RANSOM Consulting, LLC

Consulting Engineers and Scientists

March 16, 2020 171.06108.004

Mr. Dan Pennessi
Mr. Scott Houldin
Mason Station, LLC
485 West Putnam Avenue
Greenwich, Connecticut 06830

RE: Unit #5 Transformer Remediation
Mason Station
Wiscasset, Maine

Dear Mr. Pennessi and Mr. Houldin:

On behalf of Mason Station LLC, Ransom Consulting, LLC (Ransom) has prepared the following letter report documenting the removal and remediation activities associated with an electrical transformer formerly located in Unit #5 of the Mason Station Powerhouse facility located on Birch Point Road in Wiscasset, Maine (the "Site"). These activities were performed in conjunction with the spill response activities related to Maine Department of Environmental Protection (MEDEP) Spill No. A-678-2018, as described in Ransom's "Spill Response Activities and Water Discharge Characterization report, dated December 7, 2018. The activities discussed below were performed in accordance with Ransom's Proposed Scope of Work and Cost Estimate, Unit 5 Transformer Remediation, dated December 14, 2018. A Site Location Map is included as Figure 1.

BACKGROUND

The Site is occupied by the Mason Station Powerhouse Building. The Powerhouse Building is generally divided into the following areas: Units #1 and #2 (constructed from 1940 to 1946); Units #3 and #4 (constructed in 1952), and Unit #5 (constructed in the late 1950s). The Powerhouse Building was deactivated in 1997 and much of the former power generating equipment has been removed. The general layout of the Powerhouse Building is shown on the attached Figure 2.

On October 9, 2018, a leaking electrical transformer was identified in Unit #5 of the Powerhouse building. According to the information plate attached to the transformer, the leaking transformer was manufactured by RTE Corporation of Waukesha Wisconsin (Serial #826007169), with a capacity of 600 gallons. The leaking mineral oil dielectric fluid was observed to be entering the trench floor drain network in that area of the building and ultimately discharging to the adjacent Sheepscot River. Certain sections of the trench floor drain network were observed to be a depth ≥ 4-feet below floor grade. Other sections of the trench floor drain network were observed to be a depth of ≤ 2.5 feet below floor grade. Impacts from the leaking mineral oil dielectric fluid were visually observed in the deeper sections of the floor trench drain network but were not observed in the shallower (≤ 2.5-foot) sections of the trench drain network. Photographs of the transformer and trench drain network are included in the Photograph Log, Attachment A.

On October 29, 2018, a shutoff valve associated with the trench drain network was identified as partially open, and closed, which prevented further discharge from the trench drain system in Unit #5 to the Sheepscot River. Additional details regarding the spill investigation and characterization efforts can be found in Ransom's "*Spill Response Activities and Water Discharge Characterization*" report, dated December 7, 2018.

Based on the unauthorized release, the MEDEP requested that the Unit #5 electrical transformer be dismantled and transported for disposal, and the contaminated water in the floor trench drain system be properly disposed of. Previous sampling of the water in the trench drains (conducted during the spill response activities discussed above) indicated low concentrations of Extractable Petroleum Hydrocarbons (EPH) and total Poly-Chlorinated Biphenyls (PCBs) at a concentration of 6.0 micrograms per liter (µg/l). Ransom had initially proposed that the water in the trench drain system be processed through an activated carbon filtration system and be discharged directly to the ground surface at the Site. The MEDEP requested that the processed water be stored in a fractionation ("frac") tank until such time as analytical testing could determine that the processed water met the State-wide Drinking Water standards, prior to discharge to the ground surface.

TRANSFORMER REMOVAL

On January 7 and 8, 2019, Environmental Projects Inc. (EPI) of Auburn, Maine mobilized a vactor rig to the Site to remove oil from the Unit #5 transformer. The oil removed from the transformer was transported and disposed of by EPI. Once all oil had been removed, the electrical transformer was cut into portable pieces using a plasma torch. As the pieces of the transformer were removed, they were wiped down with "D-Lime" detergent (manufactured by Envirochem, South River, New Jersey) to remove residual oil that may have remained on the steel pieces. Two wipe samples identified as "Unit 5 Side" and "Unit 5 Rear" were collected from the cleaned transformer pieces prior to disposal. The samples were submitted for laboratory analysis of PCBs. According to the laboratory report (included in Attachment B), PCBs were not detected above the laboratory reporting limit. The transformer pieces were ultimately transported to Prolerized New England Company, LLC of Auburn, Maine, for disposal as scrap metal. Copies of disposal receipts are included as Attachment C.

CLEANUP ACTIVITIES

In conjunction with the transformer removal discussed above, EPI utilized the vactor rig to remove free-phase oil from the top of the water surface in the floor trench drain system. A total of 1,181 gallons of oil/water mixture was removed from the electrical transformer and the floor trench drain system and transported for off-site disposal. Disposal receipts are included as Attachment C.

On January 8, 2019, EPI began pumping water from the trench drain network. Water pumped from the trench drain network was processed in accordance with the "Water Discharge Plan" dated December 26, 2018. A copy of the Water Discharge Plan is included as Attachment D.

The water treatment system consisted of a sediment ("bag") filter vessel and a 55-gallon granular activated carbon (GAC) unit. After passing through the treatment system, the water was discharged to a 20,000-gallon frac tank. In order to evaluate the effectiveness of the treatment system, Ransom collected

an initial sample of treated water ("Effluent 1") being discharged into the frac tank. The sample "Effluent 1" was submitted for laboratory analysis of the following parameters:

- RCRA 8 Metals Mercury (Method 1601/ 7470A)
- Volatile Organic Compounds (VOC) (Method 8260)
- Polychlorinated Biphenyls (PCB) (Method 8082)
- Extractable Petroleum Hydrocarbons (EPH) (MADEP-EPH-04-1/8270D)

No analytes were detected above laboratory detection limits in the sample "Effluent 1". Laboratory analytical reports are included as Attachment B.

EPI continued pumping water from the trench drain network. By January 14, 2019, the 20,000-gallon frac tank had been filled. In accordance with MEDEP direction, sample "Effluent 2" was collected from the water stored in the frac tank in anticipation of on-site discharge. The sample "Effluent 2" was submitted for the laboratory analyses identified above. Analytical results from sample "Effluent 2" did not indicate contaminant concentrations above the laboratory detection limits (refer to laboratory analytical report, Attachment B). In an email dated January 16, 2019, Mr. Finn Whiting of the MEDEP authorized the discharge of water from the frac tank to the discharge location identified as Option #2 in the Water Discharge Plan (Attachment D). However, by this time, the water stored in the frac tank had frozen and could not be discharged from the frac tank. Floor trench drain cleaning activities were placed on hold until spring thaw.

By the spring of 2019, the frac tank had thawed, and Ransom and EPI returned to the Site to discharge the treated water. On April 29, 2019, treated water stored in the frac tank was discharged through a series of hoses to the location identified as Option #2 in the attached Water Discharge Plan. Once the frac tank was empty, EPI resumed processing water from the trench drains through the treatment system and into the frac tank. Sludge in the bottom of the trench drain system that was too thick to be pumped through the treatment system was removed by hand.

By June 13, 2019, the water in the trench drain system had been pumped down enough to allow EPI to steam clean the affected area of the trench drain system. Steam cleaning and sludge removal continued through June 21, 2019. The section of the floor trench drain network that was impacted by the electrical transformer release and subsequently decontaminated is shown on Figure 3.

Cleaning water generated during the power washing activities was initially captured in the trench drain system and processed through the water treatment system and stored in the frac tank. A total of nineteen 55-gallon drums of sludge material were removed from the trench drain system. The sludge material was transported to Northland Environmental LLC of Providence Rhode Island, for disposal. Disposal receipts are included in attachment C.

Upon completion of the power washing activities, Ransom collected sample "Effluent 3" from the water stored in the frac tank. The sample "Effluent 3" was submitted for laboratory analysis of RCRA 8 Metals, EPH, and PCBs. As shown in the laboratory report included in Attachment B, low concentrations of EPH fractions were detected in the "Effluent 3" sample, and total PCBs were detected at a concentration of 0.575 µ/l. These concentrations exceeded the Drinking Water Standards that had been stipulated by the

MEDEP for discharge to the ground surface at the Site. On July 29, 2019, EPI provided a new GAC vessel and began recirculating the water from the frac tank through the new GAC vessel and back into the frac tank. On August 2, 2019, an additional sample was collected from the water stored in the frac tank. Analytical results of the August 2, 2019 sample indicated no detectable concentrations of contaminants of concern. Refer to the laboratory analytical report included in Attachment B. In an email dated August 29, 2019, Ms. Cindy Dionne, MEDEP Bureau of Water Quality, provided authorization to discharge water from the frac tank to the ground surface. The water was subsequently discharged to the ground surface in the location discussed above.

CONCLUSIONS

The activities discussed herein were completed to remove and dispose of the leaking electrical transformer and clean the affected areas of the trench drain system within Unit #5 of the Mason Station Powerhouse building. The electrical transformer and associated oil were transported for off-site disposal in accordance with applicable disposal regulations. Oily water and wash water removed from the trench drain system was processed through a water treatment system until laboratory analysis indicated no detection of contaminants of concern. The treated water was subsequently discharged to the ground surface at the site, following approval from the MEDEP.

If you have any questions regarding this submittal, please feel free to call us at your earliest convenience.

Sincerely,

RANSOM CONSULTING, LLC.

Eriksen P. Phenix, C.G.
Project Geologist

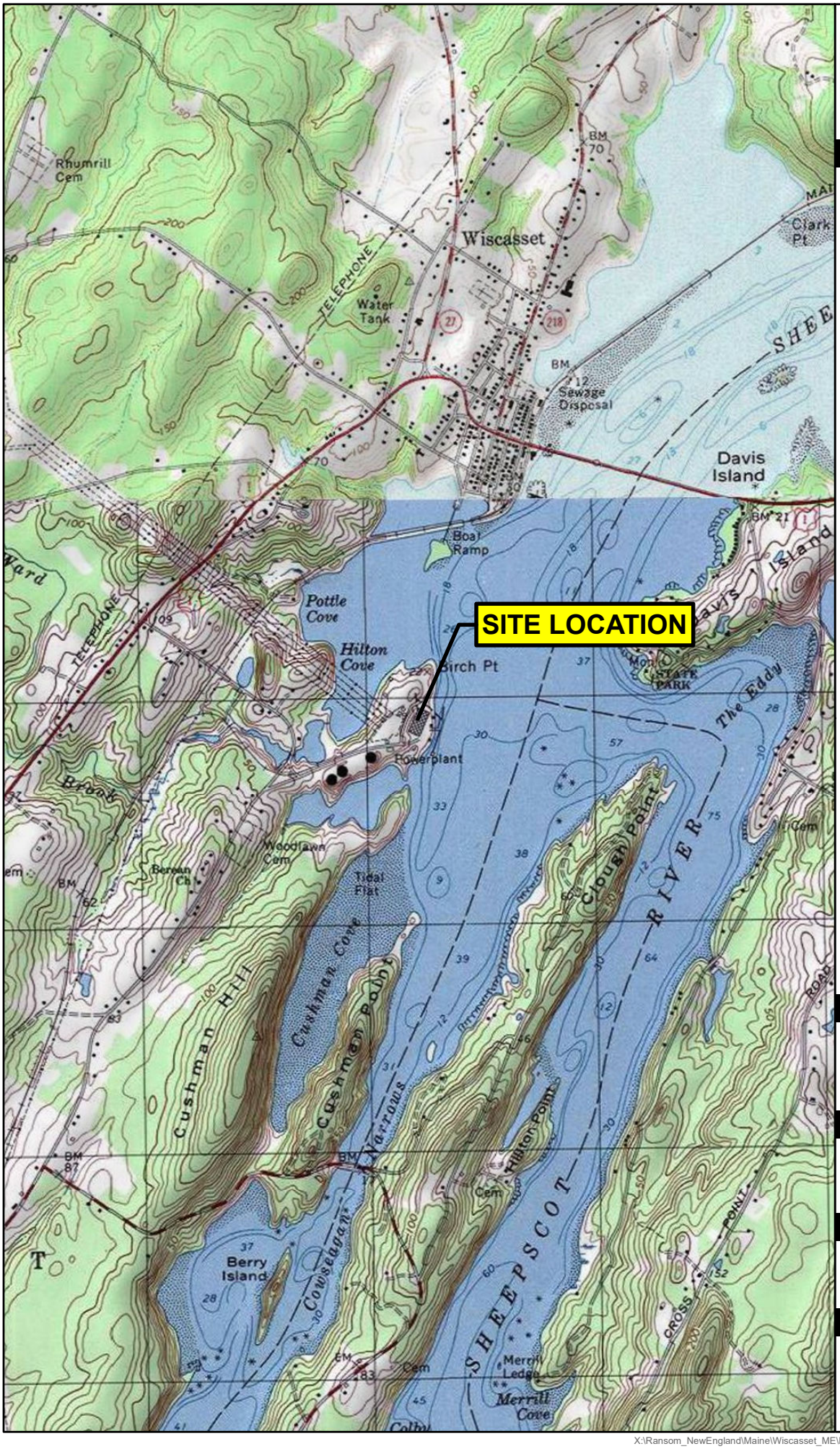
Stephen J. Dyer, P.E.
Senior Project Manager

EPP/SJD: mes
Attachments

ATTACHMENT A

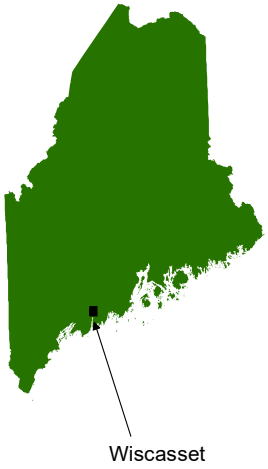
Site Figures

Unit #5 Transformer Remediation
Mason Station
Wiscasset, Maine



RANSOM Consulting, LLC

Regional Locator Map



Notes

1. Data Source: USGS National Map Seamless Server, 24K DRG, 1/3" NED
2. USGS Quad Name(s): Wiscasset and Westport, Maine
3. Latitude: 43° 40' 17"N
   Longitude: 69° 40' 17"W
   UTM Northing: 4871095 mN
   UTM Easting: 446153 mE

Scale and Orientation

0 1,000 2,000

1 inch = 2,000 feet

Prepared For

Mason Station, LLC
485 West Putnam Avenue
Greenwich, Connecticut

Site Address

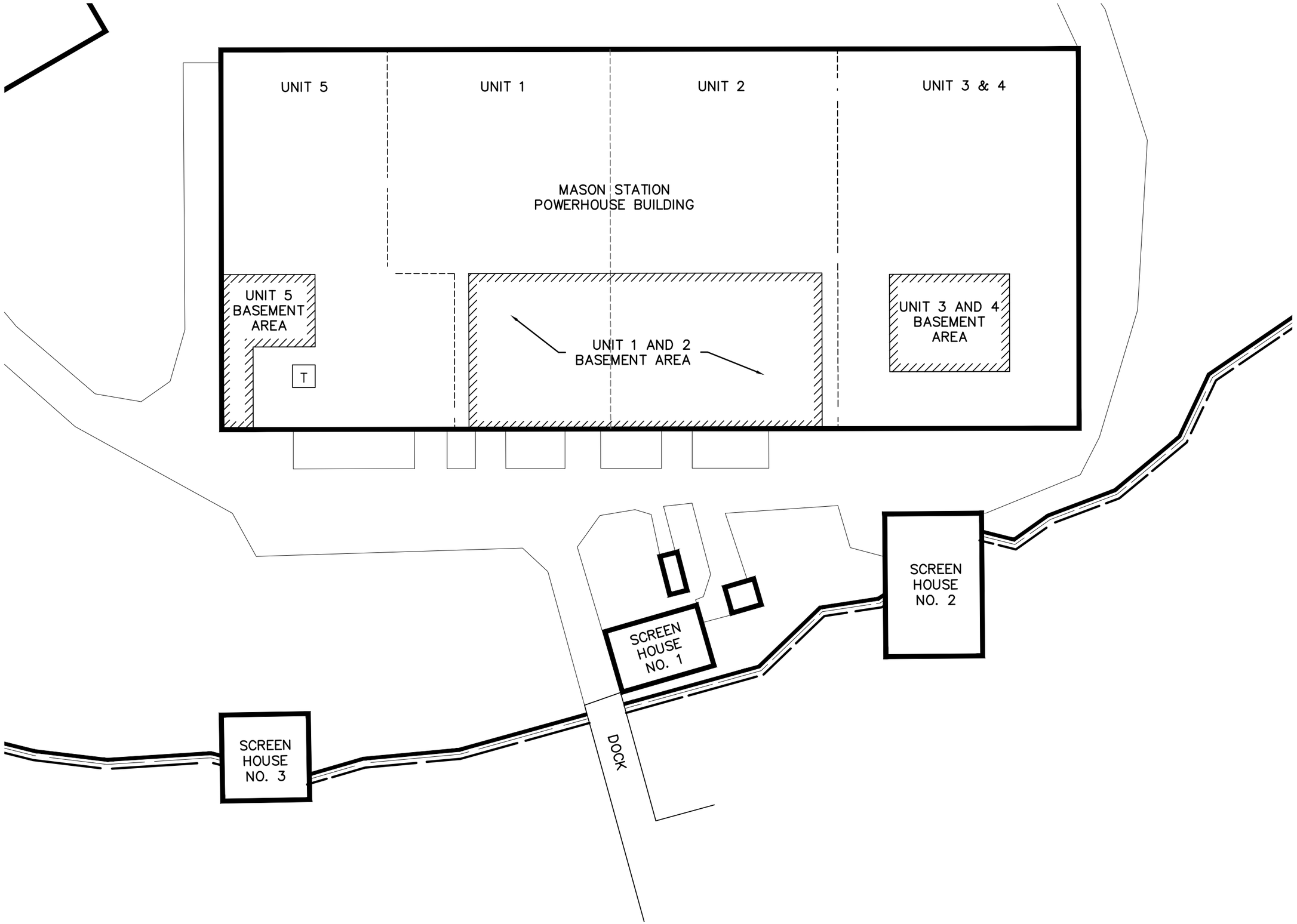
Mason Station, LLC
144 Birch Point Road
Wiscasset, Maine

171.06108 | March 2020

Figure 1

Site Location

X:\Ransom_NewEngland\Maine\Wiscasset_ME\MasonStation\MS_Wiscasset_ME_REM-F1_SLM.mxd



RANSOM Consulting, LLC

Legend & Notes

Notes:

1. Some features are approximate in location and scale.

Scale and Orientation

0 20 40

1 inch = 40 feet

Prepared For

Mason Station, LLC
485 West Putnam Avenue
Greenwich, Connecticut

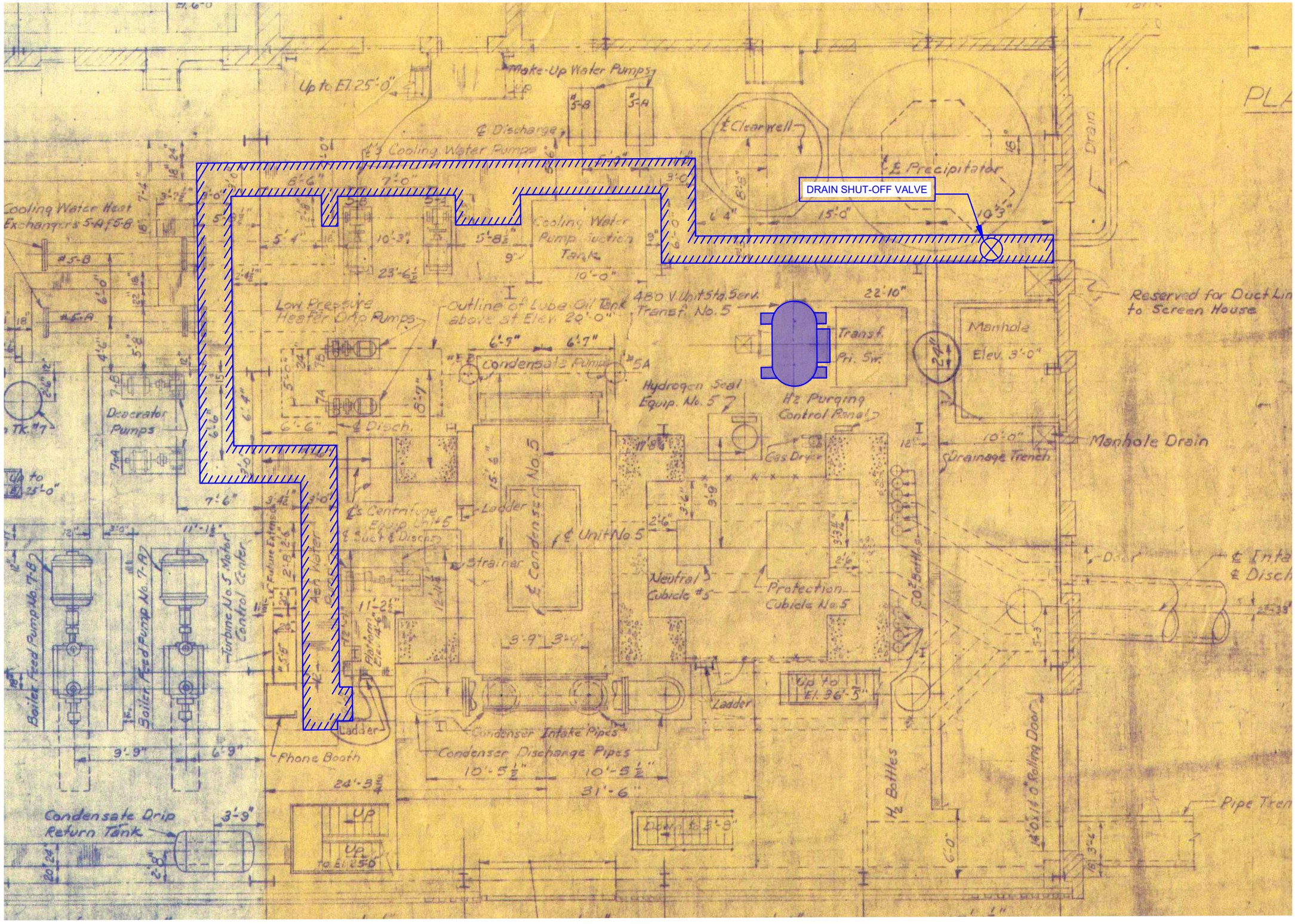
Site Address

Mason Station, LLC
144 Birch Point Road
Wiscasset, Maine

171.06108 | *March 2020*

Figure 2
Site Plan

X:\Ransom_NewEngland\Maine\Wiscasset_ME\MasonStation\Drawings\MS_Wiscasset_ME_REM.dwg



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Legend & Notes

SECTION OF FLOOR TRENCH STEAM CLEANED

LEAKING ELECTRICAL TRANSFORMER REMOVED

Scale and Orientation

NOT TO SCALE

Prepared For

Mason Station, LLC
485 West Putnam Avenue
Greenwich, Connecticut

Site Address

Mason Station, LLC
144 Birch Point Road
Wiscasset, Maine

171.06108 | March 2020

Figure 3
Unit #5
Remediation Plan

File: MS_Wiscasset_ME_REM.dwg Date: 03/09/2020

ATTACHMENT B

Photograph Log

Unit #5 Transformer Remediation
Mason Station
Wiscasset, Maine

Photo 1: Unit #5 electrical transformer, prior to removal, looking east.

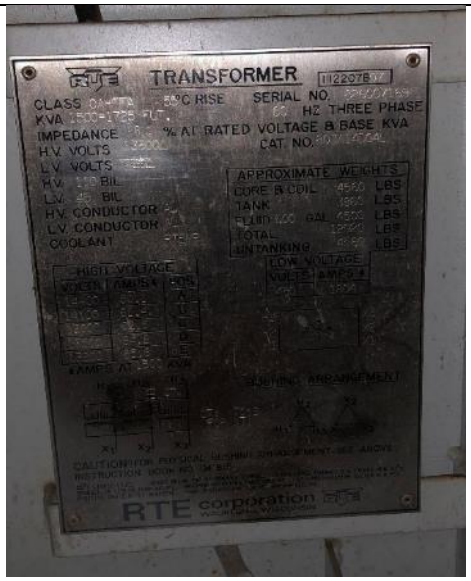


Photo 2: Transformer Information Plate.

Photo 3: Electrical transformer looking southeast.

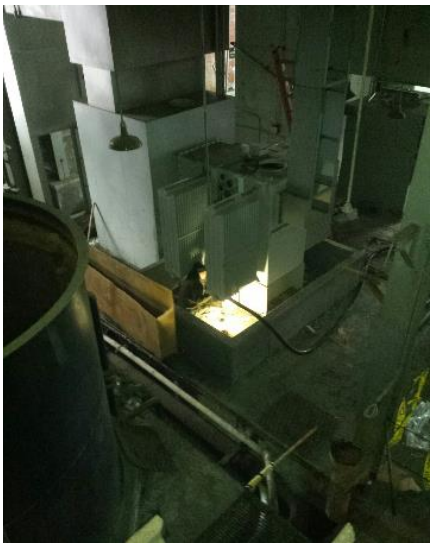


Photo 4: Transformer looking southeast from second floor.

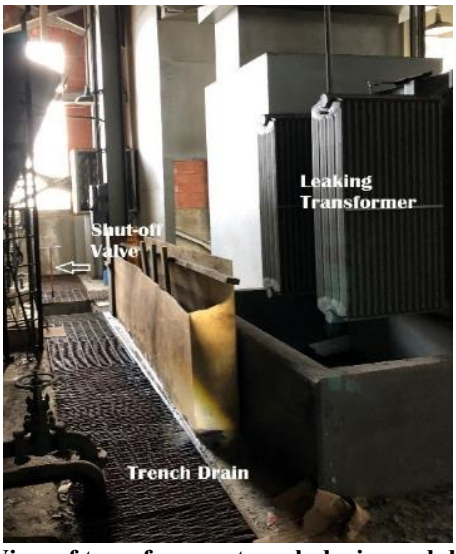


Photo 5: View of transformer, trench drain, and drain shut-off valve.

Photo 6: View of leaking flange on east side of transformer.

Photo 7: Oily water in trench drain system adjacent to leaking transformer.

Photo 8: Interior of electrical transformer (looking down) prior to draining oil.

Photo 9: Removing oil from transformer using vactor rig.

Photo 10: Draining residual oil from bottom of transformer.

Photo 11: Cutting transformer using plasma torch.

Photo 12: Transformer removal with plasma torch.

Photo 13: Wiping down cut pieces of transformer with "D-Lime" cleaning solution.

Photo 14: Trench drain network viewed from second floor.

Photo 15: Trench drain network viewed from second floor.

Photo 16: Trench drain with oily water prior to water removal and cleaning.

Photo 17: Bag filter and GAC drum for water treatment.

Photo 18: Frac tank for storage of treated water.

Photo 19: Discharge of treated water to ground surface.

Photo 20: Discharge of treated water, 4/29/2019.

Photo 21: Manually removing sludge from trench drain network.

Photo 22: Power washing trench drain network.

Photo 23: Power washing floor area adjacent to electrical transformer.

Photo 24: 55-gallon drum of sludge material removed from trenches.

Photo 25: Trennch drain system following power wash.

Photo 26: Trench drain system following power wash.

Photo 27: Trench drain system following power wash.

ATTACHMENT C

Laboratory Analytical Reports

Unit #5 Transformer Remediation
Mason Station
Wiscasset, Maine

ANALYTICAL REPORT

Lab Number:	L1900872
Client:	Ransom Consulting, Inc. 400 Commercial Street Suite 404 Portland, ME 04101-4660
ATTN:	Steve Dyer
Phone:	(207) 772-2891
Project Name:	MASON STATION
Project Number:	171.06108
Report Date:	01/11/19

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: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900872-01	EFFLUENT 1	WATER	WISCASSET, ME	01/08/19 12:15	01/08/19

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

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:  Amita Naik

Title: Technical Director/Representative Date: 01/11/19

ORGANICS

VOLATILES

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

SAMPLE RESULTS

Lab ID: L1900872-01
Client ID: EFFLUENT 1
Sample Location: WISCASSET, ME
Date Collected: 01/08/19 12:15
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/09/19 09:59
Analyst: RR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	1.0	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	0.20	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1

Project Name: MASON STATION **Lab Number:** L1900872

Project Number: 171.06108 **Report Date:** 01/11/19

SAMPLE RESULTS

Lab ID: L1900872-01 Date Collected: 01/08/19 12:15

Client ID: EFFLUENT 1 Date Received: 01/08/19

Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	1.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	1.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	1.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	1.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	1.0	--	1
1,2-Dibromoethane	ND		ug/l	1.0	--	1
1,3-Dichloropropane	ND		ug/l	1.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	1.0	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	1.0	--	1
o-Chlorotoluene	ND		ug/l	1.0	--	1
p-Chlorotoluene	ND		ug/l	1.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	1.0	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1

Project Name: MASON STATION **Lab Number:** L1900872

Project Number: 171.06108 **Report Date:** 01/11/19

SAMPLE RESULTS

Lab ID: L1900872-01 Date Collected: 01/08/19 12:15

Client ID: EFFLUENT 1 Date Received: 01/08/19

Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	1.0	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	1.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	1.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	1.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	1.0	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	1.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	101		70-130

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/09/19 09:33
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1196082-5					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	1.0	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	1.0	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	0.20	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/09/19 09:33
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1196082-5					
1,2-Dichloroethene, Total	ND		ug/l	0.50	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	1.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	1.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	1.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrolein	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	1.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	1.0	--
1,2-Dibromoethane	ND		ug/l	1.0	--
1,3-Dichloropropane	ND		ug/l	1.0	--

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/09/19 09:33
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1196082-5					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	1.0	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	1.0	--
o-Chlorotoluene	ND		ug/l	1.0	--
p-Chlorotoluene	ND		ug/l	1.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	1.0	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	1.0	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	1.0	--
1,2,4-Trichlorobenzene	ND		ug/l	1.0	--
1,3,5-Trimethylbenzene	ND		ug/l	1.0	--
1,3,5-Trichlorobenzene	ND		ug/l	1.0	--
1,2,4-Trimethylbenzene	ND		ug/l	1.0	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Halothane	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	1.0	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	1.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	1.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	1.0	--
1,4-Dioxane	ND		ug/l	250	--

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/09/19 09:33
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1196082-5					
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1196082-3 WG1196082-4								
Methylene chloride	97		96		70-130	1		20
1,1-Dichloroethane	93		96		70-130	3		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	92		90		63-132	2		20
1,2-Dichloropropane	91		92		70-130	1		20
Dibromochloromethane	110		100		63-130	10		20
1,1,2-Trichloroethane	99		99		70-130	0		20
2-Chloroethylvinyl ether	**150**	Q	**170**	Q	70-130	13		20
Tetrachloroethene	87		84		70-130	4		20
Chlorobenzene	98		96		75-130	2		25
Trichlorofluoromethane	86		79		62-150	8		20
1,2-Dichloroethane	98		97		70-130	1		20
1,1,1-Trichloroethane	94		91		67-130	3		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		98		70-130	2		20
cis-1,3-Dichloropropene	94		97		70-130	3		20
1,1-Dichloropropene	83		82		70-130	1		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	98		100		67-130	2		20
Benzene	96		92		70-130	4		25
Toluene	94		91		70-130	3		25
Ethylbenzene	93		90		70-130	3		20
Chloromethane	90		89		64-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1196082-3 WG1196082-4

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Bromomethane	**38**	Q	**34**	Q	39-139	11		20
Vinyl chloride	72		74		55-140	3		20
Chloroethane	90		80		55-138	12		20
1,1-Dichloroethene	83		83		61-145	0		25
trans-1,2-Dichloroethene	90		90		70-130	0		20
Trichloroethene	90		88		70-130	2		25
1,2-Dichlorobenzene	99		98		70-130	1		20
1,3-Dichlorobenzene	98		96		70-130	2		20
1,4-Dichlorobenzene	100		98		70-130	2		20
Methyl tert butyl ether	92		95		63-130	3		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	94		93		70-130	1		20
Dibromomethane	95		98		70-130	3		20
1,4-Dichlorobutane	96		100		70-130	4		20
1,2,3-Trichloropropane	100		100		64-130	0		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	77		76		36-147	1		20
Acetone	77		82		58-148	6		20
Carbon disulfide	87		87		51-130	0		20
2-Butanone	89		84		63-138	6		20
Vinyl acetate	100		110		70-130	10		20
4-Methyl-2-pentanone	76		80		59-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION

Project Number: 171.06108

Lab Number: L1900872

Report Date: 01/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1196082-3 WG1196082-4								
2-Hexanone	75		76		57-130	1		20
Ethyl methacrylate	85		86		70-130	1		20
Acrolein	100		110		70-130	10		20
Acrylonitrile	82		89		70-130	8		20
Bromochloromethane	99		97		70-130	2		20
Tetrahydrofuran	88		86		58-130	2		20
2,2-Dichloropropane	99		97		63-133	2		20
1,2-Dibromoethane	100		98		70-130	2		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		99		70-130	1		20
n-Butylbenzene	79		80		53-136	1		20
sec-Butylbenzene	79		79		70-130	0		20
tert-Butylbenzene	82		80		70-130	2		20
o-Chlorotoluene	88		87		70-130	1		20
p-Chlorotoluene	99		97		70-130	2		20
1,2-Dibromo-3-chloropropane	92		95		41-144	3		20
Hexachlorobutadiene	64		**62**	Q	63-130	3		20
Isopropylbenzene	87		86		70-130	1		20
p-Isopropyltoluene	82		81		70-130	1		20
Naphthalene	89		89		70-130	0		20
n-Propylbenzene	87		86		69-130	1		20
1,2,3-Trichlorobenzene	87		89		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1196082-3 WG1196082-4								
1,2,4-Trichlorobenzene	87		84		70-130	4		20
1,3,5-Trimethylbenzene	91		88		64-130	3		20
1,3,5-Trichlorobenzene	87		86		70-130	1		20
1,2,4-Trimethylbenzene	92		90		70-130	2		20
trans-1,4-Dichloro-2-butene	100		110		70-130	10		20
Halothane	86		87		70-130	1		20
Ethyl ether	97		98		59-134	1		20
Methyl Acetate	79		79		70-130	0		20
Ethyl Acetate	85		84		70-130	1		20
Isopropyl Ether	83		85		70-130	2		20
Cyclohexane	**60**	Q	**56**	Q	70-130	7		20
Tert-Butyl Alcohol	72		78		70-130	8		20
Ethyl-Tert-Butyl-Ether	88		90		70-130	2		20
Tertiary-Amyl Methyl Ether	88		88		66-130	0		20
1,4-Dioxane	**46**	Q	66		56-162	**36**	Q	20
1,1,2-Trichloro-1,2,2-Trifluoroethane	74		71		70-130	4		20
Methyl cyclohexane	**60**	Q	**56**	Q	70-130	7		20
p-Diethylbenzene	81		80		70-130	1		20
4-Ethyltoluene	90		89		70-130	1		20
1,2,4,5-Tetramethylbenzene	86		85		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1196082-3 WG1196082-4								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		96		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	99		99		70-130

PETROLEUM HYDROCARBONS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

SAMPLE RESULTS

Lab ID:	L1900872-01			Date Collected:	01/08/19 12:15
Client ID:	EFFLUENT 1			Date Received:	01/08/19
Sample Location:	WISCASSET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1			Extraction Date:	01/10/19 12:24
Analytical Date:	01/11/19 03:58	M.S. Analytical Date:	01/11/19 11:18	Cleanup Method1:	EPH-04-1
Analyst:	MEO	M.S. Analyst:	CB	Cleanup Date1:	01/10/19

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/MS Targets - 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: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

SAMPLE RESULTS

Lab ID: L1900872-01
Client ID: EFFLUENT 1
Sample Location: WISCASSET, ME
Date Collected: 01/08/19 12:15
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	63		40-140
o-Terphenyl	55		40-140
2-Fluorobiphenyl	75		40-140
2-Bromonaphthalene	69		40-140
O-Terphenyl-MS	54		40-140

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/11/19 02:03
Analyst: MEO
M.S. Analytical Date: 01/11/19 09:45
M.S. Analyst: CB
Extraction Method: EPA 3510C
Extraction Date: 01/10/19 12:24
Cleanup Method: EPH-04-1
Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1196446-1					
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: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/11/19 02:03 01/11/19 09:45
Analyst: MEO CB

Extraction Method: EPA 3510C
Extraction Date: 01/10/19 12:24
Cleanup Method: EPH-04-1
Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1196446-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	79		40-140
o-Terphenyl	63		40-140
2-Fluorobiphenyl	61		40-140
2-Bromonaphthalene	58		40-140
O-Terphenyl-MS	71		40-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1196446-2 WG1196446-3								
C9-C18 Aliphatics	91		83		40-140	9		25
C19-C36 Aliphatics	101		96		40-140	5		25
C11-C22 Aromatics	82		64		40-140	25		25
Naphthalene	69		63		40-140	9		25
2-Methylnaphthalene	51		47		40-140	8		25
Acenaphthylene	82		75		40-140	9		25
Acenaphthene	82		75		40-140	9		25
Fluorene	84		78		40-140	7		25
Phenanthrene	78		74		40-140	5		25
Anthracene	85		80		40-140	6		25
Fluoranthene	86		82		40-140	5		25
Pyrene	86		83		40-140	4		25
Benzo(a)anthracene	90		85		40-140	6		25
Chrysene	82		78		40-140	5		25
Benzo(b)fluoranthene	91		86		40-140	6		25
Benzo(k)fluoranthene	90		86		40-140	5		25
Benzo(a)pyrene	80		75		40-140	6		25
Indeno(1,2,3-cd)Pyrene	90		84		40-140	7		25
Dibenzo(a,h)anthracene	86		82		40-140	5		25
Benzo(ghi)perylene	81		76		40-140	6		25
Nonane (C9)	64		56		30-140	13		25
Decane (C10)	71		64		40-140	10		25
Dodecane (C12)	78		71		40-140	9		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1196446-2 WG1196446-3								
Tetradecane (C14)	86		79		40-140	8		25
Hexadecane (C16)	92		84		40-140	9		25
Octadecane (C18)	96		88		40-140	9		25
Nonadecane (C19)	95		88		40-140	8		25
Eicosane (C20)	96		90		40-140	6		25
Docosane (C22)	97		90		40-140	7		25
Tetracosane (C24)	95		89		40-140	7		25
Hexacosane (C26)	95		88		40-140	8		25
Octacosane (C28)	94		87		40-140	8		25
Triacontane (C30)	94		87		40-140	8		25
Hexatriacontane (C36)	92		85		40-140	8		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	88		82		40-140
o-Terphenyl	80		63		40-140
2-Fluorobiphenyl	79		65		40-140
2-Bromonaphthalene	73		57		40-140
O-Terphenyl-MS	78		74		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

PCBS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

SAMPLE RESULTS

Lab ID: L1900872-01
Client ID: EFFLUENT 1
Sample Location: WISCASSET, ME

Date Collected: 01/08/19 12:15
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/10/19 02:46
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/09/19 14:23
Cleanup Method: EPA 3665A
Cleanup Date: 01/09/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	B
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	73		30-150	A

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 01/10/19 02:09
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/09/19 14:23
Cleanup Method: EPA 3665A
Cleanup Date: 01/09/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1196104-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	72		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1196104-2 WG1196104-3									
Aroclor 1016	83		77		40-140	6		50	A
Aroclor 1260	77		73		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		72		30-150	B
Decachlorobiphenyl	88		79		30-150	B
2,4,5,6-Tetrachloro-m-xylene	82		75		30-150	A
Decachlorobiphenyl	78		74		30-150	A

METALS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

SAMPLE RESULTS

Lab ID: L1900872-01
Client ID: EFFLUENT 1
Sample Location: WISCASSET, ME
Sample Depth:
Matrix: Water

Date Collected: 01/08/19 12:15
Date Received: 01/08/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.005	--	1	01/09/19 13:02	01/09/19 22:06	EPA 3005A	1,6010D	MC
Barium, Total	ND		mg/l	0.010	--	1	01/09/19 13:02	01/09/19 22:06	EPA 3005A	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	--	1	01/09/19 13:02	01/09/19 22:06	EPA 3005A	1,6010D	MC
Chromium, Total	ND		mg/l	0.010	--	1	01/09/19 13:02	01/09/19 22:06	EPA 3005A	1,6010D	MC
Lead, Total	ND		mg/l	0.010	--	1	01/09/19 13:02	01/09/19 22:06	EPA 3005A	1,6010D	MC
Mercury, Total	ND		mg/l	0.00020	--	1	01/09/19 11:16	01/09/19 17:18	EPA 7470A	1,7470A	MG
Selenium, Total	ND		mg/l	0.010	--	1	01/09/19 13:02	01/09/19 22:06	EPA 3005A	1,6010D	MC
Silver, Total	ND		mg/l	0.007	--	1	01/09/19 13:02	01/09/19 22:06	EPA 3005A	1,6010D	MC

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1900872
Report Date: 01/11/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1196029-1										
Mercury, Total	ND		mg/l	0.00020	--	1	01/09/19 11:16	01/09/19 16:44	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1196054-1										
Arsenic, Total	ND		mg/l	0.005	--	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Barium, Total	ND		mg/l	0.010	--	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	--	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Chromium, Total	ND		mg/l	0.010	--	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Lead, Total	ND		mg/l	0.010	--	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Selenium, Total	ND		mg/l	0.010	--	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Silver, Total	ND		mg/l	0.007	--	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION

Project Number: 171.06108

Lab Number: L1900872

Report Date: 01/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1196029-2								
Mercury, Total	103		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1196054-2								
Arsenic, Total	106		-		80-120	-		
Barium, Total	93		-		80-120	-		
Cadmium, Total	102		-		80-120	-		
Chromium, Total	95		-		80-120	-		
Lead, Total	100		-		80-120	-		
Selenium, Total	114		-		80-120	-		
Silver, Total	101		-		80-120	-		

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1900872
Report Date: 01/11/19

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(*)
L1900872-01A	Vial HCl preserved	A	NA		3.4	Y	Absent		ME-8260(14)
L1900872-01B	Vial HCl preserved	A	NA		3.4	Y	Absent		ME-8260(14)
L1900872-01C	Vial HCl preserved	A	NA		3.4	Y	Absent		ME-8260(14)
L1900872-01D	Amber 1000ml unpreserved	A	7	7	3.4	Y	Absent		PCB-8082(7)
L1900872-01E	Amber 1000ml unpreserved	A	7	7	3.4	Y	Absent		PCB-8082(7)
L1900872-01F	Amber 1000ml HCl preserved	A	<2	<2	3.4	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1900872-01G	Amber 1000ml HCl preserved	A	<2	<2	3.4	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1900872-01H	Plastic 250ml HNO3 preserved	A	<2	<2	3.4	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)

*Values in parentheses indicate holding time in days

Project Name:	MASON STATION	**Lab Number:**	L1900872
Project Number:	171.06108	**Report Date:**	01/11/19

GLOSSARY

Acronyms

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.
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.
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.
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.

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.

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.

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.

Report Format: Data Usability Report

Project Name:	MASON STATION	**Lab Number:**	L1900872
Project Number:	171.06108	**Report Date:**	01/11/19

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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.

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.

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

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name:	MASON STATION	**Lab Number:**	L1900872
Project Number:	171.06108	**Report Date:**	01/11/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

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
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

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**
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.**

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.

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.

RANSOM

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 1/8/19

ALPHA Job #: L1900872

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: Mason Station
Project Location: Wiscasset ME
Project #: 171.06108
Project Manager: Steve Dyer
ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #:

Client Information

Client: Ransom Consulting Inc.
Address: 400 Commercial St. Portland ME 04101
Phone: 207.772.2891
Email: ephenix@ransomenv.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 MEDEP Criteria Drinking Water

Additional Project Information:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)
Date Due: 1/11/19

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	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
0087201	Effluent 1	1/8/19	12:15	GW	EPP	V			X	X		X			8
Container Type						V			P	A		A			
Preservative						B			C	B		A			

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
	1/8/19 1520		1/8/19 1520
	1/8/19 16:38	Rob Mash AAL	1-8-19 1638
AAL	1-8-19 1905	AAL	1/8/19 1905

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:	L1901644
Client:	Ransom Consulting, Inc. 400 Commercial Street Suite 404 Portland, ME 04101-4660
ATTN:	Steve Dyer
Phone:	(207) 772-2891
Project Name:	MASON STATION
Project Number:	171.06108
Report Date:	01/15/19

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: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1901644-01	EFFLUENT 2	WATER	WISCASSET, ME	01/14/19 11:30	01/14/19

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

Case Narrative (continued)

Total Metals

The WG1197689-2 LCS recovery, associated with L1901644-01, is above the acceptance criteria for mercury (144%); however, the associated sample is non-detect to the RL for this target analyte. The results of the original analysis are reported.

The WG1197689-3 MS recovery, performed on L1901644-01, is outside the acceptance criteria for mercury (154%). A post digestion spike was performed and was within acceptance criteria.

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:  Amita Naik

Title: Technical Director/Representative Date: 01/15/19

ORGANICS

VOLATILES

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

SAMPLE RESULTS

Lab ID: L1901644-01
Client ID: EFFLUENT 2
Sample Location: WISCASSET, ME
Date Collected: 01/14/19 11:30
Date Received: 01/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/15/19 09:24
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	1.0	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	0.20	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1

Project Name: MASON STATION **Lab Number:** L1901644

Project Number: 171.06108 **Report Date:** 01/15/19

SAMPLE RESULTS

Lab ID: L1901644-01 Date Collected: 01/14/19 11:30

Client ID: EFFLUENT 2 Date Received: 01/14/19

Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	1.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	1.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	1.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	1.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	1.0	--	1
1,2-Dibromoethane	ND		ug/l	1.0	--	1
1,3-Dichloropropane	ND		ug/l	1.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	1.0	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	1.0	--	1
o-Chlorotoluene	ND		ug/l	1.0	--	1
p-Chlorotoluene	ND		ug/l	1.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	1.0	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1

Project Name: MASON STATION **Lab Number:** L1901644

Project Number: 171.06108 **Report Date:** 01/15/19

SAMPLE RESULTS

Lab ID: L1901644-01 Date Collected: 01/14/19 11:30

Client ID: EFFLUENT 2 Date Received: 01/14/19

Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	1.0	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	1.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	1.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	1.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	1.0	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	1.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	104		70-130

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/15/19 08:58
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1197754-5					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	1.0	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	1.0	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	0.20	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/15/19 08:58
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1197754-5					
1,2-Dichloroethene, Total	ND		ug/l	0.50	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	1.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	1.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	1.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrolein	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	1.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	1.0	--
1,2-Dibromoethane	ND		ug/l	1.0	--
1,3-Dichloropropane	ND		ug/l	1.0	--

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/15/19 08:58
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1197754-5					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	1.0	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	1.0	--
o-Chlorotoluene	ND		ug/l	1.0	--
p-Chlorotoluene	ND		ug/l	1.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	1.0	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	1.0	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	1.0	--
1,2,4-Trichlorobenzene	ND		ug/l	1.0	--
1,3,5-Trimethylbenzene	ND		ug/l	1.0	--
1,3,5-Trichlorobenzene	ND		ug/l	1.0	--
1,2,4-Trimethylbenzene	ND		ug/l	1.0	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Halothane	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	1.0	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	1.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	1.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	1.0	--
1,4-Dioxane	ND		ug/l	250	--

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/15/19 08:58
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1197754-5					
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1197754-3 WG1197754-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	120		120		63-132	0		20
1,2-Dichloropropane	94		91		70-130	3		20
Dibromochloromethane	120		110		63-130	9		20
1,1,2-Trichloroethane	100		100		70-130	0		20
2-Chloroethylvinyl ether	**160**	Q	**160**	Q	70-130	0		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	100		98		75-130	2		25
Trichlorofluoromethane	120		110		62-150	9		20
1,2-Dichloroethane	110		100		70-130	10		20
1,1,1-Trichloroethane	120		110		67-130	9		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		99		70-130	1		20
1,1-Dichloropropene	100		98		70-130	2		20
Bromoform	120		110		54-136	9		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	100		98		70-130	2		25
Toluene	100		95		70-130	5		25
Ethylbenzene	99		94		70-130	5		20
Chloromethane	100		96		64-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1197754-3 WG1197754-4

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Bromomethane	53		41		39-139	**26**	Q	20
Vinyl chloride	100		99		55-140	1		20
Chloroethane	100		98		55-138	2		20
1,1-Dichloroethene	110		100		61-145	10		25
trans-1,2-Dichloroethene	100		98		70-130	2		20
Trichloroethene	100		99		70-130	1		25
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	110		100		63-130	10		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,4-Dichlorobutane	95		91		70-130	4		20
1,2,3-Trichloropropane	100		100		64-130	0		20
Styrene	100		90		70-130	11		20
Dichlorodifluoromethane	110		100		36-147	10		20
Acetone	94		90		58-148	4		20
Carbon disulfide	100		98		51-130	2		20
2-Butanone	97		90		63-138	7		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	80		83		59-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1197754-3 WG1197754-4								
2-Hexanone	75		74		57-130	1		20
Ethyl methacrylate	88		87		70-130	1		20
Acrolein	110		100		70-130	10		20
Acrylonitrile	97		94		70-130	3		20
Bromochloromethane	110		110		70-130	0		20
Tetrahydrofuran	89		110		58-130	**21**	Q	20
2,2-Dichloropropane	120		110		63-133	9		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	110		110		64-130	0		20
Bromobenzene	110		100		70-130	10		20
n-Butylbenzene	96		91		53-136	5		20
sec-Butylbenzene	99		94		70-130	5		20
tert-Butylbenzene	99		94		70-130	5		20
o-Chlorotoluene	91		87		70-130	4		20
p-Chlorotoluene	100		96		70-130	4		20
1,2-Dibromo-3-chloropropane	100		100		41-144	0		20
Hexachlorobutadiene	89		84		63-130	6		20
Isopropylbenzene	98		94		70-130	4		20
p-Isopropyltoluene	99		94		70-130	5		20
Naphthalene	96		95		70-130	1		20
n-Propylbenzene	98		93		69-130	5		20
1,2,3-Trichlorobenzene	98		96		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1197754-3 WG1197754-4								
1,2,4-Trichlorobenzene	99		95		70-130	4		20
1,3,5-Trimethylbenzene	100		95		64-130	5		20
1,3,5-Trichlorobenzene	100		95		70-130	5		20
1,2,4-Trimethylbenzene	99		95		70-130	4		20
trans-1,4-Dichloro-2-butene	110		100		70-130	10		20
Halothane	110		100		70-130	10		20
Ethyl ether	110		110		59-134	0		20
Methyl Acetate	84		85		70-130	1		20
Ethyl Acetate	91		92		70-130	1		20
Isopropyl Ether	89		87		70-130	2		20
Cyclohexane	91		86		70-130	6		20
Tert-Butyl Alcohol	88		78		70-130	12		20
Ethyl-Tert-Butyl-Ether	97		95		70-130	2		20
Tertiary-Amyl Methyl Ether	97		95		66-130	2		20
1,4-Dioxane	96		78		56-162	**21**	Q	20
1,1,2-Trichloro-1,2,2-Trifluoroethane	120		110		70-130	9		20
Methyl cyclohexane	98		92		70-130	6		20
p-Diethylbenzene	96		92		70-130	4		20
4-Ethyltoluene	100		95		70-130	5		20
1,2,4,5-Tetramethylbenzene	95		91		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1197754-3 WG1197754-4								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	99		97		70-130
4-Bromofluorobenzene	94		95		70-130
Dibromofluoromethane	104		104		70-130

PETROLEUM HYDROCARBONS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

SAMPLE RESULTS

Lab ID:	L1901644-01			Date Collected:	01/14/19 11:30
Client ID:	EFFLUENT 2			Date Received:	01/14/19
Sample Location:	WISCASSET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1			Extraction Date:	01/14/19 21:16
Analytical Date:	01/15/19 15:00	M.S. Analytical Date:	01/15/19 12:28	Cleanup Method1:	EPH-04-1
Analyst:	DG	M.S. Analyst:	CB	Cleanup Date1:	01/15/19

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/MS Targets - 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: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

SAMPLE RESULTS

Lab ID: L1901644-01
Client ID: EFFLUENT 2
Sample Location: WISCASSET, ME
Date Collected: 01/14/19 11:30
Date Received: 01/14/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	77		40-140
o-Terphenyl	58		40-140
2-Fluorobiphenyl	60		40-140
2-Bromonaphthalene	54		40-140
O-Terphenyl-MS	64		40-140

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/15/19 11:34
Analyst: DG

M.S. Analytical Date: 01/15/19 10:54
M.S. Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 03:23
Cleanup Method: EPH-04-1
Cleanup Date: 01/15/19

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1197288-1					
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: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/15/19 11:34
Analyst: DG

01/15/19 10:54
CB

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 03:23
Cleanup Method: EPH-04-1
Cleanup Date: 01/15/19

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1197288-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	87		40-140
o-Terphenyl	76		40-140
2-Fluorobiphenyl	81		40-140
2-Bromonaphthalene	72		40-140
O-Terphenyl-MS	71		40-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1197288-2 WG1197288-3								
C9-C18 Aliphatics	84		82		40-140	2		25
C19-C36 Aliphatics	86		81		40-140	6		25
C11-C22 Aromatics	80		75		40-140	6		25
Naphthalene	59		57		40-140	3		25
2-Methylnaphthalene	43		44		40-140	2		25
Acenaphthylene	68		72		40-140	6		25
Acenaphthene	65		69		40-140	6		25
Fluorene	68		71		40-140	4		25
Phenanthrene	64		66		40-140	3		25
Anthracene	70		70		40-140	0		25
Fluoranthene	72		72		40-140	0		25
Pyrene	72		72		40-140	0		25
Benzo(a)anthracene	75		75		40-140	0		25
Chrysene	68		69		40-140	1		25
Benzo(b)fluoranthene	76		75		40-140	1		25
Benzo(k)fluoranthene	74		75		40-140	1		25
Benzo(a)pyrene	67		66		40-140	2		25
Indeno(1,2,3-cd)Pyrene	74		73		40-140	1		25
Dibenzo(a,h)anthracene	71		70		40-140	1		25
Benzo(ghi)perylene	66		65		40-140	2		25
Nonane (C9)	62		57		30-140	8		25
Decane (C10)	68		64		40-140	6		25
Dodecane (C12)	74		74		40-140	0		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1197288-2 WG1197288-3								
Tetradecane (C14)	79		83		40-140	5		25
Hexadecane (C16)	85		86		40-140	1		25
Octadecane (C18)	91		88		40-140	3		25
Nonadecane (C19)	92		88		40-140	4		25
Eicosane (C20)	95		89		40-140	7		25
Docosane (C22)	95		89		40-140	7		25
Tetracosane (C24)	95		89		40-140	7		25
Hexacosane (C26)	95		89		40-140	7		25
Octacosane (C28)	95		89		40-140	7		25
Triacontane (C30)	95		89		40-140	7		25
Hexatriacontane (C36)	99		88		40-140	12		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	83		78		40-140
o-Terphenyl	72		68		40-140
2-Fluorobiphenyl	79		74		40-140
2-Bromonaphthalene	74		66		40-140
O-Terphenyl-MS	59		59		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

PCBS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

SAMPLE RESULTS

Lab ID: L1901644-01
Client ID: EFFLUENT 2
Sample Location: WISCASSET, ME

Date Collected: 01/14/19 11:30
Date Received: 01/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/15/19 05:24
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 21:18
Cleanup Method: EPA 3665A
Cleanup Date: 01/15/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/15/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	30		30-150	B
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	40		30-150	A

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 01/15/19 05:36
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 21:18
Cleanup Method: EPA 3665A
Cleanup Date: 01/15/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/15/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1197595-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	**25**	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	31		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1197595-2 WG1197595-3									
Aroclor 1016	67		67		40-140	1		50	A
Aroclor 1260	63		67		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		77		30-150	B
Decachlorobiphenyl	66		78		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		74		30-150	A
Decachlorobiphenyl	61		70		30-150	A

METALS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

SAMPLE RESULTS

Lab ID: L1901644-01
Client ID: EFFLUENT 2
Sample Location: WISCASSET, ME
Sample Depth:
Matrix: Water

Date Collected: 01/14/19 11:30
Date Received: 01/14/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.005	--	1	01/15/19 07:10	01/15/19 11:01	EPA 3005A	1,6010D	LC
Barium, Total	ND		mg/l	0.010	--	1	01/15/19 07:10	01/15/19 11:01	EPA 3005A	1,6010D	LC
Cadmium, Total	ND		mg/l	0.005	--	1	01/15/19 07:10	01/15/19 11:01	EPA 3005A	1,6010D	LC
Chromium, Total	ND		mg/l	0.010	--	1	01/15/19 07:10	01/15/19 11:01	EPA 3005A	1,6010D	LC
Lead, Total	ND		mg/l	0.010	--	1	01/15/19 07:10	01/15/19 11:01	EPA 3005A	1,6010D	LC
Mercury, Total	ND		mg/l	0.00020	--	1	01/15/19 08:00	01/15/19 12:46	EPA 7470A	1,7470A	MG
Selenium, Total	ND		mg/l	0.010	--	1	01/15/19 07:10	01/15/19 11:01	EPA 3005A	1,6010D	LC
Silver, Total	ND		mg/l	0.007	--	1	01/15/19 07:10	01/15/19 11:01	EPA 3005A	1,6010D	LC

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1901644
Report Date: 01/15/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1197684-1										
Arsenic, Total	ND		mg/l	0.005	--	1	01/15/19 07:10	01/15/19 10:43	1,6010D	LC
Barium, Total	ND		mg/l	0.010	--	1	01/15/19 07:10	01/15/19 10:43	1,6010D	LC
Cadmium, Total	ND		mg/l	0.005	--	1	01/15/19 07:10	01/15/19 10:43	1,6010D	LC
Chromium, Total	ND		mg/l	0.010	--	1	01/15/19 07:10	01/15/19 10:43	1,6010D	LC
Lead, Total	ND		mg/l	0.010	--	1	01/15/19 07:10	01/15/19 10:43	1,6010D	LC
Selenium, Total	ND		mg/l	0.010	--	1	01/15/19 07:10	01/15/19 10:43	1,6010D	LC
Silver, Total	ND		mg/l	0.007	--	1	01/15/19 07:10	01/15/19 10:43	1,6010D	LC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1197689-1										
Mercury, Total	ND		mg/l	0.00020	--	1	01/15/19 08:00	01/15/19 12:43	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION

Project Number: 171.06108

Lab Number: L1901644

Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1197684-2								
Arsenic, Total	109		-		80-120	-		
Barium, Total	100		-		80-120	-		
Cadmium, Total	106		-		80-120	-		
Chromium, Total	100		-		80-120	-		
Lead, Total	104		-		80-120	-		
Selenium, Total	112		-		80-120	-		
Silver, Total	101		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1197689-2								
Mercury, Total	**144**	Q	-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1197684-3 QC Sample: L1901644-01 Client ID: EFFLUENT 2												
Arsenic, Total	ND	0.12	0.131	109		-	-		75-125	-		20
Barium, Total	ND	2	1.98	99		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.053	104		-	-		75-125	-		20
Chromium, Total	ND	0.2	0.199	100		-	-		75-125	-		20
Lead, Total	ND	0.51	0.514	101		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.131	109		-	-		75-125	-		20
Silver, Total	ND	0.05	0.051	101		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1197689-3 QC Sample: L1901644-01 Client ID: EFFLUENT 2												
Mercury, Total	ND	0.005	0.00768	**154**	Q	-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1197684-4 QC Sample: L1901644-01 Client ID: EFFLUENT 2						
Arsenic, Total	ND	ND	mg/l	NC		20
Barium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1197689-4 QC Sample: L1901644-01 Client ID: EFFLUENT 2						
Mercury, Total	ND	ND	mg/l	NC		20

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1901644
Report Date: 01/15/19

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(*)
L1901644-01A	Vial HCl preserved	A	NA		3.0	Y	Absent		ME-8260(14)
L1901644-01B	Vial HCl preserved	A	NA		3.0	Y	Absent		ME-8260(14)
L1901644-01C	Vial HCl preserved	A	NA		3.0	Y	Absent		ME-8260(14)
L1901644-01D	Amber 1000ml unpreserved	A	7	7	3.0	Y	Absent		PCB-8082(7)
L1901644-01E	Amber 1000ml unpreserved	A	7	7	3.0	Y	Absent		PCB-8082(7)
L1901644-01F	Amber 1000ml HCl preserved	A	<2	<2	3.0	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1901644-01G	Amber 1000ml HCl preserved	A	<2	<2	3.0	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1901644-01H	Plastic 250ml HNO3 preserved	A	<2	<2	3.0	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)

*Values in parentheses indicate holding time in days

Project Name:	MASON STATION	**Lab Number:**	L1901644
Project Number:	171.06108	**Report Date:**	01/15/19

GLOSSARY

Acronyms

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.
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.
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.
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.

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.

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.

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.

Report Format: Data Usability Report

Project Name:	MASON STATION	**Lab Number:**	L1901644
Project Number:	171.06108	**Report Date:**	01/15/19

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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.

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.

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

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name:	MASON STATION	**Lab Number:**	L1901644
Project Number:	171.06108	**Report Date:**	01/15/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

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
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

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**
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.**

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.

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: 1/14/19

ALPHA Job #: L1901644

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: Mason Station
Project Location: Wiscasset ME
Project #: 171.06108
Project Manager: Steve Dyer
ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #: 11490

Client Information

Client: Ransom Consulting Inc.
Address: 400 Commercial St.
Portland ME 04101
Phone: 207.772.2891
Email: ephenix@ransomenv.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 Maine DEP Criteria Drinking Water

Turn-Around Time

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

Date Due: 1/15/19

Additional Project Information:

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	VOC	SVOC	METALS (MCP)	METALS (RCRA)	EPH	VPH	PCB/PEST	TPH	Sample Comments	TOTAL # BOTTLES
01644-01	Effluent 2	1/14/19	11:30	GW	EPP	X			X	X		X			8
Container Type						V			P	A		A			
Preservative						B			C	B		A			

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

Relinquished By:	Date/Time	Received By:	Date/Time
Erik Phenix	1/14/19 1330	Rob Maerto AAL	1-14-19 1330
Rob Maerto	1/14/19 19:25		1/14/19 1925

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:	L1927448
Client:	Ransom Consulting, Inc. 400 Commercial Street Suite 404 Portland, ME 04101-4660
ATTN:	Steve Dyer
Phone:	(207) 772-2891
Project Name:	MASON STATION
Project Number:	171.06108.005
Report Date:	07/08/19

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: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1927448-01	EFFLUENT 3	WATER	WISCASSET, ME	06/21/19 15:00	06/24/19

Project Name:	MASON STATION	**Lab Number:**	L1927448
Project Number:	171.06108.005	**Report Date:**	07/08/19

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.

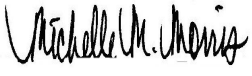
When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded 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.

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:  Michelle M. Morris

Title: Technical Director/Representative Date: 07/08/19

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: MASON STATION
Project Number: 171.06108.005
Lab Number: L1927448
Report Date: 07/08/19

SAMPLE RESULTS

Lab ID:	L1927448-01			Date Collected:	06/21/19 15:00
Client ID:	EFFLUENT 3			Date Received:	06/24/19
Sample Location:	WISCASSET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1			Extraction Date:	07/04/19 08:48
Analytical Date:	07/06/19 15:03	M.S. Analytical Date:	07/07/19 13:01	Cleanup Method1:	EPH-04-1
Analyst:	LL	M.S. Analyst:	CB	Cleanup Date1:	07/05/19

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/MS Targets - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	498		ug/l	100	--	1
C11-C22 Aromatics	123		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	123		ug/l	100	--	1
Naphthalene	ND		ug/l	0.421	--	1
2-Methylnaphthalene	ND		ug/l	0.421	--	1
Acenaphthylene	ND		ug/l	0.421	--	1
Acenaphthene	ND		ug/l	0.421	--	1
Fluorene	ND		ug/l	0.421	--	1
Phenanthrene	ND		ug/l	0.421	--	1
Anthracene	ND		ug/l	0.421	--	1
Fluoranthene	ND		ug/l	0.421	--	1
Pyrene	ND		ug/l	0.421	--	1
Benzo(a)anthracene	ND		ug/l	0.421	--	1
Chrysene	ND		ug/l	0.421	--	1
Benzo(b)fluoranthene	ND		ug/l	0.421	--	1
Benzo(k)fluoranthene	ND		ug/l	0.421	--	1
Benzo(a)pyrene	ND		ug/l	0.210	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.421	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.421	--	1
Benzo(ghi)perylene	ND		ug/l	0.421	--	1

Project Name: MASON STATION
Project Number: 171.06108.005
Lab Number: L1927448
Report Date: 07/08/19

SAMPLE RESULTS

Lab ID: L1927448-01
Client ID: EFFLUENT 3
Sample Location: WISCASSET, ME
Date Collected: 06/21/19 15:00
Date Received: 06/24/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	79		40-140
2-Fluorobiphenyl	85		40-140
2-Bromonaphthalene	86		40-140
O-Terphenyl-MS	69		40-140

Project Name: MASON STATION
Project Number: 171.06108.005
Lab Number: L1927448
Report Date: 07/08/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 07/06/19 14:31
Analyst: LL
M.S. Analytical Date: 07/07/19 11:32
M.S. Analyst: CB
Extraction Method: EPA 3510C
Extraction Date: 07/04/19 08:48
Cleanup Method: EPH-04-1
Cleanup Date: 07/05/19

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1256553-1					
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: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 07/06/19 14:31 07/07/19 11:32
Analyst: LL CB

Extraction Method: EPA 3510C
Extraction Date: 07/04/19 08:48
Cleanup Method: EPH-04-1
Cleanup Date: 07/05/19

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1256553-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	61		40-140
o-Terphenyl	79		40-140
2-Fluorobiphenyl	84		40-140
2-Bromonaphthalene	85		40-140
O-Terphenyl-MS	67		40-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1256553-2 WG1256553-3								
C9-C18 Aliphatics	60		57		40-140	5		25
C19-C36 Aliphatics	74		70		40-140	6		25
C11-C22 Aromatics	89		85		40-140	5		25
Naphthalene	82		77		40-140	6		25
2-Methylnaphthalene	74		70		40-140	6		25
Acenaphthylene	90		87		40-140	3		25
Acenaphthene	100		98		40-140	2		25
Fluorene	94		91		40-140	3		25
Phenanthrene	100		97		40-140	3		25
Anthracene	106		102		40-140	4		25
Fluoranthene	103		99		40-140	4		25
Pyrene	103		99		40-140	4		25
Benzo(a)anthracene	108		100		40-140	8		25
Chrysene	110		101		40-140	9		25
Benzo(b)fluoranthene	103		97		40-140	6		25
Benzo(k)fluoranthene	104		98		40-140	6		25
Benzo(a)pyrene	102		94		40-140	8		25
Indeno(1,2,3-cd)Pyrene	105		99		40-140	6		25
Dibenzo(a,h)anthracene	103		99		40-140	4		25
Benzo(ghi)perylene	93		88		40-140	6		25
Nonane (C9)	40		34		30-140	16		25
Decane (C10)	50		43		40-140	15		25
Dodecane (C12)	58		55		40-140	5		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1256553-2 WG1256553-3								
Tetradecane (C14)	61		60		40-140	2		25
Hexadecane (C16)	64		62		40-140	3		25
Octadecane (C18)	68		65		40-140	5		25
Nonadecane (C19)	69		66		40-140	4		25
Eicosane (C20)	72		67		40-140	7		25
Docosane (C22)	73		68		40-140	7		25
Tetracosane (C24)	72		67		40-140	7		25
Hexacosane (C26)	72		67		40-140	7		25
Octacosane (C28)	72		67		40-140	7		25
Triacontane (C30)	73		67		40-140	9		25
Hexatriacontane (C36)	77		71		40-140	8		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	65		61		40-140
o-Terphenyl	84		80		40-140
2-Fluorobiphenyl	85		80		40-140
2-Bromonaphthalene	84		80		40-140
O-Terphenyl-MS	91		86		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

PCBS

Project Name: MASON STATION
Project Number: 171.06108.005
Lab Number: L1927448
Report Date: 07/08/19

SAMPLE RESULTS

Lab ID: L1927448-01
Client ID: EFFLUENT 3
Sample Location: WISCASSET, ME

Date Collected: 06/21/19 15:00
Date Received: 06/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/01/19 03:15
Analyst: AWS

Extraction Method: EPA 3510C
Extraction Date: 06/28/19 01:14
Cleanup Method: EPA 3665A
Cleanup Date: 06/29/19
Cleanup Method: EPA 3660B
Cleanup Date: 06/29/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	0.575		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	0.575		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/28/19 00:15
Analyst: KB

Extraction Method: EPA 3510C
Extraction Date: 06/27/19 08:22
Cleanup Method: EPA 3665A
Cleanup Date: 06/27/19
Cleanup Method: EPA 3660B
Cleanup Date: 06/27/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1253763-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	87		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1253763-2 WG1253763-3									
Aroclor 1016	85		85		40-140	0		50	A
Aroclor 1260	82		83		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		73		30-150	A
Decachlorobiphenyl	82		83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		77		30-150	B
Decachlorobiphenyl	82		82		30-150	B

METALS

Project Name: MASON STATION
Project Number: 171.06108.005
Lab Number: L1927448
Report Date: 07/08/19

SAMPLE RESULTS

Lab ID: L1927448-01
Client ID: EFFLUENT 3
Sample Location: WISCASSET, ME
Sample Depth:
Matrix: Water

Date Collected: 06/21/19 15:00
Date Received: 06/24/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.005	--	1	07/03/19 15:55	07/03/19 23:02	EPA 3005A	1,6010D	MC
Barium, Total	ND		mg/l	0.010	--	1	07/03/19 15:55	07/03/19 23:02	EPA 3005A	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	--	1	07/03/19 15:55	07/03/19 23:02	EPA 3005A	1,6010D	MC
Chromium, Total	ND		mg/l	0.010	--	1	07/03/19 15:55	07/03/19 23:02	EPA 3005A	1,6010D	MC
Lead, Total	ND		mg/l	0.010	--	1	07/03/19 15:55	07/03/19 23:02	EPA 3005A	1,6010D	MC
Mercury, Total	ND		mg/l	0.00020	--	1	07/03/19 10:29	07/03/19 13:29	EPA 7470A	1,7470A	GD
Selenium, Total	ND		mg/l	0.010	--	1	07/03/19 15:55	07/03/19 23:02	EPA 3005A	1,6010D	MC
Silver, Total	ND		mg/l	0.007	--	1	07/03/19 15:55	07/03/19 23:02	EPA 3005A	1,6010D	MC

Project Name: MASON STATION **Lab Number:** L1927448

Project Number: 171.06108.005 **Report Date:** 07/08/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1256225-1										
Mercury, Total	ND		mg/l	0.00020	--	1	07/03/19 10:29	07/03/19 13:25	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1256308-1										
Arsenic, Total	ND		mg/l	0.005	--	1	07/03/19 15:55	07/03/19 21:37	1,6010D	MC
Barium, Total	ND		mg/l	0.010	--	1	07/03/19 15:55	07/03/19 21:37	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	--	1	07/03/19 15:55	07/03/19 21:37	1,6010D	MC
Chromium, Total	ND		mg/l	0.010	--	1	07/03/19 15:55	07/03/19 21:37	1,6010D	MC
Lead, Total	ND		mg/l	0.010	--	1	07/03/19 15:55	07/03/19 21:37	1,6010D	MC
Selenium, Total	ND		mg/l	0.010	--	1	07/03/19 15:55	07/03/19 21:37	1,6010D	MC
Silver, Total	ND		mg/l	0.007	--	1	07/03/19 15:55	07/03/19 21:37	1,6010D	MC

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1256225-2								
Mercury, Total	93		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1256308-2								
Arsenic, Total	113		-		80-120	-		
Barium, Total	100		-		80-120	-		
Cadmium, Total	106		-		80-120	-		
Chromium, Total	99		-		80-120	-		
Lead, Total	109		-		80-120	-		
Selenium, Total	113		-		80-120	-		
Silver, Total	104		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1256225-3 QC Sample: L1927448-01 Client ID: EFFLUENT 3												
Mercury, Total	ND	0.005	0.00484	97		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1256225-4 QC Sample: L1927448-01 Client ID: EFFLUENT 3						
Mercury, Total	ND	ND	mg/l	NC		20

Project Name: MASON STATION
Project Number: 171.06108.005

Lab Number: L1927448
Report Date: 07/08/19

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(*)
L1927448-01B	Amber 120ml unpreserved	A	7	7	4.2	Y	Absent		PCB-8082-LVI(7)
L1927448-01C	Amber 120ml unpreserved	A	7	7	4.2	Y	Absent		PCB-8082-LVI(7)
L1927448-01D	Plastic 250ml HNO3 preserved	A	<2	<2	4.2	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L1927448-01E	Amber 1000ml HCl preserved	A	<2	<2	4.2	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1927448-01F	Amber 1000ml HCl preserved	A	<2	<2	4.2	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)

*Values in parentheses indicate holding time in days

Project Name:	MASON STATION	**Lab Number:**	L1927448
Project Number:	171.06108.005	**Report Date:**	07/08/19

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.
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.

Footnotes

Report Format: Data Usability Report

Project Name:	MASON STATION	**Lab Number:**	L1927448
Project Number:	171.06108.005	**Report Date:**	07/08/19

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.

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. If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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.

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 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.

Report Format: Data Usability Report

Project Name:	MASON STATION	**Lab Number:**	L1927448
Project Number:	171.06108.005	**Report Date:**	07/08/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

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
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

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**
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.**

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.

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

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

Date Rec'd in Lab: 6/24/19

ALPHA Job #: L1927448

Project Information

Project Name: Mason Station
Project Location: Wiscasset ME
Project #: 171.06108.005
Project Manager: Steve Dyer
ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #: 11808

Client Information

Client: Ransom Consulting Inc.
Address: 400 Commercial St.
Portland ME 04101
Phone: 207.772.2891
Email: ephenix@ransomenv.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 Drinking Water

Turn-Around Time

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

Date Due:

Additional Project Information:

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; ☐ PEST ☒ PCB; 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	METALS: RCRA8	EPH: Ranges & Targets	PCB	Sample Comments	TOTAL # BOTTLES
27448-01	Effluent 3	6/21/19	1500	GW	EPP	X	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
Emily [signature]	6/24/19 1400	Rob Mauks AAL	6/24/19 1400
Rob Mauk	6-24-19 1905	[signature]	6/24/19 1905

ANALYTICAL REPORT

Lab Number:	L1934529
Client:	Ransom Consulting, Inc. 400 Commercial Street Suite 404 Portland, ME 04101-4660
ATTN:	Steve Dyer
Phone:	(207) 772-2891
Project Name:	MASON STATION
Project Number:	171.06108
Report Date:	08/14/19

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: MASON STATION
Project Number: 171.06108

Lab Number: L1934529
Report Date: 08/14/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1934529-01	FRAC TANK	WATER	WISCASSET, ME	08/02/19 09:00	08/02/19

Project Name:	MASON STATION	**Lab Number:**	L1934529
Project Number:	171.06108	**Report Date:**	08/14/19

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.

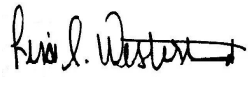
When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded 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.

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:  Lisa Westerlind

Title: Technical Director/Representative Date: 08/14/19

QC OUTLIER SUMMARY REPORT

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1934529
Report Date: 08/14/19

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment

There are no QC Outliers associated with this report.

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1934529
Report Date: 08/14/19

SAMPLE RESULTS

Lab ID:	L1934529-01	Date Collected:	08/02/19 09:00
Client ID:	FRAC TANK	Date Received:	08/02/19
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1	Extraction Date:	08/12/19 00:26
Analytical Date:	08/13/19 06:39	Cleanup Method1:	EPH-04-1
Analyst:	SC	Cleanup Date1:	08/13/19

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
Extractable Petroleum Hydrocarbons - 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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	60		40-140
o-Terphenyl	81		40-140
2-Fluorobiphenyl	86		40-140
2-Bromonaphthalene	87		40-140

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1934529
Report Date: 08/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 08/13/19 05:53
Analyst: SC

Extraction Method: EPA 3510C
Extraction Date: 08/11/19 01:48
Cleanup Method: EPH-04-1
Cleanup Date: 08/13/19

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG1271060-1					
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	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	51		40-140
o-Terphenyl	57		40-140
2-Fluorobiphenyl	67		40-140
2-Bromonaphthalene	67		40-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1934529
Report Date: 08/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG1271060-2 WG1271060-3								
C9-C18 Aliphatics	82		71		40-140	14		25
C19-C36 Aliphatics	82		76		40-140	8		25
C11-C22 Aromatics	75		75		40-140	0		25
Naphthalene	64		58		40-140	10		25
2-Methylnaphthalene	65		60		40-140	8		25
Acenaphthylene	71		67		40-140	6		25
Acenaphthene	75		71		40-140	5		25
Fluorene	76		73		40-140	4		25
Phenanthrene	78		77		40-140	1		25
Anthracene	75		75		40-140	0		25
Fluoranthene	78		78		40-140	0		25
Pyrene	80		80		40-140	0		25
Benzo(a)anthracene	75		76		40-140	1		25
Chrysene	71		72		40-140	1		25
Benzo(b)fluoranthene	76		77		40-140	1		25
Benzo(k)fluoranthene	70		71		40-140	1		25
Benzo(a)pyrene	70		71		40-140	1		25
Indeno(1,2,3-cd)Pyrene	65		66		40-140	2		25
Dibenzo(a,h)anthracene	65		66		40-140	2		25
Benzo(ghi)perylene	59		60		40-140	2		25
Nonane (C9)	56		45		30-140	22		25
Decane (C10)	66		55		40-140	18		25
Dodecane (C12)	76		64		40-140	17		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1934529
Report Date: 08/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG1271060-2 WG1271060-3								
Tetradecane (C14)	80		69		40-140	15		25
Hexadecane (C16)	82		74		40-140	10		25
Octadecane (C18)	84		76		40-140	10		25
Nonadecane (C19)	82		75		40-140	9		25
Eicosane (C20)	82		76		40-140	8		25
Docosane (C22)	81		74		40-140	9		25
Tetracosane (C24)	80		74		40-140	8		25
Hexacosane (C26)	79		73		40-140	8		25
Octacosane (C28)	78		72		40-140	8		25
Triacontane (C30)	78		72		40-140	8		25
Hexatriacontane (C36)	67		63		40-140	6		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	64		56		40-140
o-Terphenyl	72		72		40-140
2-Fluorobiphenyl	78		79		40-140
2-Bromonaphthalene	79		80		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

PCBS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1934529
Report Date: 08/14/19

SAMPLE RESULTS

Lab ID: L1934529-01
Client ID: FRAC TANK
Sample Location: WISCASSET, ME

Date Collected: 08/02/19 09:00
Date Received: 08/02/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 08/10/19 14:16
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 08/09/19 00:50
Cleanup Method: EPA 3665A
Cleanup Date: 08/09/19
Cleanup Method: EPA 3660B
Cleanup Date: 08/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1934529
Report Date: 08/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 08/09/19 15:11
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 08/09/19 00:50
Cleanup Method: EPA 3665A
Cleanup Date: 08/09/19
Cleanup Method: EPA 3660B
Cleanup Date: 08/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1270354-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	105		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	98		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1934529
Report Date: 08/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1270354-2 WG1270354-3									
Aroclor 1016	89		88		40-140	1		50	A
Aroclor 1260	83		81		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		85		30-150	A
Decachlorobiphenyl	97		94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		82		30-150	B
Decachlorobiphenyl	95		93		30-150	B

METALS

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1934529
Report Date: 08/14/19

SAMPLE RESULTS

Lab ID: L1934529-01
Client ID: FRAC TANK
Sample Location: WISCASSET, ME
Date Collected: 08/02/19 09:00
Date Received: 08/02/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.005	--	1	08/09/19 10:41	08/13/19 18:12	EPA 3005A	1,6010D	AB
Barium, Total	ND		mg/l	0.010	--	1	08/09/19 10:41	08/13/19 18:12	EPA 3005A	1,6010D	AB
Cadmium, Total	ND		mg/l	0.005	--	1	08/09/19 10:41	08/13/19 18:12	EPA 3005A	1,6010D	AB
Chromium, Total	ND		mg/l	0.010	--	1	08/09/19 10:41	08/13/19 18:12	EPA 3005A	1,6010D	AB
Lead, Total	ND		mg/l	0.010	--	1	08/09/19 10:41	08/13/19 18:12	EPA 3005A	1,6010D	AB
Mercury, Total	ND		mg/l	0.00020	--	1	08/14/19 11:08	08/14/19 13:54	EPA 7470A	1,7470A	GD
Selenium, Total	ND		mg/l	0.010	--	1	08/09/19 10:41	08/13/19 18:12	EPA 3005A	1,6010D	AB
Silver, Total	ND		mg/l	0.007	--	1	08/09/19 10:41	08/13/19 18:12	EPA 3005A	1,6010D	AB

Project Name: MASON STATION
Project Number: 171.06108
Lab Number: L1934529
Report Date: 08/14/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1270562-1										
Arsenic, Total	ND		mg/l	0.005	--	1	08/09/19 10:41	08/13/19 16:04	1,6010D	AB
Barium, Total	ND		mg/l	0.010	--	1	08/09/19 10:41	08/13/19 16:04	1,6010D	AB
Cadmium, Total	ND		mg/l	0.005	--	1	08/09/19 10:41	08/13/19 16:04	1,6010D	AB
Chromium, Total	ND		mg/l	0.010	--	1	08/09/19 10:41	08/13/19 16:04	1,6010D	AB
Lead, Total	ND		mg/l	0.010	--	1	08/09/19 10:41	08/13/19 16:04	1,6010D	AB
Selenium, Total	ND		mg/l	0.010	--	1	08/09/19 10:41	08/13/19 16:04	1,6010D	AB
Silver, Total	ND		mg/l	0.007	--	1	08/09/19 10:41	08/13/19 16:04	1,6010D	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1272226-1										
Mercury, Total	ND		mg/l	0.00020	--	1	08/14/19 11:08	08/14/19 13:46	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASON STATION

Project Number: 171.06108

Lab Number: L1934529

Report Date: 08/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1270562-2								
Arsenic, Total	117		-		80-120	-		
Barium, Total	112		-		80-120	-		
Cadmium, Total	114		-		80-120	-		
Chromium, Total	109		-		80-120	-		
Lead, Total	112		-		80-120	-		
Selenium, Total	118		-		80-120	-		
Silver, Total	109		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1272226-2								
Mercury, Total	87		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1934529
Report Date: 08/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1272226-3 QC Sample: L1934529-01 Client ID: FRAC TANK												
Mercury, Total	ND	0.005	0.00481	96		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: MASON STATION

Project Number: 171.06108

Lab Number: L1934529

Report Date: 08/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1272226-4 QC Sample: L1934529-01 Client ID: FRAC TANK						
Mercury, Total	ND	ND	mg/l	NC		20

Project Name: MASON STATION
Project Number: 171.06108

Lab Number: L1934529
Report Date: 08/14/19

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(*)
L1934529-01A	Amber 120ml unpreserved	A	7	7	3.6	Y	Absent		PCB-8082-LVI(7)
L1934529-01B	Amber 120ml unpreserved	A	7	7	3.6	Y	Absent		PCB-8082-LVI(7)
L1934529-01C	Plastic 250ml HNO3 preserved	A	<2	<2	3.6	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L1934529-01D	Amber 1000ml HCl preserved	A	<2	<2	3.6	Y	Absent		EPH-10(14)
L1934529-01E	Amber 1000ml HCl preserved	A	<2	<2	3.6	Y	Absent		EPH-10(14)

*Values in parentheses indicate holding time in days

Project Name:	MASON STATION	**Lab Number:**	L1934529
Project Number:	171.06108	**Report Date:**	08/14/19

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.

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.

Footnotes

Report Format: Data Usability Report

Project Name:	MASON STATION	**Lab Number:**	L1934529
Project Number:	171.06108	**Report Date:**	08/14/19

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.

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. If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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.

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 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.

Report Format: Data Usability Report

Project Name:	MASON STATION	**Lab Number:**	L1934529
Project Number:	171.06108	**Report Date:**	08/14/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

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
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; 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.**

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.

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, 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: 8/2/19

ALPHA Job #: L1934529

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: Mason Station
- Project Location: Wiscasset, ME
- Project #: 171.06108
- Project Manager: Stephen Dyer
- ALPHA Quote #:

Report Information - Data Deliverables
- ☒ ADEx ☐ EMAIL

Billing Information
- ☐ Same as Client info
- PO #: 11885

Client Information
- Client: Ransom Consulting, Inc.
- Address: 400 Commercial Street #400, Portland, ME 04101
- Phone: 207-772-2891
- Email: Stephen.Dyer@ransomenv.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 Maine Drinking Water Criteria Standards

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

Additional Project Information:

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	VOC	SVOC	METALS	METALS	EPH	VPH	PCB	TPH	Sample Comments	TOTAL # BOTTLES
34529-01	Frac Tank	8/2/19	09:00	water	CMV				X	X		X			5

Container Type								P	A		A				
Preservative								C	B		A				

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
TMC	8/2/19 13:22	TMC AAL	8-2-19 1322
TMC	8-2-19 1809	AKL	8-2-19 1809

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:	L1903069
Client:	Environmental Projects, Inc P.O. Box 1417 Auburn, ME 04211-1417
ATTN:	Brian Fons
Phone:	(207) 786-7390
Project Name:	WISCASSET
Project Number:	12944
Report Date:	01/28/19

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: WISCASSET
Project Number: 12944

Lab Number: L1903069
Report Date: 01/28/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1903069-01	UNIT 5 SIDE	WIPE	UNIT 5	01/24/19 12:05	01/24/19
L1903069-02	UNIT 5 REAR	WIPE	UNIT 5	01/24/19 12:10	01/24/19

Project Name:	WISCASSET	**Lab Number:**	L1903069
Project Number:	12944	**Report Date:**	01/28/19

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.

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: Cristin Walker Cristin Walker

Title: Technical Director/Representative Date: 01/28/19

ORGANICS

PCBS

Project Name: WISCASSET
Project Number: 12944
Lab Number: L1903069
Report Date: 01/28/19

SAMPLE RESULTS

Lab ID: L1903069-01
Client ID: UNIT 5 SIDE
Sample Location: UNIT 5

Date Collected: 01/24/19 12:05
Date Received: 01/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Wipe
Analytical Method: 1,8082A
Analytical Date: 01/26/19 02:24
Analyst: HT

Extraction Method: EPA 3540C
Extraction Date: 01/25/19 01:50
Cleanup Method: EPA 3665A
Cleanup Date: 01/25/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/25/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug Abs	0.500	--	1	A
Aroclor 1221	ND		ug Abs	0.500	--	1	A
Aroclor 1232	ND		ug Abs	0.500	--	1	A
Aroclor 1242	ND		ug Abs	0.500	--	1	A
Aroclor 1248	ND		ug Abs	0.500	--	1	A
Aroclor 1254	ND		ug Abs	0.500	--	1	A
Aroclor 1260	ND		ug Abs	0.500	--	1	A
Aroclor 1262	ND		ug Abs	0.500	--	1	A
Aroclor 1268	ND		ug Abs	0.500	--	1	A
PCBs, Total	ND		ug Abs	0.500	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: WISCASSET
Project Number: 12944
Lab Number: L1903069
Report Date: 01/28/19

SAMPLE RESULTS

Lab ID: L1903069-02
Client ID: UNIT 5 REAR
Sample Location: UNIT 5

Date Collected: 01/24/19 12:10
Date Received: 01/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Wipe
Analytical Method: 1,8082A
Analytical Date: 01/26/19 02:37
Analyst: HT

Extraction Method: EPA 3540C
Extraction Date: 01/25/19 01:50
Cleanup Method: EPA 3665A
Cleanup Date: 01/25/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/25/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug Abs	0.500	--	1	A
Aroclor 1221	ND		ug Abs	0.500	--	1	A
Aroclor 1232	ND		ug Abs	0.500	--	1	A
Aroclor 1242	ND		ug Abs	0.500	--	1	A
Aroclor 1248	ND		ug Abs	0.500	--	1	A
Aroclor 1254	ND		ug Abs	0.500	--	1	A
Aroclor 1260	ND		ug Abs	0.500	--	1	A
Aroclor 1262	ND		ug Abs	0.500	--	1	A
Aroclor 1268	ND		ug Abs	0.500	--	1	A
PCBs, Total	ND		ug Abs	0.500	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	76		30-150	B
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	60		30-150	A

Project Name: WISCASSET
Project Number: 12944

Lab Number: L1903069
Report Date: 01/28/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 01/26/19 02:50
Analyst: HT

Extraction Method: EPA 3540C
Extraction Date: 01/25/19 01:50
Cleanup Method: EPA 3665A
Cleanup Date: 01/25/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/25/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1200787-1						
Aroclor 1016	ND		ug Abs	0.500	--	A
Aroclor 1221	ND		ug Abs	0.500	--	A
Aroclor 1232	ND		ug Abs	0.500	--	A
Aroclor 1242	ND		ug Abs	0.500	--	A
Aroclor 1248	ND		ug Abs	0.500	--	A
Aroclor 1254	ND		ug Abs	0.500	--	A
Aroclor 1260	ND		ug Abs	0.500	--	A
Aroclor 1262	ND		ug Abs	0.500	--	A
Aroclor 1268	ND		ug Abs	0.500	--	A
PCBs, Total	ND		ug Abs	0.500	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	74		30-150	B
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	59		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: WISCASSET

Project Number: 12944

Lab Number: L1903069

Report Date: 01/28/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1200787-2 WG1200787-3									
Aroclor 1016	69		68		40-140	2		50	A
Aroclor 1260	63		63		40-140	0		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		82		30-150	B
Decachlorobiphenyl	79		78		30-150	B
2,4,5,6-Tetrachloro-m-xylene	83		82		30-150	A
Decachlorobiphenyl	64		63		30-150	A

Project Name: WISCASSET
Project Number: 12944

Lab Number: L1903069
Report Date: 01/28/19

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(*)
L1903069-01A	Glass 120ml/4oz w/1:4 Acetone:Hexane	A	NA		2.6	Y	Absent		PCB-8082-3540C(14)
L1903069-02A	Glass 120ml/4oz w/1:4 Acetone:Hexane	A	NA		2.6	Y	Absent		PCB-8082-3540C(14)

*Values in parentheses indicate holding time in days

Project Name:	WISCASSET	**Lab Number:**	L1903069
Project Number:	12944	**Report Date:**	01/28/19

GLOSSARY

Acronyms

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.
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.
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.
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.

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.

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.

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.

Report Format: Data Usability Report

Project Name:	WISCASSET	**Lab Number:**	L1903069
Project Number:	12944	**Report Date:**	01/28/19

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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.

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.

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

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name:	WISCASSET	**Lab Number:**	L1903069
Project Number:	12944	**Report Date:**	01/28/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

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**
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.**

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.

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:01281911:00

ALPHA ANALYTICAL

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 1/24/19

ALPHA Job #: L1903069

Project Information

Project Name: Wiscasset

Project Location: Unit 5

Project #: 12944

Project Manager: Brian Fons

ALPHA Quote #: Nathalie

Report Information - Data Deliverables

☐ ADEx ☑ EMAIL

Billing Information

☐ Same as Client info PO #: 12944

Client Information

Client: Environmental Projects, Inc

Address: Po Box 1417 Auburn ME 04211

Phone: 207-786-7390

Email: BFONS@ENVPROJECTS.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:

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	PCB	Sample Comments	TOTAL # BOTTLES
03069-01	Unit 5 Side	1/24/19	12:05	Wipe	BF	8		
-02	Unit 5 Rear	1/24/19	12:10	Wipe		8		
	Container Type					G		
	Preservative					A		

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] BF	1/24/19 14:00	Rob Magh AAL	1/24/19 1400
Rob Magh AAL	1/24/19 19:15	[signature]	1/24/19 1915

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

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

ATTACHMENT D

Disposal Receipts

Unit #5 Transformer Remediation
Mason Station
Wiscasset, Maine

DILLANS FILE FOR WIZ

PROLERIZED NEW ENGLAND COMPANY, LLC. 522 WASHINGTON STREET N AUBURN, ME 04210 (207)786-3531

ENVIRONMENTAL PROJECTS
Vendor # ENVI01

Date: 02/08/19
Check No: 2210228264

TICKET# SHP DATE COMMODITY	GROSS	TARE	NET	ADJ	PAID WT	VEHICLE ID	PRICE UM	FRT EXT	TOTAL AMT
TSTNFD 02/08/19 TIN/LIGHT IRON	12560	10980	1580	0	1580	EPI	102.0000 GT	0.00	71.95
VENDOR ENVI01 TOTALS (Pounds):			1580	0	1580		TOTAL DUE: $		71.95

EP 12944

PROLERIZED NEW ENGLAND COMPANY, LLC. 522 WASHINGTON STREET N AUBURN, ME 04210 (207)786-3531

ENVIRONMENTAL PROJECTS
Vendor # ENVI01

Date: 02/08/19
Check No: 2210228263

TICKET# SHP DATE COMMODITY	GROSS	TARE	NET	ADJ	PAID WT	VEHICLE ID	PRICE UM	FRT EXT	TOTAL AMT
TSTNXN 02/08/19 TIN/LIGHT IRON	12760	10980	1780	0	1780	EPI	102.0000 GT	0.00	81.05
VENDOR ENVI01 TOTALS (Pounds):			1780	0	1780		TOTAL DUE: $		81.05

EP 12944

PROLERIZED NEW ENGLAND COMPANY, LLC. 522 WASHINGTON STREET N AUBURN, ME 04210 (207)786-3531

ENVIRONMENTAL PROJECTS
Vendor # ENVI01

Date: 02/11/19
Check No: 2210228284

TICKET# SHP DATE COMMODITY	GROSS	TARE	NET	ADJ	PAID WT	VEHICLE ID	PRICE UM	FRT EXT	TOTAL AMT
TSTSMP 02/11/19 #2 HMS Prepared	9260	8980	280	0	280	EPI	147.0000 GT	0.00	18.38
VENDOR ENVI01 TOTALS (Pounds):			280	0	280		TOTAL DUE: $		18.38

Shop

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Date 7 JAN 19 Bill of Lading No. 12944-1

Shipper No.

Memorandum ENVIRONMENTAL PROJECTS INC (Name of Carrier) Carrier No. 786 7390

TO: Consignee	ENVIRONMENTAL PROJECTS INC	FROM: Shipper	NATIONAL RESOURCES
Street	664 WASHINGTON ST. N.	Street	144 BIRCH POINT RD
Destination	AUBURN, ME Zip Code 04210	Origin	WISCASSET, ME Zip Code 04578
Route:	Vehicle No. V-4	SCAC	Emergency Response Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions (Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360.)	Weight (Subject to Correction)*	Rate or Class	CHARGES
1 X TRK		OIL CONTAMINATED WATER (TRENCH)	876	G	
		3 X Tales total			

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS

C.O.D. Amt. $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

FREIGHT CHARGES
Check Appropriate Box:
☐ Freight prepaid
☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (iii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply, unless a specific exception from the requirement is provided in the Regulation for a particular material.

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203: Proper shipping name, hazardous class, UN identification number, packing group, and subsidiary class(es).

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c (1)(A) and (B).

SHIPPER DAN WOODARD - EPI

PER

CARRIER

PER

This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation.

Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Date 8 JAN 2019 Bill of Lading No. 12944-2

Shipper No.

Memorandum ENVIRONMENTAL PROJECTS INC Carrier No. 796 7390

(Name of Carrier)

TO: Consignee	EPI	FROM: Shipper	NATIONAL RESOURCES
Street	664 WASHINGTON ST N.	Street	144 BUZZY POINT RD
Destination	AUBURN, ME Zip Code 04210	Origin	WISCASSET, ME Zip Code 04578
Route:	Vehicle No. V-4	SCAC	Emergency Response Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions (Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360.)	Weight (Subject to Correction)*	Rate or Class	CHARGES
1 x TOTE		USED OIL	303	G	
		1X Tote MIA OIL			

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS | C.O.D. Amt. $ | C.O.D. FEE: PREPAID ☐ COLLECT ☐ $ | TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

FREIGHT CHARGES Check Appropriate Box:

☐ Freight prepaid

☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (iii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply, unless a specific exception from the requirement is provided in the Regulation for a particular material.

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203: Proper shipping name, hazardous class, UN identification number, packing group, and subsidiary class(es).

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c (1)(A) and (B).

SHIPPER DAN WOODARD - EPI CARRIER

PER PER

This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation.

Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Shipping Order

Date 6/21/19 Bill of Lading No. 12944-2

Shipper No.

Carrier No. 7667398

ENVIRONMENTAL PROJECTS INC
(Name of Carrier)

TO: Consignee	ERI	FROM: Shipper	MASON STATION
Street	661 WASHINGTON ST N	Street	144 BIRCH POINT RD
Destination	AUBURN, ME	Zip Code 04210	Origin WISCASSET ME	Zip Code 04578
Route:		Vehicle No. V 39	SCAC	Emergency Response Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions (Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360.)	Weight (Subject to Correction)*	Rate or Class	CHARGES
1 XTT		NON DOT REGULATED MATERIAL (CAKY SLUDGE)	480	G	

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS

C.O.D. Amt. $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____
(Signature of Consignor)

FREIGHT CHARGES
Check Appropriate Box:
☐ Freight prepaid
☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (iii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply, unless a specific exception from the requirement is provided in the Regulation for a particular material.

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203: Proper shipping name, hazardous class, UN identification number, packing group, and subsidiary class(es).

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c (1)(A) and (B).

SHIPPER	CARRIER
PER	PER

2 This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation.

Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Date 6/21/19 Bill of Lading No. 12944-2

Shipper No.

Shipping Order

ENVIRONMENTAL PROJECTS INC (Name of Carrier) Carrier No. 7667398

TO: Consignee	ERI	FROM: Shipper	MASON STATION
Street	661 WASHINGTON ST N	Street	144 BIRCH POINT RD
Destination	AUBURN, ME Zip Code 04210	Origin	WISCASSET ME Zip Code 04578
Route:	Vehicle No. V 39	SCAC	Emergency Response Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions (Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360.)	Weight (Subject to Correction)*	Rate or Class	CHARGES
1XTT		NON DOT REGULATED MATERIAL (ONLY SLUDGE)	480	G	

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS

C.O.D. Amt. $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

FREIGHT CHARGES
Check Appropriate Box:
☐ Freight prepaid
☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (iii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply, unless a specific exception from the requirement is provided in the Regulation for a particular material.

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203: Proper shipping name, hazardous class, UN identification number, packing group, and subsidiary class(es).

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c (1)(A) and (B).

SHIPPER _____ CARRIER _____

PER _____ PER _____

2 This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation.

Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.

EP-12944

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MEX02000000000
2. Page 1 of: 1
3. Emergency Response Phone: 877-546-0947
4. Waste Tracking Number: NHM12944

5. Generator's Name and Mailing Address: Mason Station LLC, 485 West Putnam Ave. Greenwich, CT. 06830
Generator's Site Address (if different than mailing address): Point East Drive, Wiscasset, ME. 04578
Generator's Phone: (207)

6. Transporter 1 Company Name: Environmental Projects Inc.
U.S. EPA ID Number: NYR000504191

7. Transporter 2 Company Name: Republic Env Sys (Transp Group) LLC
U.S. EPA ID Number: PAD982661381

8. Designated Facility Name and Site Address: Northland Environmental LLC, 375 Allens Avenue, Providence, RI. 02905
U.S. EPA ID Number: RID040096352
Facility's Phone: (401) 781-6340

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non DOT / Non RCRA Regulated Material	018	DF	8000	P	None
2.	Non DOT / NON RCRA Regulated Material	001	DF	00500	P	NONE
3.						
4.						

13. Special Handling Instructions and Additional Information
1. 18x55 Trench Sludge
2. IVSS " "

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Tim HARRIS
Signature:
Month 9 Day 10 Year 19

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Eric Granlund
Signature:
Month 9 Day 10 Year 19
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name:
Signature:
Month Day Year

ATTACHMENT E

Water Discharge Plan

Unit #5 Transformer Remediation
Mason Station
Wiscasset, Maine

RANSOM
Consulting
Engineers
and Scientists

Memo

400 Commercial Street, Suite 404, Portland, Maine 04101, Tel (207) 772-2891, Fax (207) 772-3248

Byfield, Massachusetts □ Portsmouth, New Hampshire □ Hamilton, New Jersey □ Providence, Rhode Island

www.ransomenv.com

Date:	12/26/18
Subject:	Water Discharge Plan; Mason Station, Wiscasset, Maine
From:	Erik Phenix, Steve Dyer, Ransom Consulting, Inc.
To:	Dani Obery, Maine Department of Environmental Protection

As requested in a letter from the Maine Department of Environmental Protection (MEDEP), dated December 21, 2018, this Water Discharge Plan is being provided to describe the proposed process for on-site treatment and discharge of water generated as part of the remediation efforts at the Mason Station facility in Wiscasset, Maine.

Water currently contained in the floor drain trenches and basement vaults within Units #1, #2, and #5 of the Powerhouse Building has previously been characterized and shown to contain concentrations of petroleum constituents, PCBs, and certain metals. Due to the volume of water requiring treatment, Ransom through our subcontractor Environmental Projects, Inc. (EPI) proposes to treat and discharge the water on-site.

Any free-phase product observed on the water will be removed using sorbent pads, which will be transported for appropriate off-site disposal. The oily water mixture currently in the trench drain system will be processed through a 55 gallon drum containing activated carbon at a rate of approximately 10 gallons per minute. The processed water will be stored on site in a 20,000-gallon fractionation tank until laboratory analytical results can be obtained. Ransom understands that the MEDEP has required any water discharged to the Site shall meet the drinking water standards set forth by the U.S. EPA and the Maine Center for Disease Control. Samples will be submitted for laboratory analysis of Extractable Petroleum Hydrocarbons (EPH), PCBs, and RCRA 8 Metals. Once laboratory analytical results have been obtained indicating the treated water meets the required standards, the treated water will be discharged from the fractionation tank to the ground surface at a rate of approximately 10 gallons per minute. The proposed discharge location is shown on the following site sketch.

A water sample will be collected and laboratory analytical results will be obtained prior to discharge of any water to the ground surface, and at a rate of every 20,000 gallons thereafter. Additional carbon vessels will be obtained, if necessary based on the total volume of water anticipated for discharge.

We trust this provides the information you require at this time. Please let us know at your earliest convenience if this plan is acceptable to the MEDEP.

Birch Point Road
Hilton Pond
Hilton Cove
Point East Rerserve
Hilton Pond Pumphouse
Point East Drive
South Point Drive
North Point Drive
Peregrine Consulting
Stockpiled Soil and Residual Coal Excavated From Northern Lots
CMP Co.
Rail Swtiching Yard
Proposed Water Discharge Location Option #2
Maintenance Building
Mason Station Powerhouse Building
Screen House #2
Screen House #1
Screen House #3
Ash Pond 3
Ash Pond 2
Ash Pond 4
Ash Pond 1
Ash Pond Pump House
Ice Pond
Back River

RANSOM
Consulting Engineers and Scientists

Legend & Notes

- Site Boundary
- Rail
- Lot Boundary
- Common Area

Notes

1. Site Plan based on ESRI/ Digital Globe Orthophotography
2. Some features are approximate in location and scale
3. This plan has been prepared for Mason Station, LLC. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

Scale & Orientation

0 100 200

1 inch = 200 feet

Prepared For

Mason Station, LLC
485 West Putnam Avenue
Greenwich, Connecticut

Site Address

Mason Station
Birch Point Road
Wiscasset, Maine

171.06108 | Apr 2018

Figure 2
Site Plan

G:\Data\ME\Project\171_06108\Maps\Figure_2.mxd