzene	ND		mg/kg	0.100	--
Toluene	ND		mg/kg	0.100	--
Ethylbenzene	ND		mg/kg	0.100	--
p/m-Xylene	ND		mg/kg	0.100	--
o-Xylene	ND		mg/kg	0.100	--
Methyl tert butyl ether	ND		mg/kg	0.050	--
Naphthalene	ND		mg/kg	0.200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	97		70-130
2,5-Dibromotoluene-FID	100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab	Associated sample(s): 01,03,05,07		Batch: WG1626484-2 WG1626484-3					
C9-C18 Aliphatics	70		71		40-140	1		25
C19-C36 Aliphatics	92		81		40-140	13		25
C11-C22 Aromatics	83		46		40-140	**57**	Q	25
Naphthalene	95		45		40-140	**71**	Q	25
2-Methylnaphthalene	106		50		40-140	**72**	Q	25
Acenaphthylene	114		53		40-140	**73**	Q	25
Acenaphthene	100		47		40-140	**72**	Q	25
Fluorene	110		52		40-140	**72**	Q	25
Phenanthrene	102		50		40-140	**68**	Q	25
Anthracene	114		56		40-140	**68**	Q	25
Fluoranthene	119		60		40-140	**66**	Q	25
Pyrene	117		60		40-140	**64**	Q	25
Benzo(a)anthracene	128		62		40-140	**69**	Q	25
Chrysene	109		54		40-140	**67**	Q	25
Benzo(b)fluoranthene	119		58		40-140	**69**	Q	25
Benzo(k)fluoranthene	109		54		40-140	**67**	Q	25
Benzo(a)pyrene	132		65		40-140	**68**	Q	25
Indeno(1,2,3-cd)Pyrene	**148**	Q	72		40-140	**69**	Q	25
Dibenzo(a,h)anthracene	130		66		40-140	**65**	Q	25
Benzo(ghi)perylene	113		57		40-140	**66**	Q	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01,03,05,07 Batch: WG1626484-2 WG1626484-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	84		72		40-140
o-Terphenyl	74		40		40-140
2-Fluorobiphenyl	79		45		40-140
2-Bromonaphthalene	79		46		40-140
O-Terphenyl-MS	107		52		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 02,04,06 Batch: WG1627902-2 WG1627902-3								
C9-C18 Aliphatics	49		49		40-140	0		25
C19-C36 Aliphatics	67		61		40-140	9		25
C11-C22 Aromatics	61		61		40-140	0		25
Naphthalene	75		67		40-140	11		25
2-Methylnaphthalene	78		69		40-140	12		25
Acenaphthylene	80		70		40-140	13		25
Acenaphthene	85		74		40-140	14		25
Fluorene	91		82		40-140	10		25
Phenanthrene	84		79		40-140	6		25
Anthracene	91		86		40-140	6		25
Fluoranthene	93		89		40-140	4		25
Pyrene	95		92		40-140	3		25
Benzo(a)anthracene	98		96		40-140	2		25
Chrysene	87		87		40-140	0		25
Benzo(b)fluoranthene	89		93		40-140	4		25
Benzo(k)fluoranthene	90		81		40-140	11		25
Benzo(a)pyrene	96		92		40-140	4		25
Indeno(1,2,3-cd)Pyrene	106		105		40-140	1		25
Dibenzo(a,h)anthracene	104		103		40-140	1		25
Benzo(ghi)perylene	90		88		40-140	2		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 02,04,06 Batch: WG1627902-2 WG1627902-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	53		49		40-140
o-Terphenyl	55		54		40-140
2-Fluorobiphenyl	61		65		40-140
2-Bromonaphthalene	62		66		40-140
O-Terphenyl-MS	79		74		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 02,04,06,08 Batch: WG1630589-2 WG1630589-3								
C5-C8 Aliphatics	99		109		70-130	9		25
C9-C12 Aliphatics	97		107		70-130	9		25
C9-C10 Aromatics	96		105		70-130	9		25
Benzene	98		109		70-130	10		25
Toluene	98		108		70-130	9		25
Ethylbenzene	99		109		70-130	9		25
p/m-Xylene	100		109		70-130	9		25
o-Xylene	99		108		70-130	9		25
Methyl tert butyl ether	102		114		70-130	11		25
Naphthalene	98		109		70-130	11		25
1,2,4-Trimethylbenzene	96		105		70-130	9		25
Pentane	100		111		70-130	11		25
2-Methylpentane	101		111		70-130	9		25
2,2,4-Trimethylpentane	96		106		70-130	9		25
n-Nonane	98		108		30-130	10		25
n-Decane	97		107		70-130	9		25
n-Butylcyclohexane	96		106		70-130	10		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	97		106		70-130
2,5-Dibromotoluene-FID	89		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SACO

Project Number: 179450125/1956.08

Lab Number: L2218995

Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 06,08 Batch: WG1630725-2 WG1630725-3								
C9-C18 Aliphatics	70		55		40-140	24		25
C19-C36 Aliphatics	84		80		40-140	5		25
C11-C22 Aromatics	80		75		40-140	6		25
Naphthalene	82		72		40-140	13		25
2-Methylnaphthalene	93		82		40-140	13		25
Acenaphthylene	101		89		40-140	13		25
Acenaphthene	95		83		40-140	13		25
Fluorene	102		91		40-140	11		25
Phenanthrene	99		89		40-140	11		25
Anthracene	107		95		40-140	12		25
Fluoranthene	113		100		40-140	12		25
Pyrene	114		102		40-140	11		25
Benzo(a)anthracene	108		95		40-140	13		25
Chrysene	102		95		40-140	7		25
Benzo(b)fluoranthene	107		100		40-140	7		25
Benzo(k)fluoranthene	106		93		40-140	13		25
Benzo(a)pyrene	122		109		40-140	11		25
Indeno(1,2,3-cd)Pyrene	126		111		40-140	13		25
Dibenzo(a,h)anthracene	110		99		40-140	11		25
Benzo(ghi)perylene	94		84		40-140	11		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 06,08 Batch: WG1630725-2 WG1630725-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	77		71		40-140
o-Terphenyl	73		68		40-140
2-Fluorobiphenyl	80		79		40-140
2-Bromonaphthalene	81		80		40-140
O-Terphenyl-MS	97		86		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01,03,05,07 Batch: WG1630728-2 WG1630728-3								
C5-C8 Aliphatics	107		106		70-130	1		25
C9-C12 Aliphatics	94		100		70-130	6		25
C9-C10 Aromatics	92		93		70-130	0		25
Benzene	100		100		70-130	0		25
Toluene	94		93		70-130	2		25
Ethylbenzene	96		96		70-130	0		25
p/m-Xylene	97		97		70-130	0		25
o-Xylene	94		94		70-130	1		25
Methyl tert butyl ether	96		97		70-130	1		25
Naphthalene	90		89		70-130	1		25
1,2,4-Trimethylbenzene	93		93		70-130	0		25
Pentane	102		102		70-130	0		25
2-Methylpentane	113		112		70-130	1		25
2,2,4-Trimethylpentane	104		103		70-130	1		25
n-Nonane	91		94		30-130	3		25
n-Decane	87		101		70-130	15		25
n-Butylcyclohexane	103		106		70-130	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	93		93		70-130
2,5-Dibromotoluene-FID	96		96		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-01
Client ID: SB-3(5'-7')
Sample Location: SACO, ME

Date Collected: 04/12/22 13:30
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	79.2		%	0.100	NA	1	-	04/13/22 11:25	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-03
Client ID: SB-5(5'-7')
Sample Location: SACO, ME

Date Collected: 04/12/22 12:15
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.8		%	0.100	NA	1	-	04/13/22 11:25	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-05
Client ID: SB-6(5'-6')
Sample Location: SACO, ME

Date Collected: 04/12/22 09:00
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.9		%	0.100	NA	1	-	04/13/22 11:25	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2218995-07
Client ID: SB-7(5'-6')
Sample Location: SACO, ME

Date Collected: 04/12/22 10:15
Date Received: 04/12/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78.7		%	0.100	NA	1	-	04/13/22 11:25	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2218995
Report Date: 04/27/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01,03,05,07 Batch: WG1626578-2										
Solids, Total	100		%	0.100	NA	1	-	04/13/22 11:25	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: SACO

Project Number: 179450125/1956.08

Lab Number: L2218995

Report Date: 04/27/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07 QC Batch ID: WG1626578-1 QC Sample: L2218995-01 Client ID: SB-3(5'-7')						
Solids, Total	79.2	78.3	%	1		20

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2218995-01A	Vial MeOH preserved	A	NA		2.2	Y	Absent		VPH-DELUX-18(28)
L2218995-01B	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		ME-TS-2540(7)
L2218995-01C	Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-02A	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-02B	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-02C	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-02D	Amber 1000ml HCl preserved	A	<2	<2	2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-02E	Amber 1000ml HCl preserved	A	<2	<2	2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-03A	Vial MeOH preserved	A	NA		2.2	Y	Absent		VPH-DELUX-18(28)
L2218995-03B	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		ME-TS-2540(7)
L2218995-03C	Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-04A	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-04B	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-04C	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-04D	Amber 1000ml HCl preserved	A	<2	<2	2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-04E	Amber 1000ml HCl preserved	A	<2	<2	2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-05A	Vial MeOH preserved	A	NA		2.2	Y	Absent		VPH-DELUX-18(28)
L2218995-05B	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		ME-TS-2540(7)
L2218995-05C	Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-06A	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-06B	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-06C	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-06D	Amber 1000ml HCl preserved	A	<2	<2	2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)

*Values in parentheses indicate holding time in days

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2218995
Report Date: 04/27/22

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2218995-06E	Amber 1000ml HCl preserved	A	<2	<2	2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-07A	Vial MeOH preserved	A	NA		2.2	Y	Absent		VPH-DELUX-18(28)
L2218995-07B	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		ME-TS-2540(7)
L2218995-07C	Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-08A	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-08B	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-08C	Vial HCl preserved	A	NA		2.2	Y	Absent		ME-VPH-DELUX-18(14)
L2218995-08D	Amber 1000ml HCl preserved	A	<2	<2	2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2218995-08E	Amber 1000ml HCl preserved	A	<2	<2	2.2	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)

*Values in parentheses indicate holding time in days

Project Name:	SACO	**Lab Number:**	L2218995
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	SACO	**Lab Number:**	L2218995
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	SACO	**Lab Number:**	L2218995
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	SACO	**Lab Number:**	L2218995
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

REFERENCES

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

131 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, February 2018, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, June 1, 2018.

135 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, December 2019, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, March 1, 2020.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/12/22

ALPHA Job #: L2218995

ALPHA ANALYTICAL — Where Client Comes First
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: STANTEC
Address: 5 Dartmouth Dr
Auburn, NH 03032
Phone: 603-498-4674
Email: N.GARDNER@STANTEC.COM

Project Information

Project Name: SACO
Project Location: SACO, ME
Project #: 179450125 / 195.08
Project Manager: NATE GARDNER
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Additional Project Information:
MSA @ 1/1/19

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☐ RCRA8	EPH: ☒ Ranges & Targets ☐ PP13 ☐ Ranges Only	VPH: ☒ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do	Sample Comments	TOTAL # BOTTLES
18995-01	SB-3 (5'-7')	4/12/22	1330	SO	JJW					X	X					3
-02	SB-3	4/12/22	1400	GW	JJW					X	X					5
-03	SB-5 (5'-7')	4/12/22	1215	SO	JJW					X	X					3
-04	SB-5	4/12/22	1240	GW	JJW					X	X					5
-05	SB-6 (5'-6')	4/12/22	0900	SO	JJW					X	X					3
-06	SB-6	4/12/22	0930	GW	JJW					X	X					5
-07	SB-7 (5'-6')	4/12/22	1015	SO	JJW					X	X					3
-08	SB-7	4/12/22	1040	GW	JJW					X	X					5

Container Type																
Preservative																

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	4/12/22-1515		4/12/22 1515
	4/12/22		4/12/22 1715
Joseph C. Burgess	4/12/22 17:50		4/12/22 17:50

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

ANALYTICAL REPORT

Lab Number:	L2219199
Client:	Stantec 5 Dartmouth Drive Suite 200 Auburn, NH 03032
ATTN:	Nat Gardner
Phone:	(603) 669-8600
Project Name:	SACO
Project Number:	179450125/1956.08
Report Date:	04/27/22

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2219199-01	SB-1(2'-3')	SOIL	SACO, ME	04/13/22 10:25	04/13/22
L2219199-02	SB-1	WATER	SACO, ME	04/13/22 11:00	04/13/22
L2219199-03	SB-2(2'-3')	SOIL	SACO, ME	04/13/22 09:35	04/13/22
L2219199-04	SB-2(5'-7')	SOIL	SACO, ME	04/13/22 09:15	04/13/22
L2219199-05	SB-2(10'-12')	SOIL	SACO, ME	04/13/22 09:25	04/13/22
L2219199-06	SB-2	WATER	SACO, ME	04/13/22 10:40	04/13/22
L2219199-07	SB-4(5'-7')	SOIL	SACO, ME	04/13/22 11:40	04/13/22
L2219199-08	SB-4	WATER	SACO, ME	04/13/22 12:15	04/13/22
L2219199-09	TRIP BLANKS	WATER	SACO, ME	04/07/22 00:00	04/13/22
L2219199-10	TRIP BLANKS	WATER	SACO, ME	04/07/22 00:00	04/13/22

Project Name:	SACO	**Lab Number:**	L2219199
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

Case Narrative

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

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

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

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

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

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

Project Name:	SACO	**Lab Number:**	L2219199
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

Case Narrative (continued)

Sample Receipt

L2219199-09 and -10: A sample identified as "TRIP BLANKS" was received, but not listed on the Chain of Custody. This sample was not analyzed.

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

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 04/27/22

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-01	Date Collected:	04/13/22 10:25
Client ID:	SB-1(2'-3')	Date Received:	04/13/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 20:00		
Analyst:	MKS		
Percent Solids:	88%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Volatile Petroleum Hydrocarbons - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C5-C8 Aliphatics	ND		mg/kg	6.76	--	1
C9-C12 Aliphatics	ND		mg/kg	6.76	--	1
C9-C10 Aromatics	ND		mg/kg	6.76	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.76	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.76	--	1
Benzene	ND		mg/kg	0.135	--	1
Toluene	ND		mg/kg	0.135	--	1
Ethylbenzene	ND		mg/kg	0.135	--	1
p/m-Xylene	ND		mg/kg	0.135	--	1
o-Xylene	ND		mg/kg	0.135	--	1
Methyl tert butyl ether	ND		mg/kg	0.068	--	1
Naphthalene	ND		mg/kg	0.271	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	97		70-130
2,5-Dibromotoluene-FID	100		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-01			Date Collected:	04/13/22 10:25
Client ID:	SB-1(2'-3')			Date Received:	04/13/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/15/22 14:07
Analytical Date:	04/18/22 16:31	M.S. Analytical Date:	04/27/22 13:43	Cleanup Method1:	EPH-19-2.1
Analyst:	SC	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22
Percent Solids:	88%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.22	--	1
C19-C36 Aliphatics	ND		mg/kg	7.22	--	1
C11-C22 Aromatics	ND		mg/kg	7.22	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.22	--	1
Naphthalene	0.070		mg/kg	0.029	--	1
2-Methylnaphthalene	ND		mg/kg	0.029	--	1
Acenaphthylene	ND		mg/kg	0.029	--	1
Acenaphthene	ND		mg/kg	0.029	--	1
Fluorene	ND		mg/kg	0.029	--	1
Phenanthrene	0.069		mg/kg	0.029	--	1
Anthracene	ND		mg/kg	0.029	--	1
Fluoranthene	0.032		mg/kg	0.029	--	1
Pyrene	ND		mg/kg	0.029	--	1
Benzo(a)anthracene	ND		mg/kg	0.029	--	1
Chrysene	ND		mg/kg	0.029	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.029	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.029	--	1
Benzo(a)pyrene	ND		mg/kg	0.029	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.029	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.029	--	1
Benzo(ghi)perylene	ND		mg/kg	0.029	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-01
Client ID: SB-1(2'-3')
Sample Location: SACO, ME
Date Collected: 04/13/22 10:25
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	43		40-140
2-Fluorobiphenyl	45		40-140
2-Bromonaphthalene	47		40-140
O-Terphenyl-MS	79		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-02
Client ID: SB-1
Sample Location: SACO, ME
Date Collected: 04/13/22 11:00
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/24/22 18:06
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	97		70-130
2,5-Dibromotoluene-FID	91		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-02			Date Collected:	04/13/22 11:00
Client ID:	SB-1			Date Received:	04/13/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 04:11
Analytical Date:	04/18/22 00:24	M.S. Analytical Date:	04/18/22 17:10	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-02
Client ID: SB-1
Sample Location: SACO, ME
Date Collected: 04/13/22 11:00
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	55		40-140
o-Terphenyl	73		40-140
2-Fluorobiphenyl	71		40-140
2-Bromonaphthalene	71		40-140
O-Terphenyl-MS	86		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-03	Date Collected:	04/13/22 09:35
Client ID:	SB-2(2'-3')	Date Received:	04/13/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 20:30		
Analyst:	MKS		
Percent Solids:	78%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Volatile Petroleum Hydrocarbons - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C5-C8 Aliphatics	ND		mg/kg	7.38	--	1
C9-C12 Aliphatics	ND		mg/kg	7.38	--	1
C9-C10 Aromatics	ND		mg/kg	7.38	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.38	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.38	--	1
Benzene	ND		mg/kg	0.148	--	1
Toluene	ND		mg/kg	0.148	--	1
Ethylbenzene	ND		mg/kg	0.148	--	1
p/m-Xylene	ND		mg/kg	0.148	--	1
o-Xylene	ND		mg/kg	0.148	--	1
Methyl tert butyl ether	ND		mg/kg	0.074	--	1
Naphthalene	ND		mg/kg	0.295	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	117		70-130
2,5-Dibromotoluene-FID	121		70-130

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-03			Date Collected:	04/13/22 09:35
Client ID:	SB-2(2'-3')			Date Received:	04/13/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/15/22 14:07
Analytical Date:	04/18/22 17:00	M.S. Analytical Date:	04/18/22 17:31	Cleanup Method1:	EPH-19-2.1
Analyst:	SC	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22
Percent Solids:	78%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.05	--	1
C19-C36 Aliphatics	ND		mg/kg	8.05	--	1
C11-C22 Aromatics	ND		mg/kg	8.05	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.05	--	1
Naphthalene	ND		mg/kg	0.032	--	1
2-Methylnaphthalene	ND		mg/kg	0.032	--	1
Acenaphthylene	ND		mg/kg	0.032	--	1
Acenaphthene	ND		mg/kg	0.032	--	1
Fluorene	ND		mg/kg	0.032	--	1
Phenanthrene	ND		mg/kg	0.032	--	1
Anthracene	ND		mg/kg	0.032	--	1
Fluoranthene	ND		mg/kg	0.032	--	1
Pyrene	ND		mg/kg	0.032	--	1
Benzo(a)anthracene	ND		mg/kg	0.032	--	1
Chrysene	ND		mg/kg	0.032	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.032	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.032	--	1
Benzo(a)pyrene	ND		mg/kg	0.032	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.032	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.032	--	1
Benzo(ghi)perylene	ND		mg/kg	0.032	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-03
Client ID: SB-2(2'-3')
Sample Location: SACO, ME
Date Collected: 04/13/22 09:35
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	53		40-140
2-Fluorobiphenyl	58		40-140
2-Bromonaphthalene	59		40-140
O-Terphenyl-MS	45		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-04	Date Collected:	04/13/22 09:15
Client ID:	SB-2(5'-7')	Date Received:	04/13/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 22:00		
Analyst:	MKS		
Percent Solids:	82%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	6.65	--	1
C9-C12 Aliphatics	82.6		mg/kg	6.65	--	1
C9-C10 Aromatics	50.5		mg/kg	6.65	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.65	--	1
C9-C12 Aliphatics, Adjusted	32.1		mg/kg	6.65	--	1
Benzene	ND		mg/kg	0.133	--	1
Toluene	ND		mg/kg	0.133	--	1
Ethylbenzene	ND		mg/kg	0.133	--	1
p/m-Xylene	ND		mg/kg	0.133	--	1
o-Xylene	ND		mg/kg	0.133	--	1
Methyl tert butyl ether	ND		mg/kg	0.067	--	1
Naphthalene	1.55		mg/kg	0.266	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	91		70-130
2,5-Dibromotoluene-FID	77		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-04			Date Collected:	04/13/22 09:15
Client ID:	SB-2(5'-7')			Date Received:	04/13/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/15/22 14:07
Analytical Date:	04/18/22 23:41	M.S. Analytical Date:	04/18/22 17:48	Cleanup Method1:	EPH-19-2.1
Analyst:	SC	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22
Percent Solids:	82%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	106		mg/kg	8.06	--	1
C19-C36 Aliphatics	39.3		mg/kg	8.06	--	1
C11-C22 Aromatics	85.3		mg/kg	8.06	--	1
C11-C22 Aromatics, Adjusted	83.3		mg/kg	8.06	--	1
Naphthalene	0.184		mg/kg	0.032	--	1
2-Methylnaphthalene	1.16		mg/kg	0.032	--	1
Acenaphthylene	ND		mg/kg	0.032	--	1
Acenaphthene	0.084		mg/kg	0.032	--	1
Fluorene	0.212		mg/kg	0.032	--	1
Phenanthrene	0.306		mg/kg	0.032	--	1
Anthracene	ND		mg/kg	0.032	--	1
Fluoranthene	ND		mg/kg	0.032	--	1
Pyrene	0.051		mg/kg	0.032	--	1
Benzo(a)anthracene	ND		mg/kg	0.032	--	1
Chrysene	ND		mg/kg	0.032	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.032	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.032	--	1
Benzo(a)pyrene	ND		mg/kg	0.032	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.032	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.032	--	1
Benzo(ghi)perylene	ND		mg/kg	0.032	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-04
Client ID: SB-2(5'-7')
Sample Location: SACO, ME
Date Collected: 04/13/22 09:15
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	50		40-140
o-Terphenyl	57		40-140
2-Fluorobiphenyl	63		40-140
2-Bromonaphthalene	51		40-140
O-Terphenyl-MS	45		40-140

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-05	Date Collected:	04/13/22 09:25
Client ID:	SB-2(10'-12')	Date Received:	04/13/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 21:00		
Analyst:	MKS		
Percent Solids:	75%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		mg/kg	7.65	--	1
C9-C12 Aliphatics	ND		mg/kg	7.65	--	1
C9-C10 Aromatics	ND		mg/kg	7.65	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.65	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.65	--	1
Benzene	ND		mg/kg	0.153	--	1
Toluene	ND		mg/kg	0.153	--	1
Ethylbenzene	ND		mg/kg	0.153	--	1
p/m-Xylene	ND		mg/kg	0.153	--	1
o-Xylene	ND		mg/kg	0.153	--	1
Methyl tert butyl ether	ND		mg/kg	0.077	--	1
Naphthalene	ND		mg/kg	0.306	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	117		70-130
2,5-Dibromotoluene-FID	122		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-05			Date Collected:	04/13/22 09:25
Client ID:	SB-2(10'-12')			Date Received:	04/13/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/15/22 14:07
Analytical Date:	04/19/22 00:06	M.S. Analytical Date:	04/27/22 13:59	Cleanup Method1:	EPH-19-2.1
Analyst:	SC	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22
Percent Solids:	75%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.54	--	1
C19-C36 Aliphatics	ND		mg/kg	8.54	--	1
C11-C22 Aromatics	ND		mg/kg	8.54	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	8.54	--	1
Naphthalene	ND		mg/kg	0.034	--	1
2-Methylnaphthalene	ND		mg/kg	0.034	--	1
Acenaphthylene	ND		mg/kg	0.034	--	1
Acenaphthene	ND		mg/kg	0.034	--	1
Fluorene	ND		mg/kg	0.034	--	1
Phenanthrene	ND		mg/kg	0.034	--	1
Anthracene	ND		mg/kg	0.034	--	1
Fluoranthene	ND		mg/kg	0.034	--	1
Pyrene	ND		mg/kg	0.034	--	1
Benzo(a)anthracene	ND		mg/kg	0.034	--	1
Chrysene	ND		mg/kg	0.034	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.034	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.034	--	1
Benzo(a)pyrene	ND		mg/kg	0.034	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.034	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.034	--	1
Benzo(ghi)perylene	ND		mg/kg	0.034	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-05
Client ID: SB-2(10'-12')
Sample Location: SACO, ME
Date Collected: 04/13/22 09:25
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	45		40-140
o-Terphenyl	46		40-140
2-Fluorobiphenyl	55		40-140
2-Bromonaphthalene	56		40-140
O-Terphenyl-MS	87		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-06
Client ID: SB-2
Sample Location: SACO, ME
Date Collected: 04/13/22 10:40
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/24/22 18:36
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	104		70-130
2,5-Dibromotoluene-FID	99		70-130

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-06			Date Collected:	04/13/22 10:40
Client ID:	SB-2			Date Received:	04/13/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 04:11
Analytical Date:	04/18/22 00:59	M.S. Analytical Date:	04/18/22 17:26	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

EPH w/Targets via GCMS-SIM - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	123		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	120		ug/l	100	--	1
Naphthalene	0.672		ug/l	0.400	--	1
2-Methylnaphthalene	2.11		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-06
Client ID: SB-2
Sample Location: SACO, ME
Date Collected: 04/13/22 10:40
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	56		40-140
o-Terphenyl	82		40-140
2-Fluorobiphenyl	81		40-140
2-Bromonaphthalene	82		40-140
O-Terphenyl-MS	90		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-07	Date Collected:	04/13/22 11:40
Client ID:	SB-4(5'-7')	Date Received:	04/13/22
Sample Location:	SACO, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	131,VPH-18-2.1		
Analytical Date:	04/22/22 21:30		
Analyst:	MKS		
Percent Solids:	90%		

Trap:	EST, Carbopack B/Carboxen 1000&1001	Analytical Column:	Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Were samples received in methanol?	Covering the Soil
Methanol ratio:	1:1 +/- 25%

Volatile Petroleum Hydrocarbons - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C5-C8 Aliphatics	ND		mg/kg	5.82	--	1
C9-C12 Aliphatics	ND		mg/kg	5.82	--	1
C9-C10 Aromatics	ND		mg/kg	5.82	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.82	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.82	--	1
Benzene	ND		mg/kg	0.116	--	1
Toluene	ND		mg/kg	0.116	--	1
Ethylbenzene	ND		mg/kg	0.116	--	1
p/m-Xylene	ND		mg/kg	0.116	--	1
o-Xylene	ND		mg/kg	0.116	--	1
Methyl tert butyl ether	ND		mg/kg	0.058	--	1
Naphthalene	ND		mg/kg	0.233	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	91		70-130
2,5-Dibromotoluene-FID	95		70-130

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-07			Date Collected:	04/13/22 11:40
Client ID:	SB-4(5'-7')			Date Received:	04/13/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/15/22 14:07
Analytical Date:	04/19/22 00:32	M.S. Analytical Date:	04/18/22 18:20	Cleanup Method1:	EPH-19-2.1
Analyst:	SC	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22
Percent Solids:	90%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.00	--	1
C19-C36 Aliphatics	ND		mg/kg	7.00	--	1
C11-C22 Aromatics	ND		mg/kg	7.00	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.00	--	1
Naphthalene	ND		mg/kg	0.028	--	1
2-Methylnaphthalene	ND		mg/kg	0.028	--	1
Acenaphthylene	ND		mg/kg	0.028	--	1
Acenaphthene	ND		mg/kg	0.028	--	1
Fluorene	ND		mg/kg	0.028	--	1
Phenanthrene	ND		mg/kg	0.028	--	1
Anthracene	ND		mg/kg	0.028	--	1
Fluoranthene	ND		mg/kg	0.028	--	1
Pyrene	ND		mg/kg	0.028	--	1
Benzo(a)anthracene	ND		mg/kg	0.028	--	1
Chrysene	ND		mg/kg	0.028	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.028	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.028	--	1
Benzo(a)pyrene	ND		mg/kg	0.028	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.028	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.028	--	1
Benzo(ghi)perylene	ND		mg/kg	0.028	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-07
Client ID: SB-4(5'-7')
Sample Location: SACO, ME
Date Collected: 04/13/22 11:40
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	59		40-140
o-Terphenyl	61		40-140
2-Fluorobiphenyl	65		40-140
2-Bromonaphthalene	68		40-140
O-Terphenyl-MS	55		40-140

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-08
Client ID: SB-4
Sample Location: SACO, ME
Date Collected: 04/13/22 12:15
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/24/22 19:06
Analyst: MKS

Trap: EST, Carbopack B/Carboxen 1000&1001
Analytical Column: Restek, RTX-502.2, 105m, 0.53ID, 3um

Quality Control Information

Condition of sample received: Satisfactory
Aqueous Preservative: Laboratory Provided Preserved Container
Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	97		70-130
2,5-Dibromotoluene-FID	91		70-130

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

SAMPLE RESULTS

Lab ID:	L2219199-08			Date Collected:	04/13/22 12:15
Client ID:	SB-4			Date Received:	04/13/22
Sample Location:	SACO, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	135,EPH-19-2.1			Extraction Date:	04/16/22 04:11
Analytical Date:	04/18/22 01:33	M.S. Analytical Date:	04/18/22 17:42	Cleanup Method1:	EPH-19-2.1
Analyst:	JB	M.S. Analyst:	JJW	Cleanup Date1:	04/17/22

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

EPH w/Targets via GCMS-SIM - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-08
Client ID: SB-4
Sample Location: SACO, ME
Date Collected: 04/13/22 12:15
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	57		40-140
o-Terphenyl	73		40-140
2-Fluorobiphenyl	78		40-140
2-Bromonaphthalene	79		40-140
O-Terphenyl-MS	82		40-140

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/19/22 00:45
Analyst: JB

M.S. Analytical Date: 04/18/22 16:58
M.S. Analyst: JJW

Extraction Method: EPA 3546
Extraction Date: 04/16/22 08:50
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/17/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01,03-05,07 Batch: WG1627785-1					
C9-C18 Aliphatics	ND		mg/kg	6.46	--
C19-C36 Aliphatics	ND		mg/kg	6.46	--
C11-C22 Aromatics	ND		mg/kg	6.46	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.46	--
Naphthalene	ND		mg/kg	0.026	--
2-Methylnaphthalene	ND		mg/kg	0.026	--
Acenaphthylene	ND		mg/kg	0.026	--
Acenaphthene	ND		mg/kg	0.026	--
Fluorene	ND		mg/kg	0.026	--
Phenanthrene	ND		mg/kg	0.026	--
Anthracene	ND		mg/kg	0.026	--
Fluoranthene	ND		mg/kg	0.026	--
Pyrene	ND		mg/kg	0.026	--
Benzo(a)anthracene	ND		mg/kg	0.026	--
Chrysene	ND		mg/kg	0.026	--
Benzo(b)fluoranthene	ND		mg/kg	0.026	--
Benzo(k)fluoranthene	ND		mg/kg	0.026	--
Benzo(a)pyrene	ND		mg/kg	0.026	--
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.026	--
Dibenzo(a,h)anthracene	ND		mg/kg	0.026	--
Benzo(ghi)perylene	ND		mg/kg	0.026	--

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/19/22 00:45
Analyst: JB

M.S. Analytical Date: 04/18/22 16:58
M.S. Analyst: JJW

Extraction Method: EPA 3546
Extraction Date: 04/16/22 08:50
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/17/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01,03-05,07 Batch: WG1627785-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	59		40-140
o-Terphenyl	60		40-140
2-Fluorobiphenyl	69		40-140
2-Bromonaphthalene	68		40-140
O-Terphenyl-MS	64		40-140

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/17/22 18:01
Analyst: JB

M.S. Analytical Date: 04/18/22 13:55
M.S. Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/16/22 04:11
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/17/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 02,06,08 Batch: WG1627916-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 04/17/22 18:01
Analyst: JB

M.S. Analytical Date: 04/18/22 13:55
M.S. Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/16/22 04:11
Cleanup Method: EPH-19-2.1
Cleanup Date: 04/17/22

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 02,06,08 Batch: WG1627916-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	74		40-140
o-Terphenyl	83		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	81		40-140
O-Terphenyl-MS	91		40-140

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/24/22 13:19
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 02,06,08 Batch: WG1630631-4					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	100		70-130
2,5-Dibromotoluene-FID	94		70-130

Project Name: SACO **Lab Number:** L2219199

Project Number: 179450125/1956.08 **Report Date:** 04/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 131,VPH-18-2.1
Analytical Date: 04/22/22 10:06
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01,03-05,07 Batch: WG1630728-4					
C5-C8 Aliphatics	ND		mg/kg	5.00	--
C9-C12 Aliphatics	ND		mg/kg	5.00	--
C9-C10 Aromatics	ND		mg/kg	5.00	--
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.00	--
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.00	--
Benzene	ND		mg/kg	0.100	--
Toluene	ND		mg/kg	0.100	--
Ethylbenzene	ND		mg/kg	0.100	--
p/m-Xylene	ND		mg/kg	0.100	--
o-Xylene	ND		mg/kg	0.100	--
Methyl tert butyl ether	ND		mg/kg	0.050	--
Naphthalene	ND		mg/kg	0.200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	97		70-130
2,5-Dibromotoluene-FID	100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01,03-05,07 Batch: WG1627785-2 WG1627785-3								
C9-C18 Aliphatics	67		46		40-140	**37**	Q	25
C19-C36 Aliphatics	86		60		40-140	**36**	Q	25
C11-C22 Aromatics	83		57		40-140	**37**	Q	25
Naphthalene	83		44		40-140	**61**	Q	25
2-Methylnaphthalene	86		49		40-140	**55**	Q	25
Acenaphthylene	87		53		40-140	**49**	Q	25
Acenaphthene	90		56		40-140	**47**	Q	25
Fluorene	95		62		40-140	**42**	Q	25
Phenanthrene	86		58		40-140	**39**	Q	25
Anthracene	93		62		40-140	**40**	Q	25
Fluoranthene	97		64		40-140	**41**	Q	25
Pyrene	100		66		40-140	**41**	Q	25
Benzo(a)anthracene	103		67		40-140	**42**	Q	25
Chrysene	90		60		40-140	**40**	Q	25
Benzo(b)fluoranthene	89		62		40-140	**36**	Q	25
Benzo(k)fluoranthene	91		59		40-140	**43**	Q	25
Benzo(a)pyrene	96		65		40-140	**39**	Q	25
Indeno(1,2,3-cd)Pyrene	112		74		40-140	**41**	Q	25
Dibenzo(a,h)anthracene	110		70		40-140	**44**	Q	25
Benzo(ghi)perylene	96		63		40-140	**42**	Q	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01,03-05,07 Batch: WG1627785-2 WG1627785-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	63		54		40-140
o-Terphenyl	63		52		40-140
2-Fluorobiphenyl	72		65		40-140
2-Bromonaphthalene	73		67		40-140
O-Terphenyl-MS	67		55		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 02,06,08 Batch: WG1627916-2 WG1627916-3								
C9-C18 Aliphatics	68		71		40-140	4		25
C19-C36 Aliphatics	86		87		40-140	1		25
C11-C22 Aromatics	86		94		40-140	9		25
Naphthalene	66		79		40-140	18		25
2-Methylnaphthalene	79		94		40-140	17		25
Acenaphthylene	91		104		40-140	13		25
Acenaphthene	79		90		40-140	13		25
Fluorene	89		100		40-140	12		25
Phenanthrene	82		93		40-140	13		25
Anthracene	88		100		40-140	13		25
Fluoranthene	96		107		40-140	11		25
Pyrene	96		107		40-140	11		25
Benzo(a)anthracene	92		104		40-140	12		25
Chrysene	88		100		40-140	13		25
Benzo(b)fluoranthene	91		101		40-140	10		25
Benzo(k)fluoranthene	91		101		40-140	10		25
Benzo(a)pyrene	103		116		40-140	12		25
Indeno(1,2,3-cd)Pyrene	108		122		40-140	12		25
Dibenzo(a,h)anthracene	103		115		40-140	11		25
Benzo(ghi)perylene	86		94		40-140	9		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 02,06,08 Batch: WG1627916-2 WG1627916-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	70		73		40-140
o-Terphenyl	81		90		40-140
2-Fluorobiphenyl	76		85		40-140
2-Bromonaphthalene	76		85		40-140
O-Terphenyl-MS	88		100		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SACO

Project Number: 179450125/1956.08

Lab Number: L2219199

Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 02,06,08 Batch: WG1630631-2 WG1630631-3								
C5-C8 Aliphatics	110		107		70-130	3		25
C9-C12 Aliphatics	107		105		70-130	2		25
C9-C10 Aromatics	105		103		70-130	2		25
Benzene	109		107		70-130	2		25
Toluene	109		108		70-130	1		25
Ethylbenzene	109		108		70-130	1		25
p/m-Xylene	109		108		70-130	1		25
o-Xylene	108		107		70-130	1		25
Methyl tert butyl ether	110		112		70-130	2		25
Naphthalene	103		108		70-130	5		25
1,2,4-Trimethylbenzene	105		103		70-130	2		25
Pentane	111		108		70-130	3		25
2-Methylpentane	112		109		70-130	3		25
2,2,4-Trimethylpentane	107		104		70-130	3		25
n-Nonane	111		110		30-130	1		25
n-Decane	105		103		70-130	2		25
n-Butylcyclohexane	106		103		70-130	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	103		104		70-130
2,5-Dibromotoluene-FID	96		97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01,03-05,07 Batch: WG1630728-2 WG1630728-3								
C5-C8 Aliphatics	107		106		70-130	1		25
C9-C12 Aliphatics	94		100		70-130	6		25
C9-C10 Aromatics	92		93		70-130	0		25
Benzene	100		100		70-130	0		25
Toluene	94		93		70-130	2		25
Ethylbenzene	96		96		70-130	0		25
p/m-Xylene	97		97		70-130	0		25
o-Xylene	94		94		70-130	1		25
Methyl tert butyl ether	96		97		70-130	1		25
Naphthalene	90		89		70-130	1		25
1,2,4-Trimethylbenzene	93		93		70-130	0		25
Pentane	102		102		70-130	0		25
2-Methylpentane	113		112		70-130	1		25
2,2,4-Trimethylpentane	104		103		70-130	1		25
n-Nonane	91		94		30-130	3		25
n-Decane	87		101		70-130	15		25
n-Butylcyclohexane	103		106		70-130	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	93		93		70-130
2,5-Dibromotoluene-FID	96		96		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-01
Client ID: SB-1(2'-3')
Sample Location: SACO, ME

Date Collected: 04/13/22 10:25
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.0		%	0.100	NA	1	-	04/15/22 09:30	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-03
Client ID: SB-2(2'-3')
Sample Location: SACO, ME

Date Collected: 04/13/22 09:35
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.8		%	0.100	NA	1	-	04/15/22 09:30	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-04
Client ID: SB-2(5'-7')
Sample Location: SACO, ME

Date Collected: 04/13/22 09:15
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.5		%	0.100	NA	1	-	04/15/22 09:30	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-05
Client ID: SB-2(10'-12')
Sample Location: SACO, ME

Date Collected: 04/13/22 09:25
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	75.3		%	0.100	NA	1	-	04/15/22 09:30	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

SAMPLE RESULTS

Lab ID: L2219199-07
Client ID: SB-4(5'-7')
Sample Location: SACO, ME

Date Collected: 04/13/22 11:40
Date Received: 04/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.5		%	0.100	NA	1	-	04/15/22 09:30	121,2540G	RI

Project Name: SACO
Project Number: 179450125/1956.08
Lab Number: L2219199
Report Date: 04/27/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01,03-05,07 Batch: WG1627541-2										
Solids, Total	99.9		%	0.100	NA	1	-	04/15/22 09:30	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: SACO

Project Number: 179450125/1956.08

Lab Number: L2219199

Report Date: 04/27/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03-05,07 QC Batch ID: WG1627541-1 QC Sample: L2219199-01 Client ID: SB-1(2'-3')						
Solids, Total	88.0	88.6	%	1		20

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2219199-01A	Vial MeOH preserved	A	NA		3.9	Y	Absent		VPH-DELUX-18(28)
L2219199-01B	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		ME-TS-2540(7)
L2219199-01C	Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2219199-02A	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-02B	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-02C	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-02D	Amber 1000ml HCl preserved	A	<2	<2	3.9	Y	Absent		EPHD-GC-20(14)
L2219199-02E	Amber 1000ml HCl preserved	A	<2	<2	3.9	Y	Absent		EPH-MS-20(14)
L2219199-03A	Vial MeOH preserved	A	NA		3.9	Y	Absent		VPH-DELUX-18(28)
L2219199-03B	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		ME-TS-2540(7)
L2219199-03C	Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2219199-04A	Vial MeOH preserved	A	NA		3.9	Y	Absent		VPH-DELUX-18(28)
L2219199-04B	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		ME-TS-2540(7)
L2219199-04C	Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2219199-05A	Vial MeOH preserved	A	NA		3.9	Y	Absent		VPH-DELUX-18(28)
L2219199-05B	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		ME-TS-2540(7)
L2219199-05C	Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2219199-06A	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-06B	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-06C	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-06D	Amber 1000ml HCl preserved	A	<2	<2	3.9	Y	Absent		EPHD-GC-20(14)
L2219199-06E	Amber 1000ml HCl preserved	A	<2	<2	3.9	Y	Absent		EPH-MS-20(14)
L2219199-07A	Vial MeOH preserved	A	NA		3.9	Y	Absent		VPH-DELUX-18(28)

*Values in parentheses indicate holding time in days

Project Name: SACO
Project Number: 179450125/1956.08

Lab Number: L2219199
Report Date: 04/27/22

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2219199-07B	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		ME-TS-2540(7)
L2219199-07C	Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		EPHD-GC-20(14),EPH-MS-20(14)
L2219199-08A	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-08B	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-08C	Vial HCl preserved	A	NA		3.9	Y	Absent		ME-VPH-DELUX-18(14)
L2219199-08D	Amber 1000ml HCl preserved	A	<2	<2	3.9	Y	Absent		EPHD-GC-20(14)
L2219199-08E	Amber 1000ml HCl preserved	A	<2	<2	3.9	Y	Absent		EPH-MS-20(14)
L2219199-09A	Vial MeOH preserved	A	NA		3.9	Y	Absent		ARCHIVE()
L2219199-10A	Vial HCl preserved	A	NA		3.9	Y	Absent		ARCHIVE()
L2219199-10B	Vial HCl preserved	A	NA		3.9	Y	Absent		ARCHIVE()

*Values in parentheses indicate holding time in days

Project Name:	SACO	**Lab Number:**	L2219199
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	SACO	**Lab Number:**	L2219199
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	SACO	**Lab Number:**	L2219199
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name:	SACO	**Lab Number:**	L2219199
Project Number:	179450125/1956.08	**Report Date:**	04/27/22

REFERENCES

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

131 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, February 2018, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, June 1, 2018.

135 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, December 2019, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, March 1, 2020.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:04272216:03

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/13/22

ALPHA Job #: L2219199

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Project Information

Project Name: SACO
Project Location: SACO, ME
Project #: 179450125/195.08
Project Manager: NATE GARDNER
ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #:

Client Information

Client: STANTEC
Address: 5 DARTMOUTH DR
AUBURN, NH 03032
Phone: 603-498-4674
Email: N.GARDNER@STANTEC.COM

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program ____________ Criteria ____________

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due:

Additional Project Information:
MEP # 1/1/19

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☒ Ranges & Targets ☐ Ranges Only; VPH: ☒ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO — Filtration: ☐ Field ☐ Lab to do; Preservation: ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	EPH	VPH	Sample Comments	TOTAL # BOTTLES
19199-01	SB-1 (2'-3')	4/13/22	1025	SO	JJW	X	X		3
02	SB-1	4/13/22	1100	GW	JJW	X	X		5
03	SB-2 (2'-3')	4/13/22	0935	SO	JJW	X	X		3
04	SB-2 (5'-7')	4/13/22	0915	SO	JJW	X	X		3
05	SB-2 (10'-12')	4/13/22	0925	SO	JJW	X	X		3
06	SB-2	4/13/22	1040	GW	JJW	X	X		5
07	SB-4 (5'-7')	4/13/22	1140	SO	JJW	X	X		3
08	SB-4	4/13/22	1215	GW	JJW	X	X		5
4/14/22 TS ~~09~~									
4/14/22 TS ~~10~~									

Container Type
Preservative

Container Type: P= Plastic, A= Amber glass, V= Vial, G= Glass, B= Bacteria cup, C= Cube, O= Other, E= Encore, D= BOD Bottle

Preservative: A= None, B= HCl, C= HNO_3, D= H_2SO_4, E= NaOH, F= MeOH, G= $NaHSO_4$, H = $Na_2S_2O_3$, I= Ascorbic Acid, J = NH_4Cl, K= Zn Acetate, O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/13/22 - 1325	[signature] AAL	4/13/22 1325
[signature] AAL	4/13/22	[signature] AAL	4/13/22 1830
T. Haller AAL	4/13/22 2110	[signature]	4/13 2110

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