

October 4, 2019



Project 171.06108.006

Ms. Marianne Milette PCB Enforcement Coordinator United States Environmental Protection Agency, Region 1 5 Post Office Square, Suite 100 (5-4) Boston, Massachusetts 02109-3912

RE: Initial Transformer Evaluation Mason Station Wiscasset, Maine

Dear Ms. Milette:

On behalf of Mason Station, LLC, Ransom Consulting, Inc. (Ransom) has prepared this letter report documenting the activities and findings of the Initial Transformer Evaluation at the Mason Station Powerhouse located in Wiscasset, Maine (the "Site"). The Initial Transformer Evaluation was proposed in Ransom's July 31, 2019 "Response to Preliminary Notice of Noncompliance" letter.

BACKGROUND

On June 5, 2019, U.S. EPA personnel conducted a site visit to locate potential Poly-chlorinated Biphenyl (PCB) filled transformers at the Site. At the time of the site visit, six liquid filled transformers were identified. Four of the transformers were located in fenced enclosures on the exterior of the Powerhouse building (Serial Numbers 28477-1, 28479-1, 28280-1 and B-363190). Two additional transformers were observed on the fourth floor of Unit 3 & 4 within the Powerhouse building (Serial Numbers 51334 and 51335). Transformer locations are shown on the Transformer Location Plan included as Attachment 1.

Upon further information provided by the Site owners and additional inspection, eight (8) smaller oilfilled electrical transformers were identified within the Powerhouse building. This represents a total of 4 exterior transformers and 10 interior transformers. Refer to the Transformer Location Plan included as Attachment 1.

The Initial Transformer Evaluation activities were performed to sample and analyze the PCB content and determine the remaining volume of oil contained within each of the identified transformers.

TRANSFORMER SAMPLING & OBSERVATIONS

On August 19, 2019, Ransom completed the transformer sampling and observation activities. Environmental Projects Inc. of Auburn, Maine was contracted provide access for sampling of the transformer oil. Generally, transformers were accessed from the top of housing, taking care not to release or spill oil from the transformers. Following sample collection, the access port was re-secured to the transformer. During the sampling activities, the serial number and capacity (volume) of each transformer was noted. Ransom also noted approximately how much oil remained in each transformer. In the case of transformers manufactured by Niagara Transformer Corporation, the manufacturer provided the manufacture date based on the serial numbers. All of the Niagara transformers were manufactured after 1988 and are not anticipated to be PCB containing transformers. The exact manufacturing details for the two General Electric transformers could not be determined. However, both transformers have plates attached detailing that the transformer oil was sampled on November 16, 1992 to confirm the transformers were not PCB containing. Transformer observations and information are recorded on Table 1, Attachment 2.

Samples of transformer oil were collected directly from the inside of the transformer with a laboratory supplied pre-cleaned sample container. In certain cases where the access port was not large enough to extend a sample container inside the transformer, ¹/₄-inch polyethylene tubing was inserted into the transformer and oil was removed using a peristaltic pump. Transformer Serial Number 51335 was observed to be empty at the time of the evaluation. Therefore, no sample was obtained from this transformer.

Transformer oil samples were submitted under chain of custody protocol to Alpha Analytical Laboratory in Westborough Massachusetts for analysis of PCBs by U.S. EPA Method 8082.

FINDINGS

Transformer observations and analytical results are summarized in Table 1, Attachment 2. The certified laboratory analytical report is included as Attachment 3.

Exterior Transformers

All four of the exterior transformers were observed to be full of oil at the time of sample collection. The volume of oil is presumed to be the capacity of each transformer as identified on the transformer nameplate. Oil sample analytical results indicate PCB concentrations in excess of 300,000 milligrams per kilogram (or parts per million) for each of the exterior transformers. Refer to Table 1, Attachment 2.

Interior Transformers

Analytical results from oil samples collected from the interior transformers confirmed this and indicated PCB concentrations less than 50 milligrams per kilogram (or parts per million). Please refer to Table 1, Attachment 2.

With the exception of transformer Serial Number 51335, all interior transformers were observed to be full of oil at the time of sample collection. Transformer Serial Number 51335 was observed to be empty. This transformer is paired within secondary containment with Transformer Serial Number 51334. During previous investigations and at the time of the U.S. EPA PCB Compliance Inspection, a transformer oil release was observed to have occurred within the secondary containment and precipitation from roof leaks was found to have caused the overflowing of the secondary containment associated with these transformers. Transformer Serial Number 51335 is suspected to be the source of the observed release.

Mason Station LLC is currently in the process of contracting to have the known transformers emptied, cleaned, and transported for off-site disposal in accordance with applicable regulations. Please let us know if you have any questions or comments regarding this Initial Transformer Evaluation.

Ms. Marianne Milette PCB Enforcement Coordinator United States Environmental Protection Agency, Region 1

Sincerely,

RANSOM CONSULTING, INC.

Eik Pheng

Eriksen P. Phenix, C.G. Project Geologist

EPP/SJD:mes

Stephen J. Dyer, P.E

Senior Project Manager



	Consulting Engineers and Scientists
	Legend & Notes
	Transformer Location and Serial Number
North Transformer Enclosure	
	Notes
	1. Some features are approximate in
	location and scale 2. 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
Saraan Hamaa #2	0 25 50
	1 inch = 50 feet
	Prepared For
	Mason Station, LLC 485 West Putnam Avenue Greenwich, Connecticut
	Site Address
	Mason Station Birch Point Road Wiscasset, Maine
	171.06108 Oct 2018
	Figure 1 Transformer Location Plan

X:\Ransom_NewEngland\Maine\Wiscasset_ME\MasonStation\MS_Wiscasset_ME_F1_TranformerLoc.mxd

Table 1: Transformer Information and Oil Analytical Results

Initial Transformer Evaluation Mason Station Birch Point Road, Wiscasset, Maine

Transformer Location	Manufacturer	Serial Number	Date of Manufacture	Capacity	Liquid Level Observations 8/19/19	Total PCB Concentration (mg/kg)
Exterior Transformers						
Northern Transformer Cage	General Electric	B-363190	Unknown	1025 gallons	Full	455,000
Southwestern Transformer Cage	Pennsylvania	28480-1	Unknown	965 gallons	Full	358,000
Southwestern Transformer Cage	Pennsylvania	28479-1	Unknown	965 gallons	Full	352,000
Southwestern Transformer Cage	Pennsylvania	28477-1	Unknown	825 gallons	Full	320,000
Interior Transformers						
Unit 3&4, 7th Floor Precipitator Room	General Electric	B516678	Unknown ¹	75 gallons	Full	13.9
Unit 3&4, 7th Floor Precipitator Room	General Electric	B516107	Unknown ¹	75 gallons	Full	4.61
Unit 3&4, 4th Floor	Niagara Transformer Corp.	51334	1989	97 gallons	Full	2.04
Unit 3&4, 4th Floor	Niagara Transformer Corp.	51335	1989	97 gallons	Empty	NA
Unit 1&2, 2nd Floor, Store Room #1	Niagara Transformer Corp.	50541	1988	512 gallons	Full	Below Reporting Limit (<0.936)
Unit 1&2, 2nd Floor, Store Room #1	No ID Plate (Presumed to be Niagara Transformer similar to 50539)	No I.D.	Unknown	No capacity info	Full	Below Reporting Limit (<0.943)
Unit 1&2, 1st Foor, Battery Room #2	Niagara Transformer Corp.	50539	1988	135 gallons	Full	Below Reporting Limit (<0.938)
Unit 3&4, 1st Floor	Niagara Transformer Corp.	51951	1990	635-gal	Full	Below Reporting Limit (<0.940)
Unit 3&4, 1st Floor	Niagara Transformer Corp.	51337	1989	36-gal	Full	2.22
Unit 3&4, 1st Floor	Niagara Transformer Corp.	51336	1989	36-gal	Full	4.08

(1) - Name plate indicates transformer oils were sampled on 11/16/1992 and results were < 50 ppm.

ATTACHMENT A

Laboratory Report

Initial Transformer Evaluation Mason Station Wiscasset, Maine

Ransom Consulting, Inc. Project 171.06108



ANALYTICAL REPORT

Lab Number:	L1937692
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:	171.06108.006
Report Date:	09/04/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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



Serial_No:09041909:29

Project Name:MASON STATIONProject Number:171.06108.006

 Lab Number:
 L1937692

 Report Date:
 09/04/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1937692-01	B-363190	OIL	WISCASSET, ME	08/19/19 09:30	08/20/19
L1937692-02	28480-1	OIL	WISCASSET, ME	08/19/19 09:55	08/20/19
L1937692-03	28479-1	OIL	WISCASSET, ME	08/19/19 10:10	08/20/19
L1937692-04	28477-1	OIL	WISCASSET, ME	08/19/19 10:20	08/20/19
L1937692-05	50539	OIL	WISCASSET, ME	08/19/19 11:05	08/20/19
L1937692-06	51951	OIL	WISCASSET, ME	08/19/19 11:25	08/20/19
L1937692-07	51336	OIL	WISCASSET, ME	08/19/19 11:35	08/20/19
L1937692-08	51337	OIL	WISCASSET, ME	08/19/19 11:40	08/20/19
L1937692-09	50541	OIL	WISCASSET, ME	08/19/19 12:05	08/20/19
L1937692-10	NO I.D.	OIL	WISCASSET, ME	08/19/19 12:10	08/20/19
L1937692-11	51334	OIL	WISCASSET, ME	08/19/19 13:10	08/20/19
L1937692-12	51335	OIL	WISCASSET, ME	08/19/19 13:25	08/20/19
L1937692-13	B516107	OIL	WISCASSET, ME	08/19/19 14:10	08/20/19
L1937692-14	B516678	OIL	WISCASSET, ME	08/19/19 14:15	08/20/19



Project Name: MASON STATION Project Number: 171.06108.006

Lab Number: L1937692 Report Date: 09/04/19

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.



Project Name:MASON STATIONProject Number:171.06108.006

 Lab Number:
 L1937692

 Report Date:
 09/04/19

Case Narrative (continued)

Sample Receipt

L1937692-12: A sample identified as "51335" was listed on the Chain of Custody, but not received.

PCBs

L1937692-01, -02, -03, and -04: The surrogate recoveries are below the acceptance criteria for 2,4,5,6tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

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.

Melissa Sturgis Melissa Sturgis

Authorized Signature:

Title: Technical Director/Representative

Date: 09/04/19



QC OUTLIER SUMMARY REPORT

Project Name: MASON STATION

Project Number: 171.06108.006

Lab Number: L1937692

Report Date: 09/04/19

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
Polychlorina	ated Biphenvis by GC - Westborouc	uh Lab			. ,		·	
8082A	B-363190	L1937692-01 D	2.4.5.6-Tetrachloro-m-xylene (A)	Surrogate	0	30-150	-	not applicable
8082A	B-363190	L1937692-01 D	2,4,5,6-Tetrachloro-m-xylene (B)	Surrogate	0	30-150	-	not applicable
8082A	B-363190	L1937692-01 D	Decachlorobiphenyl (A)	Surrogate	0	30-150	-	not applicable
8082A	B-363190	L1937692-01 D	Decachlorobiphenyl (B)	Surrogate	0	30-150	-	not applicable
8082A	28480-1	L1937692-02 D	2,4,5,6-Tetrachloro-m-xylene (A)	Surrogate	0	30-150	-	not applicable
8082A	28480-1	L1937692-02 D	2,4,5,6-Tetrachloro-m-xylene (B)	Surrogate	0	30-150	-	not applicable
8082A	28480-1	L1937692-02 D	Decachlorobiphenyl (A)	Surrogate	0	30-150	-	not applicable
8082A	28480-1	L1937692-02 D	Decachlorobiphenyl (B)	Surrogate	0	30-150	-	not applicable
8082A	28479-1	L1937692-03 D	2,4,5,6-Tetrachloro-m-xylene (A)	Surrogate	0	30-150	-	not applicable
8082A	28479-1	L1937692-03 D	2,4,5,6-Tetrachloro-m-xylene (B)	Surrogate	0	30-150	-	not applicable
8082A	28479-1	L1937692-03 D	Decachlorobiphenyl (A)	Surrogate	0	30-150	-	not applicable
8082A	28479-1	L1937692-03 D	Decachlorobiphenyl (B)	Surrogate	0	30-150	-	not applicable
8082A	28477-1	L1937692-04 D	2,4,5,6-Tetrachloro-m-xylene (A)	Surrogate	0	30-150	-	not applicable
8082A	28477-1	L1937692-04 D	2,4,5,6-Tetrachloro-m-xylene (B)	Surrogate	0	30-150	-	not applicable
8082A	28477-1	L1937692-04 D	Decachlorobiphenyl (A)	Surrogate	0	30-150	-	not applicable
8082A	28477-1	L1937692-04 D	Decachlorobiphenyl (B)	Surrogate	0	30-150	-	not applicable



ORGANICS



PCBS



				Serial_No:09041909:29			
Project Name:	MASON STATION			Lab Number:	L1937692		
Project Number:	171.06108.006			Report Date:	09/04/19		
			SAMPLE RESULTS				
Lab ID:	L1937692-01	D		Date Collected:	08/19/19 09:30		
Client ID:	B-363190			Date Received:	08/20/19		
Sample Location:	WISCASSET, ME			Field Prep:	Not Specified		
Sample Depth:							
Matrix:	Oil			Extraction Method	: EPA 3580A		
Analytical Method:	1,8082A			Extraction Date:	08/28/19 13:02		
Analytical Date:	09/03/19 16:14			Cleanup Method:	EPA 3665A		
Analyst:	HT			Cleanup Date:	08/28/19		
Percent Solids:	Results reporte	d on ar	h 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B		
				Cleanup Date:	08/28/19		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by C	GC - Westborough Lab						
Aroclor 1016	ND	n	ng/kg	29100		10000	А
Aroclor 1221	ND	n	ng/kg	29100		10000	А
Aroclor 1232	ND	n	ng/kg	29100		10000	А
Aroclor 1242	ND	n	ng/kg	29100		10000	А
Aroclor 1248	ND	n	ng/kg	19400		10000	А
Aroclor 1254	ND	n	ng/kg	29100		10000	А
Aroclor 1260	455000	n	ng/kg	19400		10000	А
Aroclor 1262	ND	n	ng/kg	9710		10000	А
Aroclor 1268	ND	n	ng/kg	9710		10000	А
PCBs, Total	455000	n	ng/kg	9710		10000	А
Aroclor 1262 Aroclor 1268 PCBs, Total	ND ND 455000	n n n	ng/kg ng/kg ng/kg	9710 9710 9710		10000 10000 10000	

Surrogate	% Recovery	Acceptance Qualifier Criteria Colu			
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В	
Decachlorobiphenyl	0	Q	30-150	В	
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	А	
Decachlorobiphenyl	0	Q	30-150	А	



				Serial_No	:09041909:29
Project Name:	MASON STATION			Lab Number:	L1937692
Project Number:	171.06108.006			Report Date:	09/04/19
			SAMPLE RESULTS		
Lab ID:	L1937692-02	D		Date Collected:	08/19/19 09:55
Client ID:	28480-1			Date Received:	08/20/19
Sample Location:	WISCASSET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Oil			Extraction Method	: EPA 3580A
Analytical Method:	1,8082A			Extraction Date:	08/28/19 13:02
Analytical Date:	09/03/19 16:26			Cleanup Method:	EPA 3665A
Analyst:	HT			Cleanup Date:	08/28/19
Percent Solids:	Results reporte	d on ar	h 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B
				Cleanup Date:	08/28/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - We	stborough Lab						
Aroclor 1016	ND		mg/kg	27400		10000	A
Aroclor 1221	ND		mg/kg	27400		10000	А
Aroclor 1232	ND		mg/kg	27400		10000	А
Aroclor 1242	ND		mg/kg	27400		10000	А
Aroclor 1248	ND		mg/kg	18200		10000	А
Aroclor 1254	ND		mg/kg	27400		10000	А
Aroclor 1260	358000		mg/kg	18200		10000	А
Aroclor 1262	ND		mg/kg	9120		10000	А
Aroclor 1268	ND		mg/kg	9120		10000	А
PCBs, Total	358000		mg/kg	9120		10000	А

Surrogate	% Recovery	Acceptance Qualifier Criteria Colu			
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В	
Decachlorobiphenyl	0	Q	30-150	В	
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	А	
Decachlorobiphenyl	0	Q	30-150	А	



				Serial_No:09041909:29			
Project Name:	MASON STATION			Lab Number:	L1937692		
Project Number:	171.06108.006			Report Date:	09/04/19		
		:	SAMPLE RESULTS				
Lab ID:	L1937692-03	D		Date Collected:	08/19/19 10:10		
Client ID:	28479-1			Date Received:	08/20/19		
Sample Location:	WISCASSET, ME			Field Prep:	Not Specified		
Sample Depth:							
Matrix:	Oil			Extraction Method	: EPA 3580A		
Analytical Method:	1,8082A			Extraction Date:	08/28/19 13:02		
Analytical Date:	09/03/19 16:39			Cleanup Method:	EPA 3665A		
Analyst:	HT			Cleanup Date:	08/28/19		
Percent Solids:	Results reporte	d on an	'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B		
				Cleanup Date:	08/28/19		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - We	stborough Lab						
Aroclor 1016	ND		mg/kg	11700		4000	А
Aroclor 1221	ND		mg/kg	11700		4000	А
Aroclor 1232	ND		mg/kg	11700		4000	А
Aroclor 1242	ND		mg/kg	11700		4000	А
Aroclor 1248	ND		mg/kg	7820		4000	А
Aroclor 1254	ND		mg/kg	11700		4000	А
Aroclor 1260	352000		mg/kg	7820		4000	А
Aroclor 1262	ND		mg/kg	3910		4000	А
Aroclor 1268	ND		mg/kg	3910		4000	А
PCBs, Total	352000		mg/kg	3910		4000	А

Surrogate	% Recovery	Qualifier	Column	
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	А
Decachlorobiphenyl	0	Q	30-150	А



				Serial_No	:09041909:29
Project Name:	MASON STATION			Lab Number:	L1937692
Project Number:	171.06108.006			Report Date:	09/04/19
			SAMPLE RESULTS		
Lab ID:	L1937692-04	D		Date Collected:	08/19/19 10:20
Client ID:	28477-1			Date Received:	08/20/19
Sample Location:	WISCASSET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Oil			Extraction Method	: EPA 3580A
Analytical Method:	1,8082A			Extraction Date:	08/28/19 13:02
Analytical Date:	09/03/19 16:51			Cleanup Method:	EPA 3665A
Analyst:	HT			Cleanup Date:	08/28/19
Percent Solids:	Results reported	d on ar	h 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B
				Cleanup Date:	08/28/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westh	orough Lab						
Aroclor 1016	ND		mg/kg	11600		4000	А
Aroclor 1221	ND		mg/kg	11600		4000	А
Aroclor 1232	ND		mg/kg	11600		4000	А
Aroclor 1242	ND		mg/kg	11600		4000	А
Aroclor 1248	ND		mg/kg	7760		4000	А
Aroclor 1254	ND		mg/kg	11600		4000	А
Aroclor 1260	320000		mg/kg	7760		4000	А
Aroclor 1262	ND		mg/kg	3880		4000	А
Aroclor 1268	ND		mg/kg	3880		4000	А
PCBs, Total	320000		mg/kg	3880		4000	А

Surrogate	% Recovery	Acceptance Qualifier Criteria Colu		
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	А
Decachlorobiphenyl	0	Q	30-150	А



		Serial_No:	09041909:29
Project Name:	MASON STATION	Lab Number:	L1937692
Project Number:	171.06108.006	Report Date:	09/04/19
	SAMPLE RESULTS		
Lab ID:	L1937692-05	Date Collected:	08/19/19 11:05
Client ID:	50539	Date Received:	08/20/19
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Oil	Extraction Method:	EPA 3580A
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02
Analytical Date:	09/03/19 02:05	Cleanup Method:	EPA 3665A
Analyst:	AWS	Cleanup Date:	08/28/19
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B
		Cleanup Date:	08/28/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westbord	ough Lab						
Aroclor 1016	ND		mg/kg	2.81		1	А
Aroclor 1221	ND		mg/kg	2.81		1	А
Aroclor 1232	ND		mg/kg	2.81		1	А
Aroclor 1242	ND		mg/kg	2.81		1	А
Aroclor 1248	ND		mg/kg	1.88		1	А
Aroclor 1254	ND		mg/kg	2.81		1	А
Aroclor 1260	ND		mg/kg	1.88		1	В
Aroclor 1262	ND		mg/kg	0.938		1	А
Aroclor 1268	ND		mg/kg	0.938		1	А
PCBs, Total	ND		mg/kg	0.938		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	105		30-150	В
Decachlorobiphenyl	95		30-150	В
2,4,5,6-Tetrachloro-m-xylene	104		30-150	А
Decachlorobiphenyl	83		30-150	А



		Serial_No:	09041909:29
Project Name:	MASON STATION	Lab Number:	L1937692
Project Number:	171.06108.006	Report Date:	09/04/19
	SAMPLE RESULTS		
Lab ID:	L1937692-06	Date Collected:	08/19/19 11:25
Client ID:	51951	Date Received:	08/20/19
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Oil	Extraction Method:	EPA 3580A
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02
Analytical Date:	09/03/19 02:17	Cleanup Method:	EPA 3665A
Analyst:	AWS	Cleanup Date:	08/28/19
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B
		Cleanup Date:	08/28/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westbor	ough Lab						
Aroclor 1016	ND		mg/kg	2.82		1	А
Aroclor 1221	ND		mg/kg	2.82		1	А
Aroclor 1232	ND		mg/kg	2.82		1	А
Aroclor 1242	ND		mg/kg	2.82		1	А
Aroclor 1248	ND		mg/kg	1.88		1	А
Aroclor 1254	ND		mg/kg	2.82		1	А
Aroclor 1260	ND		mg/kg	1.88		1	В
Aroclor 1262	ND		mg/kg	0.940		1	А
Aroclor 1268	ND		mg/kg	0.940		1	А
PCBs, Total	ND		mg/kg	0.940		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	В
Decachlorobiphenyl	83		30-150	В
2,4,5,6-Tetrachloro-m-xylene	92		30-150	А
Decachlorobiphenyl	69		30-150	А



		Serial_No:	09041909:29
Project Name:	MASON STATION	Lab Number:	L1937692
Project Number:	171.06108.006	Report Date:	09/04/19
	SAMPLE RESULTS		
Lab ID:	L1937692-07	Date Collected:	08/19/19 11:35
Client ID:	51336	Date Received:	08/20/19
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Oil	Extraction Method:	EPA 3580A
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02
Analytical Date:	09/03/19 02:30	Cleanup Method:	EPA 3665A
Analyst:	AWS	Cleanup Date:	08/28/19
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B
		Cleanup Date:	08/28/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - West	orough Lab						
Aroclor 1016	ND		mg/kg	2.86		1	А
Aroclor 1221	ND		mg/kg	2.86		1	А
Aroclor 1232	ND		mg/kg	2.86		1	А
Aroclor 1242	ND		mg/kg	2.86		1	А
Aroclor 1248	ND		mg/kg	1.91		1	А
Aroclor 1254	ND		mg/kg	2.86		1	А
Aroclor 1260	4.08		mg/kg	1.91		1	В
Aroclor 1262	ND		mg/kg	0.954		1	А
Aroclor 1268	ND		mg/kg	0.954		1	А
PCBs, Total	4.08		mg/kg	0.954		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	В
Decachlorobiphenyl	87		30-150	В
2,4,5,6-Tetrachloro-m-xylene	97		30-150	А
Decachlorobiphenyl	74		30-150	А



		Serial_No:09041909:29			
Project Name:	MASON STATION	Lab Number:	L1937692		
Project Number:	171.06108.006	Report Date:	09/04/19		
	SAMPLE RESULTS				
Lab ID:	L1937692-08	Date Collected:	08/19/19 11:40		
Client ID:	51337	Date Received:	08/20/19		
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified		
Sample Depth:					
Matrix:	Oil	Extraction Method:	EPA 3580A		
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02		
Analytical Date:	09/03/19 02:42	Cleanup Method:	EPA 3665A		
Analyst:	AWS	Cleanup Date:	08/28/19		
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B		
		Cleanup Date:	08/28/19		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westbo	orough Lab						
Aroclor 1016	ND		mg/kg	2.92		1	А
Aroclor 1221	ND		mg/kg	2.92		1	А
Aroclor 1232	ND		mg/kg	2.92		1	А
Aroclor 1242	ND		mg/kg	2.92		1	А
Aroclor 1248	ND		mg/kg	1.95		1	А
Aroclor 1254	ND		mg/kg	2.92		1	А
Aroclor 1260	2.22		mg/kg	1.95		1	В
Aroclor 1262	ND		mg/kg	0.974		1	А
Aroclor 1268	ND		mg/kg	0.974		1	А
PCBs, Total	2.22		mg/kg	0.974		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	В
Decachlorobiphenyl	81		30-150	В
2,4,5,6-Tetrachloro-m-xylene	94		30-150	А
Decachlorobiphenyl	70		30-150	А



		Serial_No:09041909:29		
Project Name:	MASON STATION	Lab Number:	L1937692	
Project Number:	171.06108.006	Report Date:	09/04/19	
	SAMPLE RESULTS			
Lab ID:	L1937692-09	Date Collected:	08/19/19 12:05	
Client ID:	50541	Date Received:	08/20/19	
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified	
Sample Depth:				
Matrix:	Oil	Extraction Method:	EPA 3580A	
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02	
Analytical Date:	09/03/19 02:54	Cleanup Method:	EPA 3665A	
Analyst:	AWS	Cleanup Date:	08/28/19	
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B	
		Cleanup Date:	08/28/19	

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westbor	ough Lab						
Aroclor 1016	ND		mg/kg	2.81		1	А
Aroclor 1221	ND		mg/kg	2.81		1	А
Aroclor 1232	ND		mg/kg	2.81		1	А
Aroclor 1242	ND		mg/kg	2.81		1	А
Aroclor 1248	ND		mg/kg	1.87		1	А
Aroclor 1254	ND		mg/kg	2.81		1	А
Aroclor 1260	ND		mg/kg	1.87		1	В
Aroclor 1262	ND		mg/kg	0.936		1	А
Aroclor 1268	ND		mg/kg	0.936		1	А
PCBs, Total	ND		mg/kg	0.936		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	В
Decachlorobiphenyl	81		30-150	В
2,4,5,6-Tetrachloro-m-xylene	94		30-150	А
Decachlorobiphenyl	71		30-150	А



		Serial_No:09041909:29		
Project Name:	MASON STATION	Lab Number:	L1937692	
Project Number:	171.06108.006	Report Date:	09/04/19	
	SAMPLE RESULTS			
Lab ID:	L1937692-10	Date Collected:	08/19/19 12:10	
Client ID:	NO I.D.	Date Received:	08/20/19	
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified	
Sample Depth:				
Matrix:	Oil	Extraction Method:	EPA 3580A	
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02	
Analytical Date:	09/03/19 03:07	Cleanup Method:	EPA 3665A	
Analyst:	AWS	Cleanup Date:	08/28/19	
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B	
		Cleanup Date:	08/28/19	

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westbor	ough Lab						
Aroclor 1016	ND		mg/kg	2.83		1	А
Aroclor 1221	ND		mg/kg	2.83		1	А
Aroclor 1232	ND		mg/kg	2.83		1	А
Aroclor 1242	ND		mg/kg	2.83		1	А
Aroclor 1248	ND		mg/kg	1.88		1	А
Aroclor 1254	ND		mg/kg	2.83		1	А
Aroclor 1260	ND		mg/kg	1.88		1	В
Aroclor 1262	ND		mg/kg	0.943		1	А
Aroclor 1268	ND		mg/kg	0.943		1	А
PCBs, Total	ND		mg/kg	0.943		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	В
Decachlorobiphenyl	81		30-150	В
2,4,5,6-Tetrachloro-m-xylene	93		30-150	А
Decachlorobiphenyl	64		30-150	А



		Serial_No:09041909:29			
Project Name:	MASON STATION	Lab Number:	L1937692		
Project Number:	171.06108.006	Report Date:	09/04/19		
	SAMPLE RESULTS				
Lab ID:	L1937692-11	Date Collected:	08/19/19 13:10		
Client ID:	51334	Date Received:	08/20/19		
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified		
Sample Depth:					
Matrix:	Oil	Extraction Method:	EPA 3580A		
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02		
Analytical Date:	09/03/19 03:19	Cleanup Method:	EPA 3665A		
Analyst:	AWS	Cleanup Date:	08/28/19		
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B		
		Cleanup Date:	08/28/19		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	2.78		1	А
Aroclor 1221	ND		mg/kg	2.78		1	А
Aroclor 1232	ND		mg/kg	2.78		1	А
Aroclor 1242	ND		mg/kg	2.78		1	А
Aroclor 1248	ND		mg/kg	1.86		1	А
Aroclor 1254	ND		mg/kg	2.78		1	А
Aroclor 1260	2.04		mg/kg	1.86		1	В
Aroclor 1262	ND		mg/kg	0.928		1	А
Aroclor 1268	ND		mg/kg	0.928		1	А
PCBs, Total	2.04		mg/kg	0.928		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		30-150	В
Decachlorobiphenyl	87		30-150	В
2,4,5,6-Tetrachloro-m-xylene	101		30-150	А
Decachlorobiphenyl	72		30-150	А



		Serial_No:09041909:29			
Project Name:	MASON STATION	Lab Number:	L1937692		
Project Number:	171.06108.006	Report Date:	09/04/19		
	SAMPLE RESULTS				
Lab ID:	L1937692-13	Date Collected:	08/19/19 14:10		
Client ID:	B516107	Date Received:	08/20/19		
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified		
Sample Depth:					
Matrix:	Oil	Extraction Method:	EPA 3580A		
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02		
Analytical Date:	09/03/19 12:01	Cleanup Method:	EPA 3665A		
Analyst:	CW	Cleanup Date:	08/28/19		
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B		
		Cleanup Date:	08/28/19		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	2.82		1	А
Aroclor 1221	ND		mg/kg	2.82		1	А
Aroclor 1232	ND		mg/kg	2.82		1	А
Aroclor 1242	ND		mg/kg	2.82		1	А
Aroclor 1248	ND		mg/kg	1.88		1	А
Aroclor 1254	ND		mg/kg	2.82		1	А
Aroclor 1260	4.61		mg/kg	1.88		1	В
Aroclor 1262	ND		mg/kg	0.942		1	А
Aroclor 1268	ND		mg/kg	0.942		1	А
PCBs, Total	4.61		mg/kg	0.942		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	В
Decachlorobiphenyl	104		30-150	В
2,4,5,6-Tetrachloro-m-xylene	77		30-150	А
Decachlorobiphenyl	97		30-150	А



		Serial_No:09041909:29			
Project Name:	MASON STATION	Lab Number:	L1937692		
Project Number:	171.06108.006	Report Date:	09/04/19		
	SAMPLE RESULTS				
Lab ID:	L1937692-14	Date Collected:	08/19/19 14:15		
Client ID:	B516678	Date Received:	08/20/19		
Sample Location:	WISCASSET, ME	Field Prep:	Not Specified		
Sample Depth:					
Matrix:	Oil	Extraction Method:	EPA 3580A		
Analytical Method:	1,8082A	Extraction Date:	08/28/19 13:02		
Analytical Date:	09/03/19 12:13	Cleanup Method:	EPA 3665A		
Analyst:	CW	Cleanup Date:	08/28/19		
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method:	EPA 3660B		
		Cleanup Date:	08/28/19		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	2.91		1	A
Aroclor 1221	ND		mg/kg	2.91		1	А
Aroclor 1232	ND		mg/kg	2.91		1	А
Aroclor 1242	ND		mg/kg	2.91		1	А
Aroclor 1248	ND		mg/kg	1.94		1	А
Aroclor 1254	ND		mg/kg	2.91		1	А
Aroclor 1260	13.9		mg/kg	1.94		1	В
Aroclor 1262	ND		mg/kg	0.971		1	А
Aroclor 1268	ND		mg/kg	0.971		1	А
PCBs, Total	13.9		mg/kg	0.971		1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	В
Decachlorobiphenyl	103		30-150	В
2,4,5,6-Tetrachloro-m-xylene	79		30-150	А
Decachlorobiphenyl	97		30-150	А



Project Name:	MASON STATION	Lab Number:	L1937692
Project Number:	171.06108.006	Report Date:	09/04/19

Method Blank Analysis Batch Quality Control

Analytical Method:	
Analytical Date:	
Analyst:	

1,8082A 09/03/19 03:31 AWS Extraction Method:EPA 3580AExtraction Date:08/28/19 13:02Cleanup Method:EPA 3665ACleanup Date:08/28/19Cleanup Method:EPA 3660BCleanup Date:08/28/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC	- Westboroug	h Lab for sa	ample(s):	01-11,13-14	Batch:	WG1277791-
Aroclor 1016	ND		mg/kg	2.86		А
Aroclor 1221	ND		mg/kg	2.86		А
Aroclor 1232	ND		mg/kg	2.86		А
Aroclor 1242	ND		mg/kg	2.86		А
Aroclor 1248	ND		mg/kg	1.91		А
Aroclor 1254	ND		mg/kg	2.86		А
Aroclor 1262	ND		mg/kg	0.955		А
Aroclor 1268	ND		mg/kg	0.955		А
Aroclor 1260	ND		mg/kg	1.91		В
PCBs, Total	ND		mg/kg	0.955		В

		Acceptance			
Surrogate	%Recovery	Qualifier	Criteria	Column	
2,4,5,6-Tetrachloro-m-xylene	86		30-150	В	
Decachlorobiphenyl	81		30-150	В	
2,4,5,6-Tetrachloro-m-xylene	82		30-150	А	
Decachlorobiphenyl	63		30-150	А	



Lab Control Sample Analysis

Batch Quality Control

 Lab Number:
 L1937692

 Report Date:
 09/04/19

Project Name:MASON STATIONProject Number:171.06108.006

LCS LCSD %Recovery RPD %Recovery %Recovery Limits Parameter Qual Qual Limits RPD Qual Column Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11,13-14 Batch: WG1277791-2 WG1277791-3 76 Aroclor 1016 78 40-140 3 50 А 64 70 40-140 Aroclor 1260 9 50 А

	LCS	LCSD		Acceptance	
Surrogate	%Recovery	Qual %Recovery	Qual	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86	88		30-150	В
Decachlorobiphenyl	80	82		30-150	В
2,4,5,6-Tetrachloro-m-xylene	83	89		30-150	A
Decachlorobiphenyl	63	69		30-150	А



Project Name: MASON STATION *Project Number:* 171.06108.006

Serial_No:09041909:29 Lab Number: L1937692 *Report Date:* 09/04/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal				
A	Absent				

Container Information

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1937692-01A	Glass 120ml/4oz unpreserved	А	NA		2.8	Y	Absent		PCB-8082LL(14)
L1937692-02A	Glass 120ml/4oz unpreserved	A	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-03A	Glass 120ml/4oz unpreserved	А	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-04A	Glass 120ml/4oz unpreserved	А	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-05A	Glass 120ml/4oz unpreserved	А	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-06A	Glass 120ml/4oz unpreserved	А	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-07A	Glass 120ml/4oz unpreserved	A	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-08A	Glass 120ml/4oz unpreserved	А	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-09A	Glass 120ml/4oz unpreserved	А	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-10A	Glass 120ml/4oz unpreserved	А	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-11A	Glass 120ml/4oz unpreserved	А	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-13A	Glass 120ml/4oz unpreserved	A	NA		2.8	Υ	Absent		PCB-8082LL(14)
L1937692-14A	Glass 120ml/4oz unpreserved	А	NA		2.8	Y	Absent		PCB-8082LL(14)



Serial_No:09041909:29

Project Name: MASON STATION

Project Number: 171.06108.006

Lab Number: L1937692

Report Date: 09/04/19

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.
NDPA/DPA	 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. N_Nitrosodiphenylamine/Diphenylamine
NI	- Not Imitable
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

Project Number: 171.06108.006

Lab Number: L1937692 Report Date: 09/04/19

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- 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 Waterpreserved 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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the 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 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.



Project Name: MASON STATION Project Number: 171.06108.006

 Lab Number:
 L1937692

 Report Date:
 09/04/19

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: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: <u>NPW:</u> Dimethylnaphthalene,1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine. **SM4500**: <u>NPW</u>: Amenable Cyanide; <u>SCM</u>: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: <u>NPW:</u> 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, SM4500CI-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, 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:09041909:29

	CHAIN OF	CUSTODY PAG	GE_(_OF_2	- Date Rec'd in Lat	b: 8/20/1	q ALPH	A Job #: L	1937692
A Maker Provide	320 Enthes Blue	roject Information		Report Informa	ation - Data Deliverab	les Billin	g Information	Superior States
Westboro, MA 61 Tel: 508-898-922	581 Mansfield, MA 02048 Pt 0 Tel: 508-822-9300	roject Name: Mason S	tation	ADEx	EMAIL	C Same	e as Client info	PO #: 1919
Client Information	P	roject Location: Wiscoss	et ME	Regulatory Re-	quirements & Pro	ject Informat	ion Requirem	ents
Client: Ranson	n Consulting Inc. P	roject #: 171.06108	.006	Ves No MA	MCP Analytical Methods ix Spike Required on this	SDG? (Require	es A No CT R ed for MCP Inor	CP Analytical Methods ganics)
Address: 400 (ommercial St. P	roject Manager: Steve T	Duer	Yes A No GW	1 Standards (Info Require	d for Metals & E	EPH with Target	5)
Portl	and ME OYIOI "	ALPHA Quote #:	4-	Other State /Fe	d Program USEPA	TSCA	Criteria	
Phone: 207	772-2891	Turn-Around Time			22		111	//
Email: ephenix Additional Pr	oject Information:	Standard Dust (only con Date Due:	nlinned if pre-approved?)	<u>С 8260 С 624</u> С 480 С 624 С 5242 С 480 С РАН 5: С МСР 45	S: DRCRAS DMCP 14 URC Ranges & Targets DRCRAB DPP Ranges & Targets D Ranges On DREST CRABES On Duant On	DFingerprint		SAMPLE INFO Filtration Field Lab to do Preservation Lab to do
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Sampl Matrix Initial	Noc:	TPH: C		// +	Sample Comments S
37692-01	B-363190	8/19/19 09:30	OGR	>	X			
02	28480-1	8/19/19 09:55	O EPI	>	X			
03	28479-1	8/19/19 10:10	OEP		X			
04	28477-1	8/19/19 10:20	OEP		X			
05	50539	8/19/19 11:05	OP	>	X			
06	51951	8/19/19 11:25	O FR		X			
07	51336	8/19/19 11:35	O EPI	,	X			
08	51337	8/19/19 11:40	OEP	>	X			
09	50541	8/19/19 12:05	O EP	>	X			
10	No LD.	8/19/19 12:10	O EPI	2	X			
Container Type P= Plastic A= Amber glass V= Vial G= Class	Preservative A= None B= HCl C= HNO, D= HSO		Container Typ Preservativ	e	A			
B= Bacteria cup C= Cube C= Other E= Encore D= BOD Bottle Page 28 of 29	$ \begin{array}{c} U = N_{2}O_{4} \\ E = N_{3}OH \\ F = MeOH \\ G = N_{3}N_{3}O_{3} \\ I = Ascorbic Acid \\ J = NH_{4}CI \\ K = Zn Acetate \\ O = Other \end{array} $	AAL Relinquished By: AAL AAL	Date/Time 8/20/19 16: 8/20/19 16:	50 Rob	Mato Mal	Date/Time 20/19 16. 20/19 182 117 200	All samples Alpha's Terr See reverse FORM NO: 01-	submitted are subject to ns and Conditions. side.)1 (rev. 12-Mar-2012)

Serial_No:09041909:29

	CHAIN OF		GE_2_OF_2_	Date Rec'd in Lab: 8/20/19 ALPHA Job #: 61937692
8 Walkup Drive Westboro, MA 01 Tel: 508-898-922	320 Forbes Blvd 1581 Mansfield, MA 02048 Pri 20 Tel: 508-822-9300 Pri	roject Information oject Name: Mason S	Station	Report Information - Data Deliverables Billing Information SADEx EMAIL Same as Client info PO #: [] 9/9
Hient Information Hient: Ranson Address: 400 Port hone: 207. imail: Cpheni Additional Pr	Prince Pr	oject Location: Wiscas oject #: 171.06108 oject Manager: Steve LPHA Quote #: furn-Around Time Standard	set ME 3.006 Dyer	Regulatory Requirements & Project Information Requirements Image: State of the st
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Sampler Matrix Initials	Lab to do
7692-11	51334	8/19/19 13:10	O EPP	
12	51335	8/19/19 13:25	O EPP	> X
13	B516107	8/19/19 14:10	O EPP	X
14	B516678	8/19/19 14:15	O EPP	
ontainer Type = Plastic = Amber glass = Vial = Glass	Preservative A= None B= HCI C= HNO ₃ D= H ₂ SO ₄		Container Type Preservative	A A
= Bacteria cup = Cube = Other = Encore = BOD Bottle ge 29 of 29	E= NaOH F= MeOH G= NaHSO4 H = Na ₂ S ₂ O ₃ I= Ascorbic Acid J = NH ₄ Cl K= Zn Acetate O= Other	Relinquished By:	Date/Time 8/20/19 16:50 8/20)19 18	All samples submitted are subjective All samples submitted are subjec