



June 17, 2020

Ms. Raena C. Blumenthal Director, Parks & Recreation Town of Coventry 1277 Main Street Coventry, Rhode Island 02816 Sent Via Email: rblumenthal@coventryri.org

RE: Tiogue Lake

Surface Water Sampling Report Coventry, Rhode Island

F.W. Webb/AEG Project No. 1832

Dear Ms. Blumenthal:

Alliance Environmental Group / An F.W. Webb Company (F.W. Webb / AEG) is pleased to submit this surface water sampling report for Tiogue Lake, completed on behalf of the Town of Coventry, for the quarterly monitoring period of April through June 2020.

BACKGROUND

The Town of Coventry (the Town) is a Potentially Responsible Party (PRP) in association with the former Coventry Landfill (CLF). The Town agreed to sample Tiogue Lake on a quarterly basis during implementation of the CLF closure activities, until the placement of the final impermeable cap. F.W. Webb / AEG has sampled Tiogue Lake on a generally quarterly basis since 2016. At the time of this submittal, the cap has been installed and final turf repairs/landscaping activities are underway.

CURRENT SAMPLING EVENT

The 2nd quarter 2020 sampling was conducted on June 9, 2020. During this event, F.W. Webb / AEG representatives collected three surface water samples at Tiogue Lake (identified as Surface Water 1 through Surface Water 3), replicating the collection points from previous sampling events.

The surface water samples were submitted to ESS Laboratory of Cranston, Rhode Island, a Rhode Island certified laboratory, for analysis of total and dissolved lead via United States Environmental Protection Agency (USEPA) Method 6020A. The surface water sampling results are summarized in Table 1 (located in Attachment 1). A copy of the ESS Laboratory analytical report is included as Attachment 2.

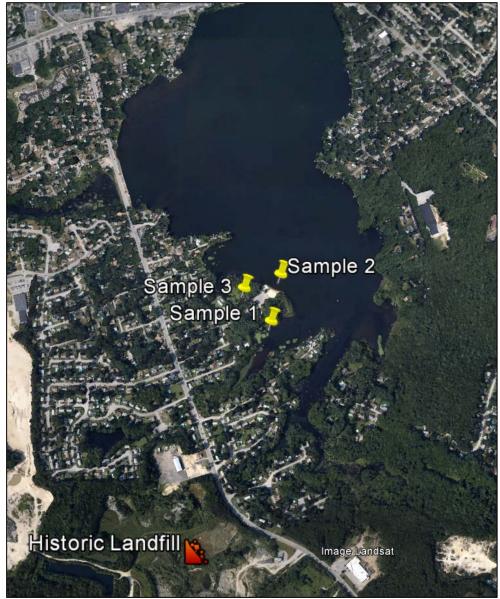


Figure 1 – Approximate Surface Water Sampling Locations

SURFACE WATER SAMPLING RESULTS

According to the Rhode Island Department of Environmental Management (RIDEM), Tiogue Lake (Water Body ID No. RI0006014L-02) is classified as Surface Water B (partial use designation) and a Warmwater Fishery. The RIDEM Water Quality Regulations, as amended in May 2009, contain the equations and criteria used to calculate the Aquatic Life Fresh Water Acute and Chronic Exposure Concentrations. There are no criteria recommendations for human health regarding the consumption of aquatic organisms impacted with lead.

In order to utilize the equations and criteria promulgated in the Water Quality Regulations, F.W. Webb/AEG obtained an alkalinity hardness value of 22.7 milligrams per



liter (mg/L) (i.e., the mean yearly concentration as calcium carbonate (CaCO₃) for Tiogue Lake¹). The conversion factor (CF) used to derive the aquatic life freshwater acute and chronic exposure was: $CF = 1.46203 - [(ln H) \times 0.145712]$; where [ln H] = natural log of hardness measured as CaCO₃. In accordance with the Water Quality Regulations, when an ambient hardness of less than 25 mg/L is used to establish criteria for lead, the hardness dependent CF should not exceed 1. Since the calculated CF was 1.0071, a CF value of 1.0 was used for the calculation.

F.W. Webb / AEG also compared the dissolved lead concentrations against the USEPA Lowest National Ambient Water Quality Criteria (NAWQC). USEPA's compilation of national recommended water quality criteria contains the recommended water quality criteria for the protection of aquatic life and human health in surface water for approximately 150 pollutants. These criteria are published pursuant to Section 304(a) of the Clean Water Act (CWA).

The ESS Laboratory analytical results for the surface water samples collected by F.W. Webb/AEG on June 9, 2020 indicated that the total and dissolved lead concentrations in each of the three samples were below the laboratory reporting limit of 0.5 micrograms per liter (μ g/L). As such, no exceedances of applicable criteria were detected.

SAMPLING SCHEDULE

Per recent discussion with Town of Coventry personnel, F.W. Webb/AEG will continue to sample Tiogue Lake on a quarterly basis in 2020 to further evaluate total and dissolved lead concentrations following the recent landfill capping activities.

If you have any questions or comments, please contact the undersigned at 401-732-7600.

Sincerely,

Alliance Environmental Group / An F.W. Webb Company

Lauren Main Sr. Geologist

Lawren Main

cc: Mr. Ed Warzycha, Interim Town Manager

Ms. Abby Pimentel, Coventry Parks and Recreation

¹ http://cels.uri.edu/docslink/ww/14WebFiles/14Alkalinity.pdf



Joel Walcott, PE

Sr. Principal Engineer

ATTACHMENT 1

Data Summary Table



			Table 1			
		Sui	rface Water Samp	ling Results		
		Tiogu	e Lake - Coventry	, Rhode Island		
	Surface Water	Surface Water	Surface Water	Aquatic Life Criteria	Aquatic Life Criteria	Lowest NAWQC
	Sample 1	Sample 2	Sample 3	Freshwater Acute	Freshwater Chronic	Lowest NAVVQC
Sampling Date 6/9/10	6 - Total and Disso	olved Lead (μg/L)				
Total Lead	1.2	<1.0	3.5	NS	NS	NS
Dissolved Lead	<0.50	<0.50	1.2	12	0.5	0.5
Sampling Date 7/1/1	6 - Total and Disso	olved Lead (μg/L)				
Total Lead	<1.0	1.2	<1.0	NS	NS	NS
Dissolved Lead	<0.50	<0.50	<0.50	12	0.5	0.5
Sampling Date 8/24/	16 - Total and Dis	solved Lead (μg/L)				
Total Lead	<1.0	<1.0	1.4	NS	NS	NS
Dissolved Lead	<0.50	<0.50	<0.50	12	0.5	0.5
Sampling Date 11/30	/16 - Total and Di	ssolved Lead (μg/	L)			
Total Lead	1.4	1.9	92	NS	NS	NS
Dissolved Lead	0.55	<0.40	<0.40	12	0.5	0.5
Sampling Date 3/9/13	7 - Total and Disso	olved Lead (μg/L)				
Total Lead	0.73	1.73	0.74	NS	NS	NS
Dissolved Lead	<0.50	<0.50	<0.50	12	0.5	0.5
Sampling Date 6/2/1	7 - Total and Disso	olved Lead (μg/L)				
Total Lead	<1.0	<1.0	1.1	NS	NS	NS
Dissolved Lead	<0.5	<0.5	<0.5	12	0.5	0.5
Sampling Date 9/15/2	17 - Total and Diss	solved Lead (μg/L)				
Total Lead	<1.0	<1.0	<1.0	NS	NS	NS
Dissolved Lead	<0.5	<0.5	<0.5	12	0.5	0.5
Sampling Date 1/3/18	8 - Total and Disso	olved Lead (μg/L)				
Total Lead	N/A	1.1	N/A	NS	NS	NS
Dissolved Lead	N/A	1.1	N/A	12	0.5	0.5
Sampling Date 4/11/2	18 - Total and Diss	solved Lead (μg/L)				
Total Lead	0.58	0.61	0.67	NS	NS	NS
Dissolved Lead	<0.5	<0.5	<0.5	12	0.5	0.5
Sampling Date 7/11/2	18 - Total and Dis	solved Lead (μg/L)	*			
Total Lead	1.9	<0.5	0.64	NS	NS	NS
Dissolved Lead	<0.5	1.2	0.78	12	0.5	0.5
Sampling Date 8/7/18	8 - Total and Disso	olved Lead (μg/L)				
Total Lead	<0.1	<0.1	<0.1	NS	NS	NS
Dissolved Lead	<1.0	<1.0	<1.0	12	0.5	0.5
Sampling Date 10/31	/18 - Total and Di	ssolved Lead (μg/	L)			
Total Lead	1.0	0.5	0.5	NS	NS	NS
Dissolved Lead	<0.4	<0.4	0.6	12	0.5	0.5
Sampling Date 3/28/2	19 - Total and Dis	solved Lead (µg/L)				
Total Lead	1.4	0.5	0.4	NS	NS	NS
Dissolved Lead	<0.5	<0.5	<0.5	12	0.5	0.5
Sampling Date 6/13/2	19 - Total and Dis	solved Lead (μg/L)				
Total Lead	0.7	0.6	0.6	NS	NS	NS
Dissolved Lead	<0.5	<0.5	<0.5	12	0.5	0.5
Sampling Date 9/25/2	19 - Total and Dis	solved Lead (µg/L))			
Total Lead	<0.5	<0.5	<0.5	NS	NS	NS
Dissolved Lead	<0.5	<0.5	<0.5	12	0.5	0.5

Table 1 Surface Water Sampling Results Tiogue Lake - Coventry, Rhode Island										
	Surface Water	Surface Water	Surface Water	Aquatic Life Criteria	Aquatic Life Criteria	Lowest NAWOC				
	Sample 1	Sample 2	Sample 3	Freshwater Acute	Freshwater Chronic	Lowest NAWQC				
Sampling Date 12/31	1/19 - Total and Di	ssolved Lead (μg/	L)							
Total Lead	N/A	0.6	0.7	NS	NS	NS				
Dissolved Lead	N/A	<0.5	<0.5	12	0.5	0.5				
Sampling Date 2/24/	20 - Total and Dis	solved Lead (μg/L))							
Total Lead	N/A	0.4	0.4	NS	NS	NS				
Dissolved Lead	N/A	<1.0	<1.0	12	0.5	0.5				
Sampling Date 6/9/2	0 - Total and Disso	olved Lead (µg/L)	•							
Total Lead	<0.5	<0.5	<0.5	NS	NS	NS				
Dissolved Lead	<0.5	<0.5	<0.5	12	0.5	0.5				

Notes:

NS = No Criteria Established

NAWQC = National Ambient Water Quality Criteria

Bold = Aquatic Life Criteria Freshwater Chronic and Lowest NAWQC Exceedance

Italics = Aquatic Life Criteria Freshwater Acute Exceedance

N/A = No Sample Collected

* = Results are believed to be erroneous based on discussion with laboratory - resampling was conducted the following month.

ATTACHMENT 2

Laboratory Analytical Report





The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Joel Walcott Alliance Environmental Group 100 Jefferson Boulevard Warwick, RI 02888

RE: Tiogue Lake (1832)

ESS Laboratory Work Order Number: 20F0344

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

REVIEWED

By ESS Laboratory at 2:55 pm, Jun 16, 2020

Laurel Stoddard Laboratory Director

Analytical Summary

The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake ESS Laboratory Work Order: 20F0344

SAMPLE RECEIPT

The following samples were received on June 09, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20F0344-01	Surface Water - 1	Surface Water	6020A
20F0344-02	Surface Water - 2	Surface Water	6020A
20F0344-03	Surface Water - 3	Surface Water	6020A



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake ESS Laboratory Work Order: 20F0344

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

185 Frances Avenue, Cranston, RI 02910-2211

Tel: 401-461-7181

Fax: 401-461-4486



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake ESS Laboratory Work Order: 20F0344

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint

6010C - ICP

6020A - ICP MS

7010 - Graphite Furnace

7196A - Hexavalent Chromium

7470A - Aqueous Mercury

7471B - Solid Mercury

8011 - EDB/DBCP/TCP

8015C - GRO/DRO

8081B - Pesticides

8082A - PCB

8100M - TPH

8151A - Herbicides

8260B - VOA

8270D - SVOA

8270D SIM - SVOA Low Level

9014 - Cyanide

9038 - Sulfate

9040C - Aqueous pH

9045D - Solid pH (Corrosivity)

9050A - Specific Conductance

9056A - Anions (IC)

9060A - TOC

9095B - Paint Filter

MADEP 04-1.1 - EPH

MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion

3020A - Aqueous Graphite Furnace / ICP MS Digestion

3050B - Solid ICP / Graphite Furnace / ICP MS Digestion

3060A - Solid Hexavalent Chromium Digestion

3510C - Separatory Funnel Extraction

3520C - Liquid / Liquid Extraction

3540C - Manual Soxhlet Extraction

3541 - Automated Soxhlet Extraction

3546 - Microwave Extraction

3580A - Waste Dilution

5030B - Aqueous Purge and Trap

5030C - Aqueous Purge and Trap

5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake Client Sample ID: Surface Water - 1 Date Sampled: 06/09/20 10:40

Percent Solids: N/A

Extraction Method: 3005A/200.7

ESS Laboratory Work Order: 20F0344 ESS Laboratory Sample ID: 20F0344-01

Sample Matrix: Surface Water

Units: ug/L

Dissolved Metals

 Analyte
 Results (MRL)
 MDL
 Method
 Limit
 DF
 Analyst
 Analyzed
 I/V
 F/V
 Batch

 Lead
 ND (0.5)
 6020A
 5
 NAR
 06/11/20
 12:22
 100
 10
 DF00949

185 Frances Avenue, Cranston, RI 02910-2211

Tel: 401-461-7181

Dependability

Fax: 401-461-4486



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake Client Sample ID: Surface Water - 1 Date Sampled: 06/09/20 10:40

Percent Solids: N/A

Extraction Method: 3005A/200.7

ESS Laboratory Work Order: 20F0344 ESS Laboratory Sample ID: 20F0344-01

Sample Matrix: Surface Water

Units: ug/L

Total Metals

 Analyte
 Results (MRL)
 MDL
 Method
 Limit
 DF
 Analyst
 Analyzed
 I/V
 F/V
 Batch

 Lead
 ND (0.5)
 6020A
 1
 NAR
 06/10/20
 22:34
 100
 10
 DF00949



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake Client Sample ID: Surface Water - 2 Date Sampled: 06/09/20 10:30

Percent Solids: N/A

Extraction Method: 3005A/200.7

ESS Laboratory Work Order: 20F0344 ESS Laboratory Sample ID: 20F0344-02

Sample Matrix: Surface Water

Units: ug/L

Dissolved Metals

 Analyte
 Results (MRL)
 MDL
 Method
 Limit
 DF
 Analyst
 Analyzed
 I/V
 F/V
 Batch

 Lead
 ND (0.5)
 6020A
 5
 NAR
 06/11/20
 12:27
 100
 10
 DF00949

185 Frances Avenue, Cranston, RI 02910-2211

2211 Tel: 401-461-7181

Dependability ◆ Quality

Fax: 401-461-4486

http://www.ESSLaboratory.com

Service



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake Client Sample ID: Surface Water - 2 Date Sampled: 06/09/20 10:30

Percent Solids: N/A

Extraction Method: 3005A/200.7

ESS Laboratory Work Order: 20F0344 ESS Laboratory Sample ID: 20F0344-02

Sample Matrix: Surface Water

Units: ug/L

Total Metals

F/V Analyte Results (MRL) **MDL** Method **Limit** <u>DF</u> Analyst Analyzed Batch Lead ND (0.5) 6020A NAR 06/10/20 22:51 DF00949

185 Frances Avenue, Cranston, RI 02910-2211

Tel: 401-461-7181 Dependability

Quality

Fax: 401-461-4486 Service



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake Client Sample ID: Surface Water - 3 Date Sampled: 06/09/20 10:50

Percent Solids: N/A

Extraction Method: 3005A/200.7

ESS Laboratory Work Order: 20F0344 ESS Laboratory Sample ID: 20F0344-03

Sample Matrix: Surface Water

Units: ug/L

Dissolved Metals

Analyte Results (MRL) **MDL** Method F/V **Limit** <u>DF</u> Analyst Analyzed Batch Lead ND (0.5) 6020A NAR 06/11/20 12:33 DF00949

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Quality

Fax: 401-461-4486 Service



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake Client Sample ID: Surface Water - 3 Date Sampled: 06/09/20 10:50

Percent Solids: N/A

Extraction Method: 3005A/200.7

ESS Laboratory Work Order: 20F0344 ESS Laboratory Sample ID: 20F0344-03

Sample Matrix: Surface Water

Units: ug/L

Total Metals

F/V Analyte Results (MRL) **MDL** Method **Limit** <u>DF</u> Analyst Analyzed Batch Lead ND (0.5) 6020A NAR 06/10/20 23:07 DF00949

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Quality

Fax: 401-461-4486 Service



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Lead

Client Project ID: Tiogue Lake ESS Laboratory Work Order: 20F0344

Quality Control Data

					6 :1	-		0/ DEC		DDD	
Analyte		Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Analyte		Nesuit				Nesuit	/UNLC	LIIIIG	NI D	LIIIIC	Qualifier
			[Dissolved M	etals						
Batch DF00949 - 3005A/	/200.7										
Blank											
Lead		ND	0.5	ug/L							
Blank											
Lead		ND	0.5	ug/L							
LCS											
Lead		47.6	2.5	ug/L	50.00		95	80-120			
LCS Dup											
Lead		43.7	2.5	ug/L	50.00		87	80-120	8	20	
				Total Meta	als						
Batch DF00949 - 3005A/	/200.7										
Blank											
Lead		ND	0.5	ug/L							
LCS											
Lead		47.6	2.5	ug/L	50.00		95	80-120			
LCS Dup											
Lead		43.7	2.5	ug/L	50.00		87	80-120	8	20	
Duplicate	Source: 20F0344-01										
Lead		0.4	0.5	ug/L		0.3			10	20	
Duplicate	Source: 20F0344-02										
Lead		0.4	0.5	ug/L		0.5			14	20	
Matrix Spike	Source: 20F0344-01										
Lead		45.9	2.5	ug/L	50.00	ND	92	75-125			
Matrix Spike	Source: 20F0344-02										

ug/L

50.00

115

75-125

57.3



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake ESS Laboratory Work Order: 20F0344

Notes and Definitions

U	Analyte included i	n the analysis,	but not detected
---	--------------------	-----------------	------------------

D Diluted.

ND Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference **MDL** Method Detection Limit MRL Method Reporting Limit LOD Limit of Detection LOQ Limit of Quantitation **Detection Limit** DL Initial Volume I/V

F/V Final Volume

Subcontracted analysis; see attached report

Range result excludes concentrations of surrogates and/or internal standards eluting in that range. 1

2 Range result excludes concentrations of target analytes eluting in that range. 3 Range result excludes the concentration of the C9-C10 aromatic range.

Avg Results reported as a mathematical average.

NR No Recovery

[CALC] Calculated Analyte

Subcontracted analysis; see attached report **SUB**

RLReporting Limit

EDL Estimated Detection Limit MF Membrane Filtration MPN Most Probably Number **TNTC** Too numerous to Count **CFU** Colony Forming Units

185 Frances Avenue, Cranston, RI 02910-2211

Tel: 401-461-7181

Fax: 401-461-4486



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Alliance Environmental Group

Client Project ID: Tiogue Lake ESS Laboratory Work Order: 20F0344

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179 http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750 http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002 http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002 http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424 http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313 http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006 http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752

http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

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Tel: 401-461-7181

Fax: 401-461-4486

ESS Laboratory Sample and Cooler Receipt Checklist

	Allian	ce Environn	nental Group	- ML		ject ID:	20F0344	
Shinned/D	elivered Via:		Client		Date Re Project Du	ceived: e Date:	6/9/2020 6/16/2020	
Shippedio	elivered via	<u> </u>	Olicite			Project:	5 Day	
	anifest preser			No	6. Does COC ma			Yes
	stody seals p			No	7. Is COC comples	ete and correct?		Yes
3. Is radiat	ion count <10	0 CPM?		Yes			halds 0 suchano	(res)No (DA)
	ler Present?	Iced with:	[Yes		ormed about <u>short</u> nalyses received out		Yes (No) Gk/20
	C signed and		ient?	Yes				
	<u> </u>							
	bcontracting r Sample IDs: Analysis: TAT:		Yes (12. Were VOAs a. Air bubbles ir b. Does methar	received? naqueous VOAs? nol cover soil comple	tely?	Yes (No) Yes / No (NA)
a. If metals	e samples pro s preserved u vel VOA vials	pon receipt:	ved? (Yes / No Date: Date:	Time:	E	ву:	_
Sample Re	ceiving Notes	3 :						
			<u> </u>			<u> </u>		<u> </u>
a. Was the	nere a need to ere a need to contacted?	contact Precontact the	oject Manage client?	Date:	Yes / No Yes / No Time:		Зу:	
Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative		vanide and 608
					Container Type	Preservative HNO3		
Number	ID	Container	Present	Volume	500 mL Poly 500 mL Poly	HNO3 NP		
Number 1 1 2	51490 51493 51491	Yes Yes Yes Yes	N/A N/A N/A	Yes Yes Yes Yes	500 mL Poly 500 mL Poly 500 mL Poly	HNO3 NP HNO3		
Number 1 1 2 2	51490 51493 51491 51494	Yes Yes Yes Yes Yes Yes	N/A N/A N/A N/A	Yes Yes Yes Yes	500 mL Poly 500 mL Poly 500 mL Poly 500 mL Poly	HNO3 NP HNO3 NP		
Number 1 1 2	51490 51493 51491	Yes Yes Yes Yes	N/A N/A N/A	Yes Yes Yes Yes	500 mL Poly 500 mL Poly 500 mL Poly	HNO3 NP HNO3		
Number 1 1 2 2 3 3 3 2nd Revie Were all C Are barcoo Are all Fla Are all He Are all QO	51490 51493 51491 51494 51492 51495 ew containers so	Yes Yes Yes Yes Yes Yes Yes Yes Anned Into Correct contains attached/ kers attached/	N/A N/A N/A N/A N/A N/A N/A N/A N/A Storage/lab?	Yes Yes Yes Yes Yes Yes Yes Yes	500 mL Poly 500 mL Poly 500 mL Poly 500 mL Poly 500 mL Poly	HNO3 NP HNO3 NP HNO3		
Number 1 1 2 2 3 3 3 2nd Revie Were all C Are barcoo Are all Fla Are all He Are all QO	51490 51493 51491 51494 51492 51495 ew containers so de labels on c shpoint sticke x Chrome stic estickers attach	Yes Yes Yes Yes Yes Yes Yes Yes Anned Into Correct contains attached/ kers attached/	N/A N/A N/A N/A N/A N/A N/A N/A N/A Storage/lab?	Yes Yes Yes Yes Yes Yes Yes Yes	500 mL Poly 100 mL	HNO3 NP HNO3 NP HNO3		

ESS Laboratory Sample and Cooler Receipt Checklist

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