Town of Brewster
Water Quality Review Committee

2198 Main St., Brewster, MA 02631
(508) 896-3701

WATER QUALITY REVIEW COMMITTEE MEETING AGENDA
2198 Main Street
February 23, 2024 at 9AM

WATER QUALITY REVIEW COMMITTEE

Robert Michaels
Chair

Amy von Hone
Vice Chair

Susan Brown

Ned Chatelain

Kimberley Crocker Pearson

John Keith

Staff Participant
Chris Miller

This meeting will be conducted in person at the time and location identified above. This means that at least a quorum of the members of the public body will attend the meeting in person and members of the public are welcome to attend in person as well. **As a courtesy only, access to the meeting is also being provided via remote means in accordance with applicable law. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast or affect remote attendance or participation, unless otherwise required by law.** Members of the public with particular interest in any specific item on this agenda, which includes an applicant and its representatives, should make plans for in-person vs. virtual attendance accordingly.

Meetings may be joined by:

1. ***Phone:*** Call (929) 436-2866 or (301) 715-8592. Webinar ID: 869 1743 3374 Passcode: 443208
   To request to speak: Press *9 and wait to be recognized.
2. ***Zoom Webinar:*** https://us02web.zoom.us/j/86917433374?pwd=WFNNWktuKzROempqU1FjWDNlazhXUT09
   Passcode: 443208

To request to speak: Tap Zoom "Raise Hand", then wait to be recognized.

When required by law or allowed by the Chair, persons wishing to provide public comment or otherwise participate in the meeting, may do so by accessing the meeting remotely, as noted above. Additionally, the meeting will be broadcast live, in real time, via ***Live broadcast*** (Brewster Government TV Channel 18), ***Livestream*** (livestream.brewster-ma.gov), or ***Video recording*** (tv.brewster-ma.gov).

Please note that the WQRC may take official action, including votes, on any item on this agenda.

1. Call to Order
2. Declaration of a Quorum
3. Meeting Participation Statement
4. Recording Statement
5. Certificate Renewal – NextGrid Solar Array
6. Annual Review – Cape Sand and Recycling
7. Update on status of WQPD Zoning Bylaw and WQRC Certificate Renewals
8. Discussion on future meeting schedule
9. Approval of Minutes from 12/22/23
10. For Your Information
11. Matters Not Reasonably Anticipated by the Chair
12. Next Meeting: TBD
13. Adjournment

Date Posted: **Date Revised:** **Received by Town Clerk:**

Recvd 2/14/24 $50.00 Bunnett Enviro.

TOWN OF BREWSTER
WATER QUALITY REVIEW COMMITTEE

2198 Main Street
Brewster, Massachusetts 02631-1898
(508) 896-3701
FAX (508) 896-8089

APPLICATION FOR RENEWAL OF CERTIFICATE OF WATER QUALITY COMPLIANCE- Brewster Bylaw 179.53

Application Fee: $50.00

(Please Print)

PROPERTY OWNER'S NAME NextGrid Patriots, LLC PHONE (559) 731-4645

BUSINESS NAME+OWNER NextGrid Patriots, LLC C/O Daniel Serber PHONE (559) 731-4645

MAILING ADDRESS 177 Huntington Ave., Suite 1703, Unit 73069, Boston, MA 02115

E-MAIL ADDRESS daniel@nextgrid.com

PROPERTY LOCATION: MAP: 119 LOT: 6 STREET ADDRESS: 0 Mid Cape Highway

PREVIOUS APPROVED PERMIT DATE October 28, 2020

PLEASE COMPLETE THE FOLLOWING CHECKLIST
IF **ANYTHING** HAS CHANGED SINCE PREVIOUS PERMIT: A **COMLETE APPLICATION** MUST BE SUBMITTED
Answer **YES or NO** for each area. USE **N/A** if not applicable

1. Engineered site plan, filed previously, is the same as previous application:

Yes a.) All property lines and ownership of abutting lots

Yes b.) Current conditions and proposed finished grades and conditions, including all structures, fencing, signage, paved areas, parking areas (with number of parking spaces delineate) and improvements, including re-vegetation and landscaping plans. Include location of any existing and/or proposed groundwater wells and provide most recent well testing data.

Yes c.) All surface and subsurface treatments for the direction and retention of storm water and waste water, including existing or proposed drains.

Yes d) Provide the most recent monitoring or pumping data since last certificate;

Septic last pumped (date) N/A

Septic last inspected (date) N/A

2. No construction, clearing and excavation has occurred on the property since last certificate. No*

*Excavation work conducted in 2022 & 2023 to remove all remaining wood waste from site as required by MassDEP for Landfill Closure and Post-Closure Use permitting process.

3. The nature of commercial activity has remained the same since last certificate. N/A

4. Agricultural activity on the property:

N/A a) Number of animals has remained the same since last certificate.

N/A b) Fertilizer and Integrated Pest Management (IPM) plan has remained the same since last certificate.

N/A c) Manure or animal waste management plan has remained the same since last certificate.

5. Equipment on site:

Yes a) All equipment stored on the property has remained the same since last certificate.

6. Traffic information, including protection against vandalism, provided in the original application has remained the same

Yes

7. Equipment fueled on-site and precautions taken to prevent spills and actions proposed in the event a spill occur has remained the same since last certificate. N/A

8. List of all chemicals, pesticides, fuels, and other potentially toxic or hazardous materials has remained the same since last certificate. Yes

9. A description of potentially toxic or hazardous wastes to be generated on site or stored on site, indicating storage containment and disposal methods has remained the same since last certificate. Yes

10. Description of measures that will be taken to protect materials and storage structures from corrosion and leakage has remained the same since last certificate. Yes

11. Description of measures that will be taken to control and contain spills of all potentially hazardous materials Including fuels has remained the same since last certificate. Yes

12. Description of any existing or proposed floor drains and dry wells has remained the same since the last certificate. N/A

13. List any non-sanitary wastewater generated at the property as a result of residential, commercial or agricultural activities conducted at the property (services, maintenance, manufacturing, processing) has remained the same since the last certificate. N/A

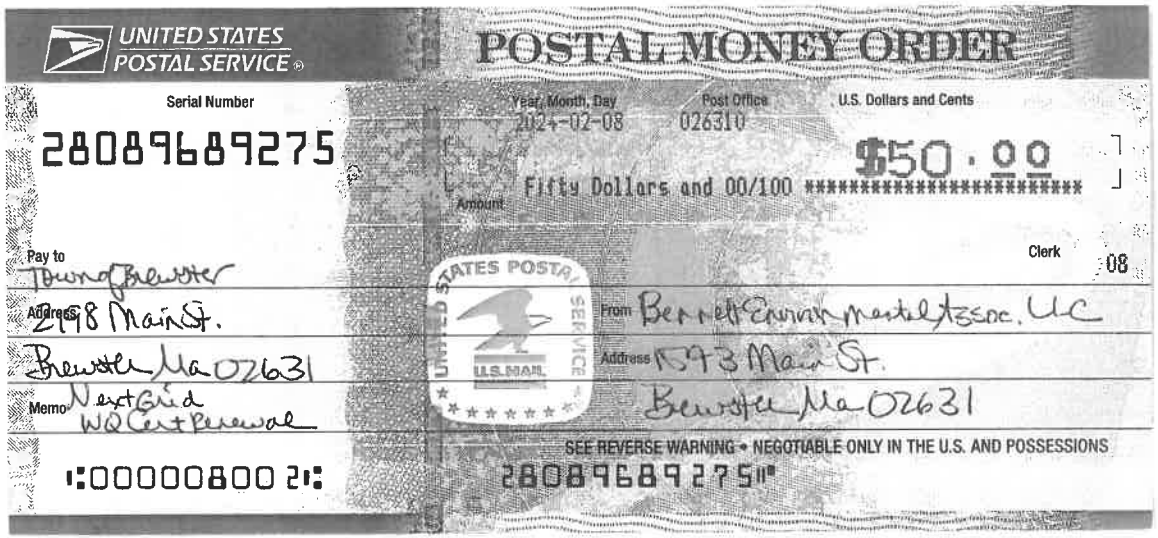
Daniel Serber

Signature of Applicant

Daniel Serber, Director of Land Development for

Printed name of Applicant

NextGrid Patriots, LLC



UNITED STATES POSTAL SERVICE®

POSTAL MONEY ORDER

Serial Number
28089689275

Year, Month, Day: 2024-02-08
Post Office: 026310
U.S. Dollars and Cents: $50.00

Amount: Fifty Dollars and 00/100 **********

Clerk: 08

Pay to: Town of Brewster
Address: 2198 Main St.
Brewster Ma 02631
Memo: Next Grid WQ Cert Renewal

From: Bennett Environmental Assoc. LLC
Address: 573 Main St.
Brewster Ma 02631

SEE REVERSE WARNING • NEGOTIABLE ONLY IN THE U.S. AND POSSESSIONS

:00000800 2:

28089689275

BENNETT ENVIRONMENTAL ASSOCIATES, LLC.

A NATURAL SYSTEMS UTILITIES COMPANY

LICENSED SITE PROFESSIONALS • ENVIRONMENTAL SCIENTISTS • GEOLOGISTS • ENGINEERS

1573 Main Street, Brewster, MA 02631 • 508-896-1706 • Fax 508-896-5109 • www.bennett-ea.com

Job# K11273

January 11, 2024

Mark Dakers, Section Chief
Bureau Air & Waste/Solid Waste Section
MA Department of Environmental Protection (SERO)
20 Riverside Drive
Lakeville, MA 02347

via email: mark.dakers@mass.gov

RE: GROUNDWATER MONITORING RESULTS - December 2023
Former Daniels/Antinarelli Stump Dump
0 Mid Cape Highway [Map 119, Parcel 6] – Brewster, MA

Dear Mr. Dakers,

Please find enclosed laboratory results for the December 2023 groundwater monitoring event, conducted at the above-referenced site. As you know, periodic groundwater monitoring is required by the MA Department of Environmental Protection (MassDEP) and Brewster Water Quality Review Committee (BWQRC) under the outstanding Administrative Consent Order, through the start of construction, as part of the permitting process for Landfill Closure and Post-Closure Reuse of the former stump dump. Laboratory analyses included standard water quality parameters, total metals, volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs), consistent with the parameters outlined in Appendix A of the Woodwaste Guidance Document (BWP-98-006), and with previous testing.

Groundwater samples were collected by BEA personnel on December 12, 2023, from monitoring wells MW-1A, MW-2, MW-3, and MW-4. A Monitoring Well Sampling Log is attached for reference. Prior to sampling, depth-to-groundwater measurements were taken at each monitoring well location. The wells were then purged in accordance with MassDEP standard practices and BEA Quality Assurance & Quality Control (QA/QC) methods. Field parameters measured during sampling activities included temperature, pH, conductivity, dissolved oxygen (DO) and oxidation-reduction potential (ORP). The samples were collected using a variable-speed 2" submersible pump, using low-flow sampling methodology. Sample containers were prepared by Alpha Analytical and kept in a cooler or refrigerator pending pick up by a lab courier and transported following chain of custody procedures.

Well gauging data from the date of sampling reports depth to groundwater ranging from 47.62 to 82.72 feet below grade, with groundwater elevations ranging from 25.08 to 23.04 feet (NAD83), as measured from the top of the well casings. The December 2023 gauging event shows groundwater flows southeasterly towards Pleasant Bay, consistent with data from previous monitoring events. Depth-to-groundwater measurements and corresponding elevations are

presented on the enclosed Monitoring Well Sampling Log. Groundwater contours are represented on the enclosed Site Plan.

Laboratory results were received on December 28, 2023. The results were compared to the Massachusetts Drinking Water Standards (MDWS), published by MassDEP. These standards include Massachusetts Maximum Contaminant Levels (MMCLs), Secondary Maximum Contaminant Levels (SMCLs) and Office of Research and Standards Guideline (ORSG) concentrations. In addition, the results were compared to the MCP Reportable Concentrations for the RCGW-1 groundwater categories. A tabulation of the laboratory data for the December 2023 sampling event, along with a comparison to the above standards, is presented in Table 1. A comparison with historical data is presented in Table 2.

The results reported elevated concentrations of manganese, sodium, and iron in both upgradient and downgradient wells, above the SMCLs, consistent with previous testing. SMCLs are not health-based standards but were established to preserve the aesthetic qualities of drinking water. Manganese was also reported above the ORSG values in MW-4. The ORSG for Manganese considers lifetime exposure (0.3 mg/L) and acute exposure (1.0 mg/L) for the general population, as well as a precautionary standard for acute exposure for children <1 year old (0.3 mg/L). Trace concentrations of Naphthalene were reported in MW-4, and trace concentrations of Chloroform were reported in MW-1A and MW-3, the concentrations reported were all below the corresponding MMCL and RCGW-1 Standards. Otherwise, no significant groundwater impairment was reported with all parameters below the respective MMCLs, or RCGW-1 concentrations.

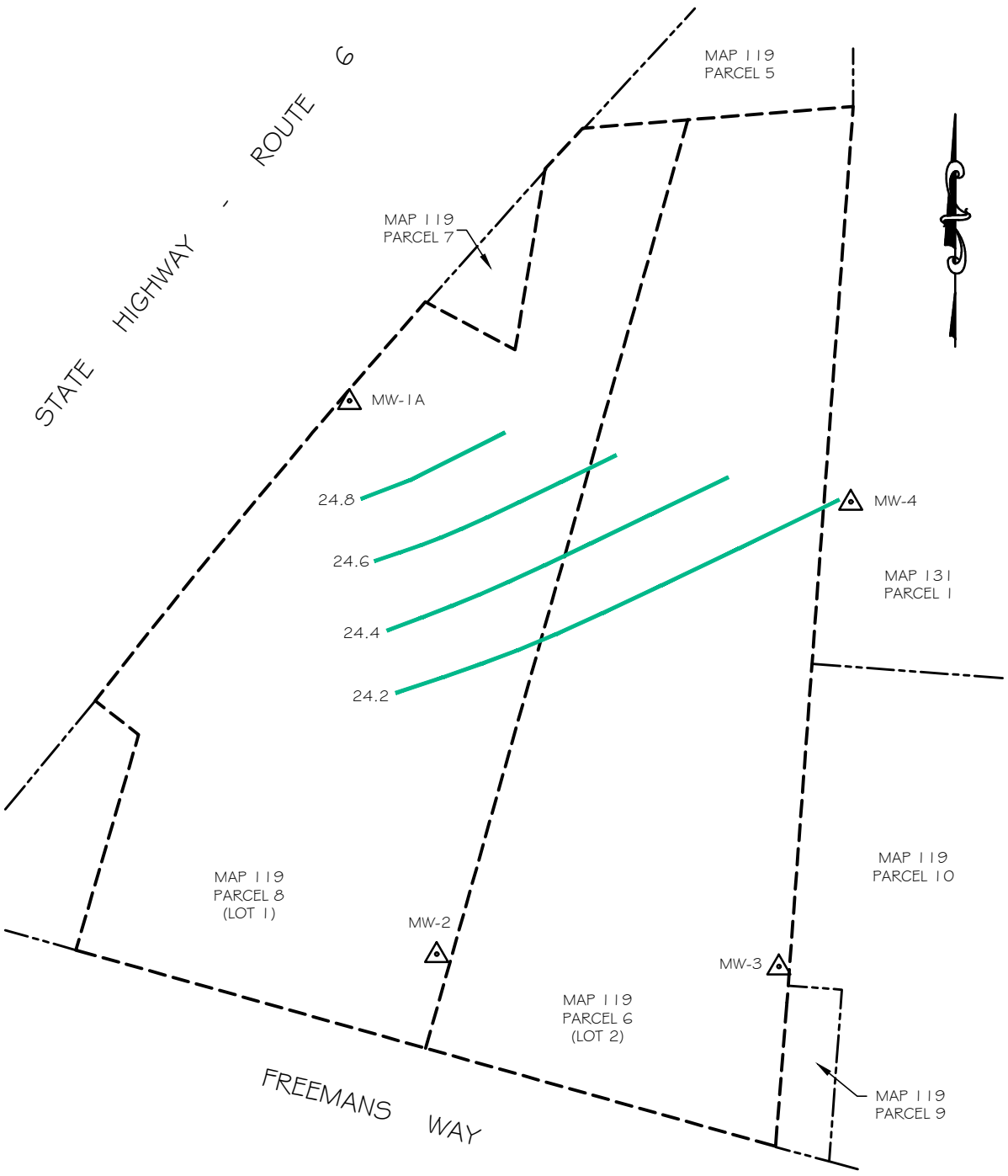
At the time of this reporting, woodwaste recovery operations at the property are complete and BEA is preparing the SW-43 Landfill Closure permit application package for MassDEP review. If you have any questions or need additional information, please contact me directly.

Respectfully yours,
BENNETT ENVIRONMENTAL ASSOCIATES, LLC

John D. Tadema-Wielandt
Manager of Environmental Services

Encl. -Groundwater Contour Plan, for NextGrid Patriots, LLC. by BEA, dated January 11, 2024
-Monitor Well Sample Log [12/12/23]
-Table 1: December 2023 Groundwater Analyses Summary
-Table 2: Temporal Groundwater Analysis Summary (March 2020 - December 2023)
-Laboratory Report - Alpha Analytical, Lab #: L2373630 (12/28/23)

Cc. Daniel Serber, Director of Land Development – NextGrid – daniel@nextgrid.com
Amy Von Hone, Health Director – Town of Brewster (WQRC) - avonhone@brewster-ma.gov
Elza Bystrom – MassDEP – elza.bystrom@mass.gov



LEGEND

- MW — EXISTING MONITORING WELL
- PROPERTY LINES
- GROUNDWATER CONTOURS 12/12/23

0 150 300 450

SCALE 1"=150'

Project: NEXTGRID PATRIOTS, LLC
WHOLLY OWNED ENTITY OF NEXTGRID, INC.
P.O. BOX 7775 # 73069 - SAN FRANCISCO, CA 94120

Title: Groundwater Contour Plan
0 MID CAPE HIGHWAY - BREWSTER, MA 02631 (PARCEL IDs 119-6-0 AND 119-8-0)

BENNETT ENVIRONMENTAL ASSOCIATES, LLC.
A NATURAL SYSTEMS UTILITIES COMPANY
LICENSED SITE PROFESSIONALS, ENVIRONMENTAL SCIENTISTS, GEOLOGISTS, ENGINEERS
1573 MAIN STREET - BREWSTER, MA 02631
PHONE: (508) 896-1706 www.bennett-ea.com FAX: (508) 896-5109

DATE	SCALE	BY	CHECK	JOB NUMBER
1/11/24	As Noted	SRF	JTW	K11273DA.X.EV.901

1573 Main Street
Brewster, MA 02631

BENNETT ENVIRONMENTAL ASSOCIATES, LLC

A Natural Systems Utilities Company

LICENSED SITE PROFESSIONALS, ENVIRONMENTAL SCIENTISTS, GEOLOGISTS, ENGINEERS

Phone: 508-896-1706
Fax: 508-896-5109

MONITORING WELL SAMPLING LOG

Job Name: NextGrid | Date(s): 12/12/23 | Time: 9:25am | Tide: N/A

Location: Off Freemans Way, Brewster | Job Number: K11273

Sampler: J. Guthrie | Measuring Point: Ground Surface or T.O.C | TOC

Well Number	Elev. of reference point (feet)	Total Depth of Well (feet)	Depth to Water (feet)	Standing Water Height (feet)	Water Table Elevation (feet)	Static Volume (gallons)	Volume Purged (gallons)	HNU PI-101 (ppm)	pH	Dissolved Oxygen (mg/L)	Conductivity	Temperature (F)	ORP	Comments:
MW-1A	107.80	88.5	82.72	5.78	25.08	0.94	2.5+	N/A	4.65	5.51	157	53.4	216.5	No odor, no sheen
MW-2	94.40	91.0	70.98	20.02	23.42	3.27	9.5+	N/A	6.37	3.27	105.5	52.3	107.7	No odor, no sheen
MW-3	96.80	79.5	73.76	5.74	23.04	0.94	2.5+	N/A	5.47	7.71	140.7	53.4	146.6	No odor, no sheen
MW-4	71.80	50.0	47.62	2.38	24.18	0.39	1.0+	N/A	5.75	0.48	261.2	57.3	57.3	No odor, no sheen

NOTES: NA = Not Applicable; NE = Not Established; NT = Not Taken

Collect samples for various analyses upon stabilization of field parameters

Table 1: December 2023 Groundwater Analyses Summary

Former Daniels/Antinarelli Stump Dump - Freemans Way, Brewster, MA

PARAMETER	STANDARDS (mg/l)		RESULTS (mg/l)			
	MDWS	RCGW-1	MW-1A	MW-2	MW-3	MW-4
TOTAL METALS						
Arsenic	0.01	0.01	<0.005	<0.005	<0.005	<0.005
Barium	2	2	0.116	<0.01	<0.01	0.0318
Cadmium	0.005	0.004	<0.004	<0.004	<0.004	<0.004
Calcium	NS	NS	4.31	7.25	3.09	19.3
Chromium	0.100	0.1	<0.01	<0.01	0.06	<0.01
Copper	1.3	10	<0.01	<0.01	<0.01	<0.01
Iron	0.3 [S]	NS	<0.05	**2.31**	**0.514**	**1.63**
Lead	0.015	0.01	<0.01	<0.01	<0.01	<0.01
Manganese	0.05 [S], 0.3/1.0 [G]	NS	**0.125**	**0.0954**	0.0156	**1**
Mercury	0.002	0.002	<0.0002	<0.0002	<0.0002	<0.0002
Selenium	0.05	0.05	<0.01	<0.01	<0.01	<0.01
Silver	0.1 [S]	0.007	<0.007	<0.007	<0.007	<0.007
Sodium	20 [G]	NS	**27.1**	15.1	**28.1**	**23.5**
Zinc	5 [S]	0.9	<0.05	<0.05	<0.05	<0.05
VOLATILE ORGANIC COMPOUNDS (VOCs)						
All Other VOCs	I	I	ND	ND	ND	ND
Chloroform	0.07 [G]	0.05	0.0014	<0.001	0.0017	<0.001
POLY-NUCLEAR AROMATIC HYDROCARBONS (PAHs)						
2-Methylnaphthalene	NS	0.01	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthene	NS	0.02	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	NS	0.03	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	NS	0.03	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)anthracene	NS	0.001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	0.0002	0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	NS	0.001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(ghi)perylene	NS	0.02	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	NS	0.001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	NS	0.002	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzo(a,h)anthracene	NS	0.0005	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	NS	0.09	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	NS	0.03	<0.0001	<0.0001	<0.0001	<0.0001
Indeno(1,2,3-cd)Pyrene	NS	0.0005	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	NS	0.14	<0.0001	<0.0001	<0.0001	0.00041
Phenanthrene	NS	0.04	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	NS	0.02	<0.0001	<0.0001	<0.0001	<0.0001
AGGREGATE ORGANIC CONSTITUENTS						
Tannin & Lignin	NS	NS	<0.2	<0.2	<0.2	0.75
Chemical Oxygen Demand (COD)	NS	NS	<20	<20	<20	69
Total Organic Carbon (TOC)	NS	NS	1.8	<0.5	<0.5	2.5
GENERAL CHEMISTRY						
Alkalinity (as CaCO3)	NS	NS	5.4	34.4	10.4	105
Color	15 [S]	NS	<5	14	<5	**30**
Chloride	250 [S]	NS	38	19	48	25
Cyanide, Total	0.2	0.03	<0.005	<0.005	<0.005	<0.005
Total K Nitrogen (TKN)	10	NS	<0.3	<0.3	<0.3	2.1
Nitrate-N	10	NS	3.38	0.265	0.136	0.259
Sulfate	250 [S]	NS	14	<10	<10	12
Sulfide	NS	NS	<0.05	<0.05	<0.05	<0.05
Total Dissolved Solids	500 [S]	NS	42	36	110	140
FIELD PARAMETERS						
Temperature (°F)	NS	NS	53.4	52.3	53.4	57.3
pH (pH units)	6.5-8.5 [S]	NS	**4.65**	**6.37**	**5.47**	**5.75**
Specific Conductivity (uS/cm)	NS	NS	157	105.5	140.7	261.2
Dissloved Oxygen	NS	NS	5.51	3.27	7.71	0.48
Oxidation Reduction Potential (mV)	NS	NS	216.5	107.7	146.6	57.3

MDWS = Massachusetts Drinking Water Standard (MMCL)
RCGW-1 = Massachusetts Reportable Groundwater Concentration Standard 1
[G] = Massachusetts Drinking Water Guideline (ORSG)
[S] = Secondary Maximum Contaminant Levels (SMCL)
NA = Not Analyzed for Indicated Compound
NS = No Standard
I = VOCs Standards Specific to Individual Compound
= Indicates an exceedance of MMCL, ORSG, or Reportable Concentration Standard
= Indicates an exceedance of SMCL

Table 2: Temporal Groundwater Analysis Summary (March 2020 - December 2023)

Former Daniels/Antinarelli Stump Dump

Freemans Way, Brewster, MA

PARAMETER	STANDARDS (mg/l)		MW-1A							MW-2							MW-3							MW-4							
	MDWS	RCGW-1	3/24/20	6/16/20	9/23/20	12/10/20	12/16/21	12/8/22	12/12/23	3/24/20	6/16/20	9/23/20	12/10/20	12/16/21	12/8/22	12/12/23	3/24/20	6/16/20	9/23/20	12/10/20	12/16/21	12/8/22	12/12/23	3/24/20	4/9/20	6/16/20	9/23/20	12/10/20	12/16/21	12/8/22	12/12/23
TOTAL METALS																														
Arsenic	0.01	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.0381**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Barium	2	2	0.085	0.09	0.073	0.063	0.064	0.0762	0.116	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.031	<0.01	<0.01	0.016	0.013	0.012	0.021	0.0318
Cadmium	0.005	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**0.008**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Calcium	NS	NS	3.02	3.05	2.28	2.04	1.94	2.85	4.31	6.83	6.22	7.12	6.52	7.08	5.86	7.25	3.56	2.12	2.39	3.87	2.05	2.13	3.09	9.43	5.9	5.8	12.2	11	10.6	15.6	19.3
Chromium	0.1	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.032	<0.01	<0.01	<0.01	<0.01	0.0231	<0.01	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	0.028	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	1.3	10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.143	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	0.3[S]	NS	<0.05	<0.05	<0.05	<0.05	<0.05	0.0726	<0.05	**1.34**	0.197	**3.08**	**18.9**	**1.09**	**0.8**	**2.31**	0.236	<0.05	<0.05	**0.67**	<0.05	0.101	**0.514**	**14.8**	**2.04**	**1.99**	**7.81**	**4.75**	**1.99**	**4.13**	**1.63**
Lead	0.015	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese	0.05[S], 0.3/1.0[G]	NS	**0.224**	**0.215**	**0.195**	**0.17**	**0.147**	**0.12**	**0.125**	**0.065**	0.024	**0.119**	0.036	**0.065**	0.0427	**0.0954**	0.012	<0.01	<0.01	0.011	<0.01	<0.01	0.0156	**0.209**	**0.145**	**0.15**	**0.337**	**0.273**	**0.193**	**0.419**	**1**
Mercury	0.002	0.002	<0.0002	<0.0002	0.0004	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	0.0018	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002
Selenium	0.05	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	0.1[S]	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Sodium	20[G]	NS	**34.2**	**43.4**	**25.5**	**21.5**	**43**	**41.1**	**27.1**	14.3	14	15.4	14.6	14.4	14.3	15.1	**39**	**31.9**	**37**	**47.1**	**33.9**	**32.4**	**28.1**	**29.6**	**40.9**	**32.9**	**28.4**	**30.5**	**29.8**	**28.8**	**23.5**
Zinc	5[S]	0.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.081	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
VOLATILE ORGANIC COMPOUNDS (VOCs) - DETECTS ONLY																															
Chloroform	0.07[G]	0.05	0.0011	ND	ND	0.0011	ND	0.0011	0.0014	ND	ND	ND	ND	ND	ND	ND	0.0022	0.0015	0.0019	0.0023	0.0018	0.0022	0.0017	ND	NA	ND	ND	ND	ND	ND	ND
POLY-NUCLEAR AROMATIC HYDROCARBONS (PAHs) - DETECTS ONLY																															
Naphthalene	0.14[G]	0.14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00012	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	NA	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00041
AGGREGATE ORGANIC CONSTITUENTS																															
Tannin & Lignin	NS	NS	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.38	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2.0	NA	<0.2	0.42	0.81	0.31	0.65	0.75
COD	NS	NS	<20	<20	<20	59	<20	<20	<20	<20	<20	<20	26	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	160	NA	<20	44	33	31	93	69
TOC	NS	NS	0.88	0.78	1	0.9	0.81	1.1	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.51	0.54	<0.5	<0.5	<0.5	7.8	NA	4.5	14	9.3	9.4	15	2.5
GENERAL CHEMISTRY																															
Alkalinity (as CaCO3)	NS	NS	6.6	6.3	5.8	5.6	5.8	7.4	5.4	31.4	31.7	30.1	31.5	31.8	34.1	34.4	7.1	7.3	6.5	6.1	7.3	11.2	10.4	34.4	NA	30.9	73.1	64.5	59.7	79.4	105
Color	15[S]	NS	<5	<5	<5	<5	<5	11	<5	6	5	**80**	**65**	5	7	14	<5	<5	<5	9	<5	6	<5	<120	NA	6	**28**	14	5	**20**	**30**
Chloride	250[S]	NS	63	75	38	31	68	66	38	20	21	20	19	18	19	19	73.0	49	55	75	53	52	48	51	NA	52	42	42	42	51	25
Cyanide, Total	0.2	0.03	<0.005	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005	0.009	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.02	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005
Total K Nitrogen (TKN)	NS	NS	<0.3	<0.3	<0.3	<0.3	<0.3	0.303	<0.3	0.757	<0.3	<0.3	<0.3	<0.3	0.31	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	3.0	NA	<0.3	1.06	0.824	0.44	1.71	2.1
Nitrate-N	10	NS	0.597	0.377	0.601	0.567	0.697	1.43	3.38	0.34	0.322	0.292	0.307	0.274	0.292	0.265	0.271	0.277	0.213	0.135	0.187	0.201	0.136	1.13	NA	0.273	0.143	<0.1	0.243	0.294	0.259
Sulfate	250[S]	NS	<10	<10	<10	<10	<10	21	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10	<10	<10	15	NA	<10	10	24	11	28	12
Sulfide	NS	NS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05
Total Dissolved Solids	500[S]	NS	140	110	75	74	160	120	42	92	72	53	59	120	81	36	140	130	82	140	140	89	110	140	NA	130	160	150	180	180	140
FIELD PARAMETERS																															
Temperature (°C)	NS	NS	53	54.5	55	53.5	53.0	53.2	53.4	52.1	52.3	53.1	53.0	52.1	52.7	52.3	53	53.4	53.7	52.8	52.8	52.8	53.4	52.5	60.9	56.7	56.7	55.8	55.9	56.0	57.3
pH (pH units)	6.5-8.5[S]	NS	**5.05**	**4.7**	**4.36**	**4.9**	**5.55**	**4.94**	**4.65**	**6.38**	**6.1**	**6.01**	**6.48**	7.03	6.55	**6.37**	**5.66**	**5.37**	**5.22**	**5.58**	**6.30**	**5.77**	**5.47**	**6.11**	**5.87**	**5.42**	**5.85**	**5.91**	6.61	**5.95**	**5.75**
Specific Conductivity (uS/cm)	NS	NS	148.4	177.1	108.6	117	162.7	189.8	157	82.5	83	83.9	103.6	83.2	104.4	105.5	163.2	126.6	141	219	132.3	145.5	140.7	162.2	185.7	161.8	198.4	227.9	177.6	265.5	261.2
Dissolved Oxygen (mg/L)	NS	NS	7.64	7.26	6.56	6.35	7.15	7.62	5.51	4.42	3.95	3.35	4.33	4.55	5.09	3.27	10.63	8.84	7.61	10.36	9.54	8.35	7.71	5.44	2.36	3.78	1.59	0.28	0.47	1.4	0.48

MDWS = Massachusetts Drinking Water Standard (MMCL)
RCGW-1 = Massachusetts Reportable Groundwater Concentration Standard 1
NA = Not Analyzed for Indicated Compound
[G] = Massachusetts Drinking Water Guideline (ORSG)
[S] = Secondary Maximum Contaminant Levels (SMCL)
NA = Not Analyzed for Indicated Compound
NS = No Standard
I = VOCs Standards Specific to Individual Compound
= Indicates an exceedance of MMCL, ORSG, or Reportable Concentration Standard
= Indicates an exceedance of SMCL

ANALYTICAL REPORT

Lab Number:	L2373630
Client:	Bennett Environmental Associates 1573 Main Street Brewster, MA 02631
ATTN:	John Tadema-Wielandt
Phone:	(508) 896-1706
Project Name:	NEXTGRID-CULIG
Project Number:	K11273
Report Date:	12/28/23

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2373630-01	MW-1A	WATER	FREEMAN'S WAY, BREWSTER, MA	12/12/23 16:00	12/13/23
L2373630-02	MW-2	WATER	FREEMAN'S WAY, BREWSTER, MA	12/12/23 14:55	12/13/23
L2373630-03	MW-3	WATER	FREEMAN'S WAY, BREWSTER, MA	12/12/23 12:35	12/13/23
L2373630-04	MW-4	WATER	FREEMAN'S WAY, BREWSTER, MA	12/12/23 10:35	12/13/23

Project Name:	NEXTGRID-CULIG	**Lab Number:**	L2373630
Project Number:	K11273	**Report Date:**	12/28/23

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name:	NEXTGRID-CULIG	**Lab Number:**	L2373630
Project Number:	K11273	**Report Date:**	12/28/23

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: NEXTGRID-CULIG **Lab Number:** L2373630
Project Number: K11273 **Report Date:** 12/28/23

Case Narrative (continued)

Report Submission

The analysis of Sulfide was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

MCP Related Narratives

Volatile Organics

L2373630-01 through -04: Initial calibration utilized a quadratic fit for: bromomethane, 1,1,2,2-tetrachloroethane, 1,2-dichlorobenzene, 1,2-dibromo-3-chloropropane

In reference to question H:

L2373630-01 through -04: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: cis-1,2-dichloroethene (0.1866), 1,2-dichloropropane (0.1817), bromodichloromethane (0.2538), 1,4-dioxane (0.0008), cis-1,3-dichloropropene (0.2125), trans-1,3-dichloropropene (0.2586)

Average Response Factor: bromodichloromethane, 1,4-dioxane, cis-1,3-dichloropropene, 1,1,2-trichloroethane, 1,2-dibromoethane

Verification: ethyl ether (143%)

L2373630-01 through -04: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

Semivolatile Organics by SIM

In reference to question H:

The WG1864927-1 Method Blank, associated with L2373630-01 through -03, has a concentration above the reporting limit for Naphthalene and 2-Methylnaphthalene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for these target analytes, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".

Project Name:	NEXTGRID-CULIG	**Lab Number:**	L2373630
Project Number:	K11273	**Report Date:**	12/28/23

Case Narrative (continued)

The WG1864927-1 Method Blank, associated with L2373630-04, has concentrations above the reporting limits for Naphthalene and 2-Methylnaphthalene. The sample was re-extracted with the method required holding time exceeded and the sample was non-detect for these target compounds. The results of both extractions are reported. The original sample result is reported with a "B" qualifier.
The WG1868738-1 Method Blank, associated with L2373630-04RE, has a concentration above the reporting limit for Naphthalene. Since the associated sample concentrations are either greater than 10x the blank concentration or non-detect to the RL for this target analyte, no corrective action is required. Any results detected below the reporting limit are qualified with a "B".
In reference to question I:
All samples were analyzed for a subset of MCP analytes per client request.

Total Metals
In reference to question I:
All samples were analyzed for a subset of MCP analytes per client request.

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: 12/28/23

QC OUTLIER SUMMARY REPORT

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics - Westborough Lab								
8260D	Batch QC	WG1867254-3	Methyl isobutyl ketone	LCS	67	70-130	01-04	potential low bias

ORGANICS

VOLATILES

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-01 Date Collected: 12/12/23 16:00
Client ID: MW-1A Date Received: 12/13/23
Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8260D
Analytical Date: 12/22/23 07:48
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	1.4		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-01 Date Collected: 12/12/23 16:00

Client ID: MW-1A Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	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	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	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	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-01 Date Collected: 12/12/23 16:00

Client ID: MW-1A Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	110		70-130

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-02 Date Collected: 12/12/23 14:55
Client ID: MW-2 Date Received: 12/13/23
Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8260D
Analytical Date: 12/22/23 08:11
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-02 Date Collected: 12/12/23 14:55

Client ID: MW-2 Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	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	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	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	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-02 Date Collected: 12/12/23 14:55

Client ID: MW-2 Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	113		70-130

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-03 Date Collected: 12/12/23 12:35
Client ID: MW-3 Date Received: 12/13/23
Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8260D
Analytical Date: 12/22/23 08:33
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	1.7		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-03 Date Collected: 12/12/23 12:35

Client ID: MW-3 Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	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	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	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	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-03 Date Collected: 12/12/23 12:35

Client ID: MW-3 Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	113		70-130

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-04 Date Collected: 12/12/23 10:35
Client ID: MW-4 Date Received: 12/13/23
Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8260D
Analytical Date: 12/22/23 08:56
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-04 Date Collected: 12/12/23 10:35

Client ID: MW-4 Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	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	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	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	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-04 Date Collected: 12/12/23 10:35

Client ID: MW-4 Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	110		70-130

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 12/22/23 04:24
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG1867254-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 12/22/23 04:24
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG1867254-5					
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	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 12/22/23 04:24
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG1867254-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG1867254-3 WG1867254-4								
Methylene chloride	110		97		70-130	13		20
1,1-Dichloroethane	120		110		70-130	9		20
Chloroform	120		110		70-130	9		20
Carbon tetrachloride	120		110		70-130	9		20
1,2-Dichloropropane	100		94		70-130	6		20
Dibromochloromethane	87		82		70-130	6		20
1,1,2-Trichloroethane	91		84		70-130	8		20
Tetrachloroethene	110		97		70-130	13		20
Chlorobenzene	100		94		70-130	6		20
Trichlorofluoromethane	120		110		70-130	9		20
1,2-Dichloroethane	110		100		70-130	10		20
1,1,1-Trichloroethane	120		110		70-130	9		20
Bromodichloromethane	100		94		70-130	6		20
trans-1,3-Dichloropropene	95		89		70-130	7		20
cis-1,3-Dichloropropene	100		92		70-130	8		20
1,1-Dichloropropene	110		100		70-130	10		20
Bromoform	76		75		70-130	1		20
1,1,2,2-Tetrachloroethane	86		84		70-130	2		20
Benzene	110		100		70-130	10		20
Toluene	110		97		70-130	13		20
Ethylbenzene	110		99		70-130	11		20
Chloromethane	130		110		70-130	17		20
Bromomethane	97		87		70-130	11		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG1867254-3 WG1867254-4								
Vinyl chloride	110		98		70-130	12		20
Chloroethane	120		100		70-130	18		20
1,1-Dichloroethene	110		98		70-130	12		20
trans-1,2-Dichloroethene	110		96		70-130	14		20
Trichloroethene	100		91		70-130	9		20
1,2-Dichlorobenzene	97		90		70-130	7		20
1,3-Dichlorobenzene	99		88		70-130	12		20
1,4-Dichlorobenzene	96		86		70-130	11		20
Methyl tert butyl ether	81		78		70-130	4		20
p/m-Xylene	110		100		70-130	10		20
o-Xylene	110		100		70-130	10		20
cis-1,2-Dichloroethene	110		100		70-130	10		20
Dibromomethane	100		96		70-130	4		20
1,2,3-Trichloropropane	86		84		70-130	2		20
Styrene	110		95		70-130	15		20
Dichlorodifluoromethane	110		100		70-130	10		20
Acetone	100		110		70-130	10		20
Carbon disulfide	120		100		70-130	18		20
Methyl ethyl ketone	73		80		70-130	9		20
Methyl isobutyl ketone	**67**	Q	71		70-130	6		20
2-Hexanone	71		75		70-130	5		20
Bromochloromethane	110		100		70-130	10		20
Tetrahydrofuran	92		88		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG1867254-3 WG1867254-4								
2,2-Dichloropropane	120		110		70-130	9		20
1,2-Dibromoethane	91		88		70-130	3		20
1,3-Dichloropropane	97		89		70-130	9		20
1,1,1,2-Tetrachloroethane	92		84		70-130	9		20
Bromobenzene	96		88		70-130	9		20
n-Butylbenzene	120		100		70-130	18		20
sec-Butylbenzene	110		99		70-130	11		20
tert-Butylbenzene	100		96		70-130	4		20
o-Chlorotoluene	110		97		70-130	13		20
p-Chlorotoluene	110		96		70-130	14		20
1,2-Dibromo-3-chloropropane	73		74		70-130	1		20
Hexachlorobutadiene	110		91		70-130	19		20
Isopropylbenzene	100		95		70-130	5		20
p-Isopropyltoluene	110		97		70-130	13		20
Naphthalene	73		72		70-130	1		20
n-Propylbenzene	110		99		70-130	11		20
1,2,3-Trichlorobenzene	88		81		70-130	8		20
1,2,4-Trichlorobenzene	88		81		70-130	8		20
1,3,5-Trimethylbenzene	110		98		70-130	12		20
1,2,4-Trimethylbenzene	110		96		70-130	14		20
Diethyl ether	94		90		70-130	4		20
Diisopropyl Ether	110		100		70-130	10		20
Ethyl-Tert-Butyl-Ether	92		89		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG1867254-3 WG1867254-4								
Tertiary-Amyl Methyl Ether	88		85		70-130	3		20
1,4-Dioxane	102		98		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		109		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	105		105		70-130

SEMIVOLATILES

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-01
Client ID: MW-1A
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 16:00
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 12/21/23 13:45
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/17/23 05:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	56		30-130
2-Fluorobiphenyl	55		30-130
4-Terphenyl-d14	52		30-130

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-02
Client ID: MW-2
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 14:55
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 12/21/23 14:01
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/17/23 05:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	56		30-130
2-Fluorobiphenyl	55		30-130
4-Terphenyl-d14	53		30-130

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-03
Client ID: MW-3
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 12:35
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 12/21/23 14:18
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/17/23 05:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	55		30-130
2-Fluorobiphenyl	54		30-130
4-Terphenyl-d14	54		30-130

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-04
Client ID: MW-4
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 10:35
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 12/21/23 14:34
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/17/23 05:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	0.41	B	ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	66		30-130
2-Fluorobiphenyl	65		30-130
4-Terphenyl-d14	62		30-130

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-04 RE
Client ID: MW-4
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 10:35
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 12/28/23 11:05
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 12/27/23 17:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	82		30-130
2-Fluorobiphenyl	84		30-130
4-Terphenyl-d14	82		30-130

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8270E-SIM
Analytical Date: 12/21/23 08:13
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/17/23 05:21

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 01-04 Batch: WG1864927-1					
Acenaphthene	ND		ug/l	0.10	--
Fluoranthene	ND		ug/l	0.10	--
Naphthalene	0.43		ug/l	0.10	--
Benzo(a)anthracene	ND		ug/l	0.10	--
Benzo(a)pyrene	ND		ug/l	0.10	--
Benzo(b)fluoranthene	ND		ug/l	0.10	--
Benzo(k)fluoranthene	ND		ug/l	0.10	--
Chrysene	ND		ug/l	0.10	--
Acenaphthylene	ND		ug/l	0.10	--
Anthracene	ND		ug/l	0.10	--
Benzo(ghi)perylene	ND		ug/l	0.10	--
Fluorene	ND		ug/l	0.10	--
Phenanthrene	ND		ug/l	0.10	--
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--
Pyrene	ND		ug/l	0.10	--
2-Methylnaphthalene	0.18		ug/l	0.10	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	71		30-130
2-Fluorobiphenyl	75		30-130
4-Terphenyl-d14	79		30-130

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8270E-SIM
Analytical Date: 12/28/23 12:28
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 12/27/23 17:25

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 04 Batch: WG1868738-1					
Acenaphthene	ND		ug/l	0.10	--
Fluoranthene	ND		ug/l	0.10	--
Naphthalene	0.12		ug/l	0.10	--
Benzo(a)anthracene	ND		ug/l	0.10	--
Benzo(a)pyrene	ND		ug/l	0.10	--
Benzo(b)fluoranthene	ND		ug/l	0.10	--
Benzo(k)fluoranthene	ND		ug/l	0.10	--
Chrysene	ND		ug/l	0.10	--
Acenaphthylene	ND		ug/l	0.10	--
Anthracene	ND		ug/l	0.10	--
Benzo(ghi)perylene	ND		ug/l	0.10	--
Fluorene	ND		ug/l	0.10	--
Phenanthrene	ND		ug/l	0.10	--
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--
Pyrene	ND		ug/l	0.10	--
2-Methylnaphthalene	ND		ug/l	0.10	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	77		30-130
2-Fluorobiphenyl	79		30-130
4-Terphenyl-d14	76		30-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1864927-2 WG1864927-3								
Acenaphthene	61		58		40-140	5		20
Fluoranthene	63		63		40-140	0		20
Naphthalene	57		55		40-140	4		20
Benzo(a)anthracene	65		60		40-140	8		20
Benzo(a)pyrene	64		61		40-140	5		20
Benzo(b)fluoranthene	68		61		40-140	11		20
Benzo(k)fluoranthene	64		67		40-140	5		20
Chrysene	60		59		40-140	2		20
Acenaphthylene	62		59		40-140	5		20
Anthracene	62		59		40-140	5		20
Benzo(ghi)perylene	66		63		40-140	5		20
Fluorene	64		61		40-140	5		20
Phenanthrene	60		58		40-140	3		20
Dibenzo(a,h)anthracene	69		66		40-140	4		20
Indeno(1,2,3-cd)pyrene	71		67		40-140	6		20
Pyrene	64		63		40-140	2		20
2-Methylnaphthalene	60		58		40-140	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1864927-2 WG1864927-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	60		59		30-130
2-Fluorobiphenyl	61		59		30-130
4-Terphenyl-d14	61		59		30-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 04 Batch: WG1868738-2 WG1868738-3								
Acenaphthene	76		81		40-140	6		20
Fluoranthene	73		80		40-140	9		20
Naphthalene	73		79		40-140	8		20
Benzo(a)anthracene	86		94		40-140	9		20
Benzo(a)pyrene	73		79		40-140	8		20
Benzo(b)fluoranthene	78		86		40-140	10		20
Benzo(k)fluoranthene	73		77		40-140	5		20
Chrysene	78		86		40-140	10		20
Acenaphthylene	77		82		40-140	6		20
Anthracene	77		84		40-140	9		20
Benzo(ghi)perylene	77		84		40-140	9		20
Fluorene	78		84		40-140	7		20
Phenanthrene	76		83		40-140	9		20
Dibenzo(a,h)anthracene	74		81		40-140	9		20
Indeno(1,2,3-cd)pyrene	74		80		40-140	8		20
Pyrene	70		76		40-140	8		20
2-Methylnaphthalene	74		79		40-140	7		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 04 Batch: WG1868738-2 WG1868738-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	78		87		30-130
2-Fluorobiphenyl	78		85		30-130
4-Terphenyl-d14	74		83		30-130

METALS

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-01 Date Collected: 12/12/23 16:00

Client ID: MW-1A Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Barium, Total	0.116		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Cadmium, Total	ND		mg/l	0.0040	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Calcium, Total	4.31		mg/l	0.100	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Chromium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Copper, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Iron, Total	ND		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Lead, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Manganese, Total	0.125		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Mercury, Total	ND		mg/l	0.0002	--	1	12/21/23 10:34	12/21/23 20:56	EPA 7470A	97,7470A	GMG
Selenium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Silver, Total	ND		mg/l	0.0070	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Sodium, Total	27.1		mg/l	2.00	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC
Zinc, Total	ND		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:41	EPA 3005A	97,6010D	DMC

Project Name: NEXTGRID-CULIG **Lab Number:** L2373630

Project Number: K11273 **Report Date:** 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-02 Date Collected: 12/12/23 14:55

Client ID: MW-2 Date Received: 12/13/23

Sample Location: FREEMAN'S WAY, BREWSTER, MA Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Barium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Cadmium, Total	ND		mg/l	0.0040	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Calcium, Total	7.25		mg/l	0.100	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Chromium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Copper, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Iron, Total	2.31		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Lead, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Manganese, Total	0.0954		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Mercury, Total	ND		mg/l	0.0002	--	1	12/21/23 10:34	12/21/23 20:59	EPA 7470A	97,7470A	GMG
Selenium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Silver, Total	ND		mg/l	0.0070	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Sodium, Total	15.1		mg/l	2.00	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC
Zinc, Total	ND		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:45	EPA 3005A	97,6010D	DMC

Project Name: NEXTGRID-CULIG
Lab Number: L2373630
Project Number: K11273
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-03
Client ID: MW-3
Sample Location: FREEMAN'S WAY, BREWSTER, MA
Date Collected: 12/12/23 12:35
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Barium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Cadmium, Total	ND		mg/l	0.0040	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Calcium, Total	3.09		mg/l	0.100	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Chromium, Total	0.0600		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Copper, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Iron, Total	0.514		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Lead, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Manganese, Total	0.0156		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Mercury, Total	ND		mg/l	0.0002	--	1	12/21/23 10:34	12/21/23 21:03	EPA 7470A	97,7470A	GMG
Selenium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Silver, Total	ND		mg/l	0.0070	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Sodium, Total	28.1		mg/l	2.00	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC
Zinc, Total	ND		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:50	EPA 3005A	97,6010D	DMC

Project Name: NEXTGRID-CULIG
Lab Number: L2373630
Project Number: K11273
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-04
Client ID: MW-4
Sample Location: FREEMAN'S WAY, BREWSTER, MA
Date Collected: 12/12/23 10:35
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Barium, Total	0.0318		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Cadmium, Total	ND		mg/l	0.0040	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Calcium, Total	19.3		mg/l	0.100	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Chromium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Copper, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Iron, Total	1.63		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Lead, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Manganese, Total	1.00		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Mercury, Total	ND		mg/l	0.0002	--	1	12/21/23 10:34	12/21/23 21:06	EPA 7470A	97,7470A	GMG
Selenium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Silver, Total	ND		mg/l	0.0070	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Sodium, Total	23.5		mg/l	2.00	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC
Zinc, Total	ND		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:54	EPA 3005A	97,6010D	DMC

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1866470-1										
Arsenic, Total	ND		mg/l	0.0050	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Barium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Cadmium, Total	ND		mg/l	0.0040	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Calcium, Total	ND		mg/l	0.100	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Chromium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Copper, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Iron, Total	ND		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Lead, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Manganese, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Selenium, Total	ND		mg/l	0.0100	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Silver, Total	ND		mg/l	0.0070	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Sodium, Total	ND		mg/l	2.00	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC
Zinc, Total	ND		mg/l	0.0500	--	1	12/21/23 11:37	12/21/23 16:27	97,6010D	DMC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1866472-1										
Mercury, Total	ND		mg/l	0.0002	--	1	12/21/23 10:34	12/21/23 20:46	97,7470A	GMG

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1866470-2 WG1866470-3								
Arsenic, Total	107		103		80-120	4		20
Barium, Total	104		102		80-120	2		20
Cadmium, Total	101		99		80-120	2		20
Calcium, Total	107		106		80-120	1		20
Chromium, Total	107		105		80-120	2		20
Copper, Total	100		98		80-120	2		20
Iron, Total	106		105		80-120	1		20
Lead, Total	107		105		80-120	2		20
Manganese, Total	103		102		80-120	1		20
Selenium, Total	103		101		80-120	2		20
Silver, Total	112		108		80-120	4		20
Sodium, Total	111		110		80-120	1		20
Zinc, Total	101		99		80-120	2		20
MCP Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1866472-2 WG1866472-3								
Mercury, Total	104		104		80-120	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-01
Client ID: MW-1A
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 16:00
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	12/21/23 14:50	12/21/23 17:49	97,9014	JER
General Chemistry - Westborough Lab										
Color, Apparent	ND		A.P.C.U.	5.0	--	1	-	12/13/23 21:46	121,2120B	AAS
Alkalinity, Total	5.40		mg CaCO3/L	2.00	NA	1	-	12/22/23 10:40	121,2320B	MKT
Solids, Total Dissolved	42.		mg/l	13	--	1.3	-	12/19/23 04:21	121,2540C	DEW
Chloride	38.		mg/l	1.0	--	1	-	12/27/23 17:41	1,9251	MRM
Nitrogen, Nitrate	3.38		mg/l	0.100	--	1	-	12/14/23 04:20	121,4500NO3-F	KAF
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	12/27/23 17:36	12/28/23 13:24	121,4500NH3-H	JRO
Sulfate	14.		mg/l	10	--	1	12/26/23 15:30	12/26/23 15:30	1,9038	MRW
Chemical Oxygen Demand	ND		mg/l	20	--	1	12/27/23 20:30	12/27/23 23:30	44,410.4	JRG
Total Organic Carbon	1.8		mg/l	0.50	--	1	-	12/20/23 03:03	1,9060A	DEW
Tannin & Lignin	ND		mg/l	0.20	--	1	-	12/20/23 10:52	121,5550B	SMD

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-02
Client ID: MW-2
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 14:55
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	12/21/23 14:50	12/21/23 17:50	97,9014	JER
General Chemistry - Westborough Lab										
Color, Apparent	14		A.P.C.U.	10	--	2	-	12/13/23 21:46	121,2120B	AAS
Alkalinity, Total	34.4		mg CaCO3/L	2.00	NA	1	-	12/22/23 10:40	121,2320B	MKT
Solids, Total Dissolved	36.		mg/l	13	--	1.3	-	12/19/23 04:21	121,2540C	DEW
Chloride	19.		mg/l	1.0	--	1	-	12/27/23 16:55	1,9251	MRM
Nitrogen, Nitrate	0.265		mg/l	0.100	--	1	-	12/14/23 04:21	121,4500NO3-F	KAF
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	12/27/23 17:36	12/28/23 13:25	121,4500NH3-H	JRO
Sulfate	ND		mg/l	10	--	1	12/26/23 15:30	12/26/23 15:30	1,9038	MRW
Chemical Oxygen Demand	ND		mg/l	20	--	1	12/27/23 20:30	12/27/23 23:30	44,410.4	JRG
Total Organic Carbon	ND		mg/l	0.50	--	1	-	12/20/23 03:03	1,9060A	DEW
Tannin & Lignin	ND		mg/l	0.20	--	1	-	12/20/23 10:52	121,5550B	SMD

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-03
Client ID: MW-3
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 12:35
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	12/21/23 14:50	12/21/23 17:51	97,9014	JER
General Chemistry - Westborough Lab										
Color, Apparent	ND		A.P.C.U.	5.0	--	1	-	12/13/23 21:46	121,2120B	AAS
Alkalinity, Total	10.4		mg CaCO3/L	2.00	NA	1	-	12/22/23 10:40	121,2320B	MKT
Solids, Total Dissolved	110		mg/l	13	--	1.3	-	12/19/23 04:21	121,2540C	DEW
Chloride	48.		mg/l	1.0	--	1	-	12/27/23 16:56	1,9251	MRM
Nitrogen, Nitrate	0.136		mg/l	0.100	--	1	-	12/14/23 04:23	121,4500NO3-F	KAF
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	12/27/23 17:36	12/28/23 13:26	121,4500NH3-H	JRO
Sulfate	ND		mg/l	10	--	1	12/26/23 15:30	12/26/23 15:30	1,9038	MRW
Chemical Oxygen Demand	ND		mg/l	20	--	1	12/27/23 20:30	12/27/23 23:30	44,410.4	JRG
Total Organic Carbon	ND		mg/l	0.50	--	1	-	12/20/23 03:03	1,9060A	DEW
Tannin & Lignin	ND		mg/l	0.20	--	1	-	12/20/23 10:52	121,5550B	SMD

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

SAMPLE RESULTS

Lab ID: L2373630-04
Client ID: MW-4
Sample Location: FREEMAN'S WAY, BREWSTER, MA

Date Collected: 12/12/23 10:35
Date Received: 12/13/23
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	12/21/23 14:50	12/21/23 17:54	97,9014	JER
General Chemistry - Westborough Lab										
Color, Apparent	30		A.P.C.U.	5.0	--	1	-	12/13/23 21:46	121,2120B	AAS
Alkalinity, Total	105.		mg CaCO3/L	2.00	NA	1	-	12/22/23 10:40	121,2320B	MKT
Solids, Total Dissolved	140		mg/l	13	--	1.3	-	12/19/23 04:21	121,2540C	DEW
Chloride	25.		mg/l	1.0	--	1	-	12/27/23 16:57	1,9251	MRM
Nitrogen, Nitrate	0.259		mg/l	0.100	--	1	-	12/14/23 04:24	121,4500NO3-F	KAF
Nitrogen, Total Kjeldahl	2.10		mg/l	0.600	--	2	12/27/23 17:36	12/28/23 13:27	121,4500NH3-H	JRO
Sulfate	12.		mg/l	10	--	1	12/26/23 15:30	12/26/23 15:30	1,9038	MRW
Chemical Oxygen Demand	69.		mg/l	20	--	1	12/27/23 20:30	12/27/23 23:31	44,410.4	JRG
Total Organic Carbon	25.		mg/l	2.0	--	4	-	12/20/23 03:03	1,9060A	DEW
Tannin & Lignin	0.75		mg/l	0.20	--	1	-	12/20/23 10:53	121,5550B	SMD

Project Name: NEXTGRID-CULIG
Project Number: K11273
Lab Number: L2373630
Report Date: 12/28/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1863735-1										
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	12/14/23 03:11	121,4500NO3-F	KAF
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1865545-1										
Solids, Total Dissolved	ND		mg/l	10	--	1	-	12/19/23 04:21	121,2540C	DEW
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1866120-1										
Total Organic Carbon	ND		mg/l	0.50	--	1	-	12/20/23 03:03	1,9060A	DEW
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1866227-1										
Tannin & Lignin	ND		mg/l	0.20	--	1	-	12/20/23 10:50	121,5550B	SMD
MCP General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1866928-1										
Cyanide, Total	ND		mg/l	0.005	--	1	12/21/23 14:50	12/21/23 17:42	97,9014	JER
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1867376-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	12/22/23 10:40	121,2320B	MKT
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1868198-1										
Sulfate	ND		mg/l	10	--	1	12/26/23 15:30	12/26/23 15:30	1,9038	MRW
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1868584-1										
Chloride	ND		mg/l	1.0	--	1	-	12/27/23 15:04	1,9251	MRM
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1868602-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	12/27/23 17:36	12/28/23 13:21	121,4500NH3-H	JRO
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1868756-1										
Chemical Oxygen Demand	ND		mg/l	20	--	1	12/27/23 20:30	12/27/23 23:28	44,410.4	JRG

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1863735-2								
Nitrogen, Nitrate	94		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1865545-2								
Solids, Total Dissolved	93		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1866120-2								
Total Organic Carbon	96		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1866227-2								
Tannin & Lignin	91		-		80-120	-		20
MCP General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1866928-2 WG1866928-3								
Cyanide, Total	96		95		80-120	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1867376-2								
Alkalinity, Total	102		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1868198-2								
Sulfate	95		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1868584-2					
Chloride	103	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1868602-2					
Nitrogen, Total Kjeldahl	96	-	78-122	-	
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1868756-2					
Chemical Oxygen Demand	93	-	90-110	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1868198-4 QC Sample: L2373630-01 Client ID: MW-1A												
Sulfate	14	40	53	98		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1868584-4 QC Sample: L2373630-01 Client ID: MW-1A												
Chloride	38	20	55	95		-	-		58-140	-		7
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1868756-4 QC Sample: L2373630-01 Client ID: MW-1A												
Chemical Oxygen Demand	ND	238	250	104		-	-		90-110	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: NEXTGRID-CULIG

Project Number: K11273

Lab Number: L2373630

Report Date: 12/28/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1868198-3 QC Sample: L2373630-01 Client ID: MW-1A						
Sulfate	14	14	mg/l	0		14
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1868584-3 QC Sample: L2373630-01 Client ID: MW-1A						
Chloride	38	39	mg/l	3		7
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1868756-3 QC Sample: L2373630-01 Client ID: MW-1A						
Chemical Oxygen Demand	ND	ND	mg/l	NC		20

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
C	Absent
D	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2373630-01A	Vial HCl preserved	A	NA		2.6	Y	Absent		MCP-8260-21(14)
L2373630-01B	Vial HCl preserved	A	NA		2.6	Y	Absent		MCP-8260-21(14)
L2373630-01C	Vial HCl preserved	A	NA		2.6	Y	Absent		MCP-8260-21(14)
L2373630-01D	Vial H2SO4 preserved	A	NA		2.6	Y	Absent		TOC-9060(28)
L2373630-01E	Vial H2SO4 preserved	A	NA		2.6	Y	Absent		TOC-9060(28)
L2373630-01F	Vial H2SO4 preserved	A	NA		2.6	Y	Absent		TOC-9060(28)
L2373630-01G	Plastic 250ml unpreserved/No Headspace	A	NA		2.6	Y	Absent		ALK-T-2320(14)
L2373630-01H	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		HOLD-METAL-DISSOLVED(180)
L2373630-01I	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		MCP-FE-6010T-10(180),MCP-CR-6010T-10(180),MCP-MN-6010T-10(180),MCP-CA-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-NA-6010T-10(180),MCP-CD-6010T-10(180),MCP-ZN-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L2373630-01J	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	2.6	Y	Absent		SUB-SULFIDE()
L2373630-01K	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	2.6	Y	Absent		SUB-SULFIDE()
L2373630-01L	Plastic 250ml NaOH preserved	A	>12	>12	2.6	Y	Absent		MCP-TCN9014-10(14)
L2373630-01M	Plastic 250ml H2SO4 preserved	A	<2	<2	2.6	Y	Absent		TKN-4500(28),COD-410(28)
L2373630-01N	Plastic 500ml unpreserved	A	7	7	2.6	Y	Absent		SO4-9038(28),CL-9251(28),NO3-4500(2),T&L(),TDS-2540(7)
L2373630-01O	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		MCP-PAHSIM-21-LVI(7)
L2373630-01P	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		MCP-PAHSIM-21-LVI(7)
L2373630-01Q	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		COLOR-A-2120(2)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2373630-02A	Vial HCl preserved	D	NA		3.7	Y	Absent		MCP-8260-21(14)
L2373630-02B	Vial HCl preserved	D	NA		3.7	Y	Absent		MCP-8260-21(14)
L2373630-02C	Vial HCl preserved	D	NA		3.7	Y	Absent		MCP-8260-21(14)
L2373630-02D	Vial H2SO4 preserved	D	NA		3.7	Y	Absent		TOC-9060(28)
L2373630-02E	Vial H2SO4 preserved	D	NA		3.7	Y	Absent		TOC-9060(28)
L2373630-02F	Vial H2SO4 preserved	D	NA		3.7	Y	Absent		TOC-9060(28)
L2373630-02G	Plastic 250ml unpreserved/No Headspace	D	NA		3.7	Y	Absent		ALK-T-2320(14)
L2373630-02H	Plastic 250ml HNO3 preserved	D	<2	<2	3.7	Y	Absent		HOLD-METAL-DISSOLVED(180)
L2373630-02I	Plastic 250ml HNO3 preserved	D	<2	<2	3.7	Y	Absent		MCP-CR-6010T-10(180),MCP-FE-6010T-10(180),MCP-MN-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-CA-6010T-10(180),MCP-CD-6010T-10(180),MCP-NA-6010T-10(180),MCP-AG-6010T-10(180),MCP-ZN-6010T-10(180),MCP-CU-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L2373630-02J	Plastic 250ml Zn Acetate/NaOH preserved	D	>9	>9	3.7	Y	Absent		SUB-SULFIDE()
L2373630-02K	Plastic 250ml Zn Acetate/NaOH preserved	D	>9	>9	3.7	Y	Absent		SUB-SULFIDE()
L2373630-02L	Plastic 250ml NaOH preserved	D	>12	>12	3.7	Y	Absent		MCP-TCN9014-10(14)
L2373630-02M	Plastic 250ml H2SO4 preserved	D	<2	<2	3.7	Y	Absent		TKN-4500(28),COD-410(28)
L2373630-02N	Plastic 500ml unpreserved	D	7	7	3.7	Y	Absent		CL-9251(28),SO4-9038(28),NO3-4500(2),TDS-2540(7),T&L()
L2373630-02O	Amber 250ml unpreserved	D	7	7	3.7	Y	Absent		MCP-PAHSIM-21-LVI(7)
L2373630-02P	Amber 250ml unpreserved	D	7	7	3.7	Y	Absent		MCP-PAHSIM-21-LVI(7)
L2373630-02Q	Amber 500ml unpreserved	D	7	7	3.7	Y	Absent		COLOR-A-2120(2)
L2373630-03A	Vial HCl preserved	C	NA		4.0	Y	Absent		MCP-8260-21(14)
L2373630-03B	Vial HCl preserved	C	NA		4.0	Y	Absent		MCP-8260-21(14)
L2373630-03C	Vial HCl preserved	C	NA		4.0	Y	Absent		MCP-8260-21(14)
L2373630-03D	Vial H2SO4 preserved	C	NA		4.0	Y	Absent		TOC-9060(28)
L2373630-03E	Vial H2SO4 preserved	C	NA		4.0	Y	Absent		TOC-9060(28)
L2373630-03F	Vial H2SO4 preserved	C	NA		4.0	Y	Absent		TOC-9060(28)
L2373630-03G	Plastic 250ml unpreserved/No Headspace	C	NA		4.0	Y	Absent		ALK-T-2320(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2373630-03H	Plastic 250ml HNO3 preserved	C	<2	<2	4.0	Y	Absent		HOLD-METAL-DISSOLVED(180)
L2373630-03I	Plastic 250ml HNO3 preserved	C	<2	<2	4.0	Y	Absent		MCP-FE-6010T-10(180),MCP-CR-6010T-10(180),MCP-MN-6010T-10(180),MCP-AS-6010T-10(180),MCP-7470T-10(28),MCP-CA-6010T-10(180),MCP-CD-6010T-10(180),MCP-NA-6010T-10(180),MCP-AG-6010T-10(180),MCP-ZN-6010T-10(180),MCP-CU-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L2373630-03J	Plastic 250ml Zn Acetate/NaOH preserved	C	>9	>9	4.0	Y	Absent		SUB-SULFIDE()
L2373630-03K	Plastic 250ml Zn Acetate/NaOH preserved	C	>9	>9	4.0	Y	Absent		SUB-SULFIDE()
L2373630-03L	Plastic 250ml NaOH preserved	C	>12	>12	4.0	Y	Absent		MCP-TCN9014-10(14)
L2373630-03M	Plastic 250ml H2SO4 preserved	C	<2	<2	4.0	Y	Absent		TKN-4500(28),COD-410(28)
L2373630-03N	Plastic 500ml unpreserved	C	7	7	4.0	Y	Absent		CL-9251(28),SO4-9038(28),NO3-4500(2),TDS-2540(7),T&L()
L2373630-03O	Amber 250ml unpreserved	C	7	7	4.0	Y	Absent		MCP-PAHSIM-21-LVI(7)
L2373630-03P	Amber 250ml unpreserved	C	7	7	4.0	Y	Absent		MCP-PAHSIM-21-LVI(7)
L2373630-03Q	Amber 500ml unpreserved	C	7	7	4.0	Y	Absent		COLOR-A-2120(2)
L2373630-04A	Vial HCl preserved	D	NA		3.7	Y	Absent		MCP-8260-21(14)
L2373630-04B	Vial HCl preserved	D	NA		3.7	Y	Absent		MCP-8260-21(14)
L2373630-04C	Vial HCl preserved	D	NA		3.7	Y	Absent		MCP-8260-21(14)
L2373630-04D	Vial H2SO4 preserved	D	NA		3.7	Y	Absent		TOC-9060(28)
L2373630-04E	Vial H2SO4 preserved	D	NA		3.7	Y	Absent		TOC-9060(28)
L2373630-04F	Vial H2SO4 preserved	D	NA		3.7	Y	Absent		TOC-9060(28)
L2373630-04G	Plastic 250ml unpreserved/No Headspace	D	NA		3.7	Y	Absent		ALK-T-2320(14)
L2373630-04H	Plastic 250ml HNO3 preserved	D	<2	<2	3.7	Y	Absent		HOLD-METAL-DISSOLVED(180)
L2373630-04I	Plastic 250ml HNO3 preserved	D	<2	<2	3.7	Y	Absent		MCP-CR-6010T-10(180),MCP-FE-6010T-10(180),MCP-MN-6010T-10(180),MCP-AS-6010T-10(180),MCP-7470T-10(28),MCP-CA-6010T-10(180),MCP-CD-6010T-10(180),MCP-NA-6010T-10(180),MCP-CU-6010T-10(180),MCP-ZN-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L2373630-04J	Plastic 250ml Zn Acetate/NaOH preserved	D	>9	>9	3.7	Y	Absent		SUB-SULFIDE()
L2373630-04K	Plastic 250ml Zn Acetate/NaOH preserved	D	>9	>9	3.7	Y	Absent		SUB-SULFIDE()

*Values in parentheses indicate holding time in days

Project Name: NEXTGRID-CULIG
Project Number: K11273

Lab Number: L2373630
Report Date: 12/28/23

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2373630-04L	Plastic 250ml NaOH preserved	D	>12	>12	3.7	Y	Absent		MCP-TCN9014-10(14)
L2373630-04M	Plastic 250ml H2SO4 preserved	D	<2	<2	3.7	Y	Absent		TKN-4500(28),COD-410(28)
L2373630-04N	Plastic 500ml unpreserved	D	7	7	3.7	Y	Absent		CL-9251(28),SO4-9038(28),NO3-4500(2),TDS-2540(7),T&L()
L2373630-04O	Amber 250ml unpreserved	D	7	7	3.7	Y	Absent		MCP-PAHSIM-21-LVI(7)
L2373630-04P	Amber 250ml unpreserved	D	7	7	3.7	Y	Absent		MCP-PAHSIM-21-LVI(7)
L2373630-04Q	Amber 500ml unpreserved	D	7	7	3.7	Y	Absent		COLOR-A-2120(2)

*Values in parentheses indicate holding time in days

Project Name:	NEXTGRID-CULIG	**Lab Number:**	L2373630
Project Number:	K11273	**Report Date:**	12/28/23

GLOSSARY

Acronyms

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

Report Format: Data Usability Report

Project Name:	NEXTGRID-CULIG	**Lab Number:**	L2373630
Project Number:	K11273	**Report Date:**	12/28/23

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.

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

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

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

Report Format: Data Usability Report

Project Name:	NEXTGRID-CULIG	**Lab Number:**	L2373630
Project Number:	K11273	**Report Date:**	12/28/23

Data Qualifiers

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.

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

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

Project Name:	NEXTGRID-CULIG	**Lab Number:**	L2373630
Project Number:	K11273	**Report Date:**	12/28/23

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

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

141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

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

Mansfield Facility
SM 2540D: TSS.
EPA 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 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).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

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

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/13/23

ALPHA Job #: L2373630

Project Information

Project Name: NextGrid-Culig

Project Location: Freeman's Way, Brewster, MA

Project #: K11273

Project Manager: John Tadema-Wielandt

ALPHA Quote #:

Client Information

Client: Bennett Environmental Associates

Address: 1573 Main Street

Brewster, MA 02631

Phone: (508) 896-1706

Fax: (508) 896-5109

Email: jtadema-wielandt@NSUWater.com

☒ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #: 11273

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
MA MCP	GW-1

Other Project Specific Requirements/Comments/Detection Limits:

Lab to hold "Dissolved Metal" samples pending detections in "Total Metal" samples.

SAMPLE HANDLING
Filtration
☒ Done
☒ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Sulfide	Total Landfill Metals	TDS, Chloride, Sulfate, Color	Tannin + Lignin	PAHs	VOCs (8260B w/ Oxygenates)	TOC	COD, TKN, Nitrate	Alkalinity	Cyanide	Dissolved Landfill Metals		Sample Specific Comments	TOTAL # BOTTLES
73630-01	MW-1A	12/12/23	4:00	GW	JCG	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐		17
02	MW-2	12/12/23	2:55	GW	JCG	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐		17
03	MW-3	12/12/23	12:35	GW	JCG	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐		17
04	MW-4	12/12/23	10:35	GW	JCG	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐		17
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		68
					Container Type	P	P	P	P	A	V	V	P	P	P	P	-		
					Preservative	K	C	A	A	A	B	D	D	A	E	C	-		

Relinquished By:	Date/Time	Received By:	Date/Time
Joel Scott	12/12/23 4:10	Fridge	12/12/23 4:10
Fridge	12/13/23 15:05	W. Yamell AAL	12/13/23 15:03
W. Yamell AAL	12/13/23 18:16	[signature]	12/13 1816

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-01(I-NJ) (rev. 29-APR-09)

Method Blank Summary
Form 4
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2373630
Project Name	: NEXTGRID-CULIG	**Project Number**	: K11273
Lab Sample ID	: WG1867254-5	**Lab File ID**	: VQ231222A05
Instrument ID	: QUIMBY		
Matrix	: WATER	**Analysis Date**	: 12/22/23 04:24

Client Sample No.	Lab Sample ID	Analysis Date
WG1867254-3LCS	WG1867254-3	12/22/23 02:53
WG1867254-4LCSD	WG1867254-4	12/22/23 03:16
MW-1A	L2373630-01	12/22/23 07:48
MW-2	L2373630-02	12/22/23 08:11
MW-3	L2373630-03	12/22/23 08:33
MW-4	L2373630-04	12/22/23 08:56

Calibration Verification Summary
Form 7
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2373630		
Project Name	: NEXTGRID-CULIG	**Project Number**	: K11273		
Instrument ID	: QUIMBY	**Calibration Date**	: 12/22/23 02:53		
Lab File ID	: VQ231222A01	**Init. Calib. Date(s)**	: 12/18/23	12/18/23	
Sample No	: WG1867254-2	**Init. Calib. Times**	: 09:06	13:42	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	109	0
Dichlorodifluoromethane	0.261	0.288	-	-10.3	20	121	0
Chloromethane	0.26	0.336	-	-29.2*	20	138	0
Vinyl chloride	0.286	0.314	-	-9.8	20	125	0
Bromomethane	10	9.723	-	2.8	20	104	0
Chloroethane	0.175	0.202	-	-15.4	20	121	0
Trichlorofluoromethane	0.32	0.37	-	-15.6	20	123	0
Ethyl ether	0.105	0.099	-	5.7	20	102	0
1,1-Dichloroethene	0.193	0.206	-	-6.7	20	118	0
Carbon disulfide	0.518	0.63	-	-21.6*	20	134	0
Freon-113	0.208	0.231	-	-11.1	20	118	0
Iodomethane	10	8.479	-	15.2	20	110	0
Acrolein	0.035	0.03	-	14.3	20	94	0
Methylene chloride	0.228	0.243	-	-6.6	20	118	-.01
Acetone	10	9.978	-	0.2	20	105	-.01
trans-1,2-Dichloroethene	0.207	0.229	-	-10.6	20	122	0
Methyl acetate	0.13	0.114	-	12.3	20	93	0
Methyl tert-butyl ether	0.502	0.409	-	18.5	20	94	0
tert-Butyl alcohol	50	33.923	-	32.2*	20	86	-.01
Diisopropyl ether	0.645	0.722	-	-11.9	20	134	0
1,1-Dichloroethane	0.393	0.469	-	-19.3	20	132	0
Halothane	0.156	0.18	-	-15.4	20	126	0
Acrylonitrile	0.054	0.053	-	1.9	20	116	0
Ethyl tert-butyl ether	0.565	0.521	-	7.8	20	117	0
Vinyl acetate	0.386	0.36	-	6.7	20	141	0
cis-1,2-Dichloroethene	0.209	0.234	-	-12	20	126	0
2,2-Dichloropropane	0.29	0.358	-	-23.4*	20	143	-.01
Bromochloromethane	0.108	0.117	-	-8.3	20	118	0
Cyclohexane	0.368	0.399	-	-8.4	20	131	0
Chloroform	0.355	0.41	-	-15.5	20	129	0
Ethyl acetate	0.145	0.119	-	17.9	20	108	0
Carbon tetrachloride	0.261	0.306	-	-17.2	20	125	0
Tetrahydrofuran	0.049	0.046	-	6.1	20	110	0
Dibromofluoromethane	0.265	0.279	-	-5.3	20	114	0
1,1,1-Trichloroethane	0.301	0.356	-	-18.3	20	128	-.01
2-Butanone	0.065	0.048	-	26.2*	20	98	0
1,1-Dichloropropene	0.235	0.257	-	-9.4	20	127	0
Benzene	0.761	0.856	-	-12.5	20	126	0
tert-Amyl methyl ether	0.426	0.376	-	11.7	20	114	0
1,2-Dichloroethane-d4	0.306	0.33	-	-7.8	20	113	0
1,2-Dichloroethane	0.273	0.301	-	-10.3	20	124	0
Methyl cyclohexane	0.308	0.307	-	0.3	20	126	0
Trichloroethene	0.206	0.211	-	-2.4	20	121	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2373630		
Project Name	: NEXTGRID-CULIG	**Project Number**	: K11273		
Instrument ID	: QUIMBY	**Calibration Date**	: 12/22/23 02:53		
Lab File ID	: VQ231222A01	**Init. Calib. Date(s)**	: 12/18/23	12/18/23	
Sample No	: WG1867254-2	**Init. Calib. Times**	: 09:06	13:42	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.115	0.119	-	-3.5	20	116	0
1,2-Dichloropropane	0.209	0.213	-	-1.9	20	118	0
2-Chloroethyl vinyl ether	10	7.857	-	21.4*	20	105	0
Bromodichloromethane	0.27	0.281*	-	-4.1	20	120	0
1,4-Dioxane	0.00106	0.00109*	-	-2.8	20	113	-.01
cis-1,3-Dichloropropene	0.277	0.276*	-	0.4	20	117	0
Chlorobenzene-d5	1	1	-	0	20	108	0
Toluene-d8	1.236	1.256	-	-1.6	20	107	0
Toluene	0.637	0.706	-	-10.8	20	125	0
4-Methyl-2-pentanone	0.069	0.046	-	33.3*	20	96	0
Tetrachloroethene	0.263	0.293	-	-11.4	20	124	0
trans-1,3-Dichloropropene	0.318	0.303	-	4.7	20	114	0
Ethyl methacrylate	0.22	0.163	-	25.9*	20	101	0
1,1,2-Trichloroethane	0.178	0.162*	-	9	20	111	0
Chlorodibromomethane	0.266	0.23	-	13.5	20	107	0
1,3-Dichloropropane	0.347	0.336	-	3.2	20	113	0
1,2-Dibromoethane	0.2	0.181*	-	9.5	20	109	0
2-Hexanone	0.118	0.084	-	28.8*	20	99	0
Chlorobenzene	0.735	0.766	-	-4.2	20	120	0
Ethylbenzene	1.169	1.302	-	-11.4	20	127	0
1,1,1,2-Tetrachloroethane	0.275	0.255	-	7.3	20	114	0
p/m Xylene	0.468	0.525	-	-12.2	20	123	0
o Xylene	0.454	0.505	-	-11.2	20	125	0
Styrene	0.778	0.855	-	-9.9	20	124	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	109	0
Bromoform	0.299	0.229	-	23.4*	20	102	0
Isopropylbenzene	1.956	2.062	-	-5.4	20	125	0
4-Bromofluorobenzene	0.752	0.742	-	1.3	20	109	0
Bromobenzene	0.576	0.553	-	4	20	121	0
n-Propylbenzene	2.348	2.579	-	-9.8	20	129	0
1,4-Dichlorobutane	0.716	0.612	-	14.5	20	114	0
1,1,2,2-Tetrachloroethane	10	8.634	-	13.7	20	112	0
4-Ethyltoluene	2.013	2.196	-	-9.1	20	127	0
2-Chlorotoluene	1.754	1.906	-	-8.7	20	129	0
1,3,5-Trimethylbenzene	1.758	1.913	-	-8.8	20	126	0
1,2,3-Trichloropropane	10	8.613	-	13.9	20	109	0
trans-1,4-Dichloro-2-buten	10	8.331	-	16.7	20	110	0
4-Chlorotoluene	1.579	1.692	-	-7.2	20	131	0
tert-Butylbenzene	1.455	1.529	-	-5.1	20	122	0
1,2,4-Trimethylbenzene	1.723	1.871	-	-8.6	20	126	0
sec-Butylbenzene	2.049	2.309	-	-12.7	20	129	0
p-Isopropyltoluene	1.797	1.932	-	-7.5	20	126	0
1,3-Dichlorobenzene	1.169	1.156	-	1.1	20	123	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2373630		
Project Name	: NEXTGRID-CULIG	**Project Number**	: K11273		
Instrument ID	: QUIMBY	**Calibration Date**	: 12/22/23 02:53		
Lab File ID	: VQ231222A01	**Init. Calib. Date(s)**	: 12/18/23	12/18/23	
Sample No	: WG1867254-2	**Init. Calib. Times**	: 09:06	13:42	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.206	1.162	-	3.6	20	124	0
p-Diethylbenzene	1.076	1.119	-	-4	20	126	0
n-Butylbenzene	1.488	1.712	-	-15.1	20	135	0
1,2-Dichlorobenzene	10	9.711	-	2.9	20	118	0
1,2,4,5-Tetramethylbenzene	1.729	1.652	-	4.5	20	124	0
1,2-Dibromo-3-chloropropan	10	7.308	-	26.9*	20	97	0
1,3,5-Trichlorobenzene	0.784	0.785	-	-0.1	20	131	0
Hexachlorobutadiene	0.224	0.241	-	-7.6	20	142	0
1,2,4-Trichlorobenzene	0.693	0.608	-	12.3	20	122	0
Naphthalene	1.562	1.139	-	27.1*	20	100	0
1,2,3-Trichlorobenzene	0.664	0.583	-	12.2	20	118	0

* Value outside of QC limits.

PHOENIX
Environmental Laboratories, Inc.

Friday, December 15, 2023

Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Project ID: L2373630
SDG ID: GCP67358
Sample ID#s: CP67358 - CP67361

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

December 15, 2023

SDG I.D.: GCP67358

Project ID: L2373630

Client Id	Lab Id	Matrix
MW-1A	CP67358	WATER
MW-2	CP67359	WATER
MW-3	CP67360	WATER
MW-4	CP67361	WATER

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 15, 2023

FOR: Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		12/12/23	16:00
Location Code:	ALPHA	Received by:	SR1	12/14/23	11:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCP67358
Phoenix ID: CP67358

Project ID: L2373630
Client ID: MW-1A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfide	< 0.05	0.05	mg/L	1	12/14/23	GD	SM4500S-D-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
December 15, 2023
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 15, 2023

FOR: Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		12/12/23	14:55
Location Code:	ALPHA	Received by:	SR1	12/14/23	11:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCP67358
Phoenix ID: CP67359

Project ID: L2373630
Client ID: MW-2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfide	< 0.05	0.05	mg/L	1	12/14/23	GD	SM4500S-D-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
December 15, 2023
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 15, 2023

FOR: Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		12/12/23	12:35
Location Code:	ALPHA	Received by:	SR1	12/14/23	11:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCP67358
Phoenix ID: CP67360

Project ID: L2373630
Client ID: MW-3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfide	< 0.05	0.05	mg/L	1	12/14/23	GD	SM4500S-D-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
December 15, 2023
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 15, 2023

FOR: Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		12/12/23	10:35
Location Code:	ALPHA	Received by:	SR1	12/14/23	11:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCP67358
Phoenix ID: CP67361

Project ID: L2373630
Client ID: MW-4

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfide	< 0.05	0.05	mg/L	1	12/14/23	GD	SM4500S-D-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
December 15, 2023
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

QA/QC Report

December 15, 2023

QA/QC Data

SDG I.D.: GCP67358

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 710440 (mg/L), QC Sample No: CP63613 (CP67358, CP67359, CP67360, CP67361)													
Sulfide	BRL	0.05	<0.05	<0.05	NC	107			105			90 - 110	20

Comment:

Additional: LCS acceptance range is 90-110% MS acceptance range 75-125%.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
December 15, 2023

Friday, December 15, 2023

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCP67358 - ALPHA

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

December 15, 2023 SDG I.D.: GCP67358

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

WC Ice 1.0

Subcontract Chain of Custody

Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040

Alpha Job Number
L2373630

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 508.439.5157 Email: dsanford@alphalab.com	Project Location: MA Project Manager: Dave Sanford **Turnaround & Deliverables Information** Due Date: Deliverables:	State/Federal Program: Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2373630

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
67358	MW-1A	12-12-23 16:00	WATER	Sulfide	
67359	MW-2	12-12-23 14:55	WATER	Sulfide	
67360	MW-3	12-12-23 12:35	WATER	Sulfide	
67361	MW-4	12-12-23 10:35	WATER	Sulfide	

Rcvd 2x 250 mL plastic w/ NAOH + ZnAce per sample

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		12/14/23 9:23		12/14/23 924
		12/14/23 1103		12/14/23 1150
Form No: AL_subcoc				

Sample Results Comparison with Reportable Concentrations RCGW-1 Criteria.

CLIENT SAMPLE ID				MW-1A		MW-2		MW-3		MW-4	
SAMPLING DATE				12-DEC-23		12-DEC-23		12-DEC-23		12-DEC-23	
LAB SAMPLE ID				L2373630-01		L2373630-02		L2373630-03		L2373630-04	
	CAS Number	RCGW-1-1	Units		Qual		Qual		Qual		Qual
General Chemistry											
Color, Apparent	COLOR		A.P.C.U.	5	U	14		5	U	30	
Alkalinity, Total	471-34-1		mg CaCO3/l	5.4		34.4		10.4		105	
Solids, Total Dissolved	---		mg/l	42		36		110		140	
MCP General Chemistry											
Cyanide, Total	57-12-5	0.03	mg/l	0.005	U	0.005	U	0.005	U	0.005	U
General Chemistry											
Chloride	16887-00-6		mg/l	38		19		48		25	
Nitrogen, Nitrate	14797-55-8		mg/l	3.38		0.265		0.136		0.259	
Nitrogen, Total Kjeldahl	---		mg/l	0.3	U	0.3	U	0.3	U	2.1	
Sulfate	14808-79-8		mg/l	14		10	U	10	U	12	
Chemical Oxygen Demand	COD		mg/l	20	U	20	U	20	U	69	
Total Organic Carbon	7440-44-0		mg/l	1.8		0.5	U	0.5	U	25	
Tannin & Lignin	---		mg/l	0.2	U	0.2	U	0.2	U	0.75	
MCP Total Metals											
Arsenic, Total	7440-38-2	0.01	mg/l	0.005	U	0.005	U	0.005	U	0.005	U
Barium, Total	7440-39-3	2	mg/l	0.116		0.01	U	0.01	U	0.0318	
Cadmium, Total	7440-43-9	0.004	mg/l	0.004	U	0.004	U	0.004	U	0.004	U
Calcium, Total	7440-70-2		mg/l	4.31		7.25		3.09		19.3	
Chromium, Total	7440-47-3	0.1	mg/l	0.01	U	0.01	U	0.06		0.01	U
Copper, Total	7440-50-8	10	mg/l	0.01	U	0.01	U	0.01	U	0.01	U
Iron, Total	7439-89-6		mg/l	0.05	U	2.31		0.514		1.63	
Lead, Total	7439-92-1	0.01	mg/l	0.01	U	0.01	U	0.01	U	0.01	U
Manganese, Total	7439-96-5		mg/l	0.125		0.0954		0.0156		1	
Mercury, Total	7439-97-6	0.002	mg/l	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Selenium, Total	7782-49-2	0.05	mg/l	0.01	U	0.01	U	0.01	U	0.01	U
Silver, Total	7440-22-4	0.007	mg/l	0.007	U	0.007	U	0.007	U	0.007	U
Sodium, Total	7440-23-5		mg/l	27.1		15.1		28.1		23.5	
Zinc, Total	7440-66-6	0.9	mg/l	0.05	U	0.05	U	0.05	U	0.05	U
MCP Volatile Organics											
1,1,1,2-Tetrachloroethane	630-20-6	0.005	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,1,1-Trichloroethane	71-55-6	0.2	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,1,2,2-Tetrachloroethane	79-34-5	0.002	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,1,2-Trichloroethane	79-00-5	0.005	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,1-Dichloroethane	75-34-3	0.07	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,1-Dichloroethene	75-35-4	0.007	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,1-Dichloropropene	563-58-6		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,2,3-Trichlorobenzene	87-61-6		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,2,3-Trichloropropane	96-18-4	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,2,4-Trichlorobenzene	120-82-1	0.07	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,2,4-Trimethylbenzene	95-63-6	10	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,2-Dibromo-3-chloropropane	96-12-8	0.1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,2-Dibromoethane	106-93-4	0.00002	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,2-Dichlorobenzene	95-50-1	0.6	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,2-Dichloroethane	107-06-2	0.005	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,2-Dichloroethene, Total	540-59-0		mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,2-Dichloropropane	78-87-5	0.003	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,3,5-Trimethylbenzene	108-67-8	0.1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,3-Dichlorobenzene	541-73-1	0.1	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,3-Dichloropropane	142-28-9	5	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
1,3-Dichloropropene, Total	542-75-6	0.0004	mg/l	0.0004	U	0.0004	U	0.0004	U	0.0004	U
1,4-Dichlorobenzene	106-46-7	0.005	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
1,4-Dioxane	123-91-1	0.0003	mg/l	0.25	U	0.25	U	0.25	U	0.25	U
2,2-Dichloropropane	594-20-7		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
2-Hexanone	591-78-6	1	mg/l	0.005	U	0.005	U	0.005	U	0.005	U
Acetone	67-64-1	6.3	mg/l	0.005	U	0.005	U	0.005	U	0.005	U
Benzene	71-43-2	0.005	mg/l	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Bromobenzene	108-86-1	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Bromochloromethane	74-97-5		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Bromodichloromethane	75-27-4	0.003	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
Bromoform	75-25-2	0.004	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Bromomethane	74-83-9	0.007	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Carbon disulfide	75-15-0	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Carbon tetrachloride	56-23-5	0.002	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
Chlorobenzene	108-90-7	0.1	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
Chloroethane	75-00-3	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Chloroform	67-66-3	0.05	mg/l	0.0014		0.001	U	0.0017		0.001	U
Chloromethane	74-87-3	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
cis-1,2-Dichloroethene	156-59-2	0.02	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
cis-1,3-Dichloropropene	10061-01-5	0.0004	mg/l	0.0004	U	0.0004	U	0.0004	U	0.0004	U
Dibromochloromethane	124-48-1	0.002	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
Dibromomethane	74-95-3	5	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Dichlorodifluoromethane	75-71-8	10	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Diethyl ether	60-29-7	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Diisopropyl Ether	108-20-3	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Ethyl-Tert-Butyl-Ether	637-92-3		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Ethylbenzene	100-41-4	0.7	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
Hexachlorobutadiene	87-68-3	0.0006	mg/l	0.0006	U	0.0006	U	0.0006	U	0.0006	U
Isopropylbenzene	98-82-8	10	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Methyl ethyl ketone	78-93-3	4	mg/l	0.005	U	0.005	U	0.005	U	0.005	U
Methyl isobutyl ketone	108-10-1	0.35	mg/l	0.005	U	0.005	U	0.005	U	0.005	U
Methyl tert butyl ether	1634-04-4	0.07	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Methylene chloride	75-09-2	0.005	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
n-Butylbenzene	104-51-8		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
n-Propylbenzene	103-65-1	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Naphthalene	91-20-3	0.14	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
o-Chlorotoluene	95-49-8	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
o-Xylene	95-47-6	3	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
p-Chlorotoluene	106-43-4		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
p-Isopropyltoluene	99-87-6	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
p/m-Xylene	179601-23-1	3	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
sec-Butylbenzene	135-98-8		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Styrene	100-42-5	0.1	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
tert-Butylbenzene	98-06-6	1	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Tertiary-Amyl Methyl Ether	994-05-8		mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Tetrachloroethene	127-18-4	0.005	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
Tetrahydrofuran	109-99-9	5	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Toluene	108-88-3	1	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
trans-1,2-Dichloroethene	156-60-5	0.08	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
trans-1,3-Dichloropropene	10061-02-6	0.0004	mg/l	0.0004	U	0.0004	U	0.0004	U	0.0004	U
Trichloroethene	79-01-6	0.005	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
Trichlorofluoromethane	75-69-4	10	mg/l	0.002	U	0.002	U	0.002	U	0.002	U
Vinyl chloride	75-01-4	0.002	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
Xylenes, Total	1330-20-7	3	mg/l	0.001	U	0.001	U	0.001	U	0.001	U
MCP PAHs by SIM											
2-Methylnaphthalene	91-57-6	0.01	mg/l							0.0001	U
2-Methylnaphthalene	91-57-6	0.01	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Acenaphthene	83-32-9	0.02	mg/l							0.0001	U
Acenaphthene	83-32-9	0.02	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Acenaphthylene	208-96-8	0.03	mg/l							0.0001	U
Acenaphthylene	208-96-8	0.03	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Anthracene	120-12-7	0.03	mg/l							0.0001	U
Anthracene	120-12-7	0.03	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Benzo(a)anthracene	56-55-3	0.001	mg/l							0.0001	U
Benzo(a)anthracene	56-55-3	0.001	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Benzo(a)pyrene	50-32-8	0.0002	mg/l							0.0001	U
Benzo(a)pyrene	50-32-8	0.0002	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Benzo(b)fluoranthene	205-99-2	0.001	mg/l							0.0001	U
Benzo(b)fluoranthene	205-99-2	0.001	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Benzo(ghi)perylene	191-24-2	0.02	mg/l							0.0001	U
Benzo(ghi)perylene	191-24-2	0.02	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Benzo(k)fluoranthene	207-08-9	0.001	mg/l							0.0001	U
Benzo(k)fluoranthene	207-08-9	0.001	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Chrysene	218-01-9	0.002	mg/l							0.0001	U
Chrysene	218-01-9	0.002	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Dibenzo(a,h)anthracene	53-70-3	0.0005	mg/l							0.0001	U
Dibenzo(a,h)anthracene	53-70-3	0.0005	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Fluoranthene	206-44-0	0.09	mg/l							0.0001	U
Fluoranthene	206-44-0	0.09	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Fluorene	86-73-7	0.03	mg/l							0.0001	U
Fluorene	86-73-7	0.03	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Indeno(1,2,3-cd)pyrene	193-39-5	0.0005	mg/l							0.0001	U
Indeno(1,2,3-cd)pyrene	193-39-5	0.0005	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Naphthalene	91-20-3	0.14	mg/l							0.0001	U
Naphthalene	91-20-3	0.14	mg/l	0.0001	U	0.0001	U	0.0001	U	0.00041	B
Phenanthrene	85-01-8	0.04	mg/l							0.0001	U
Phenanthrene	85-01-8	0.04	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Pyrene	129-00-0	0.02	mg/l							0.0001	U
Pyrene	129-00-0	0.02	mg/l	0.0001	U	0.0001	U	0.0001	U	0.0001	U

Alpha Analytical Labs provides this custom reporting format as a convenience to our clients. As such, we cannot be held liable for errors or omissions associated with the regulatory standards listed above and/or the sample results highlighted by comparison with the standards (Effective as of April 25, 2014).

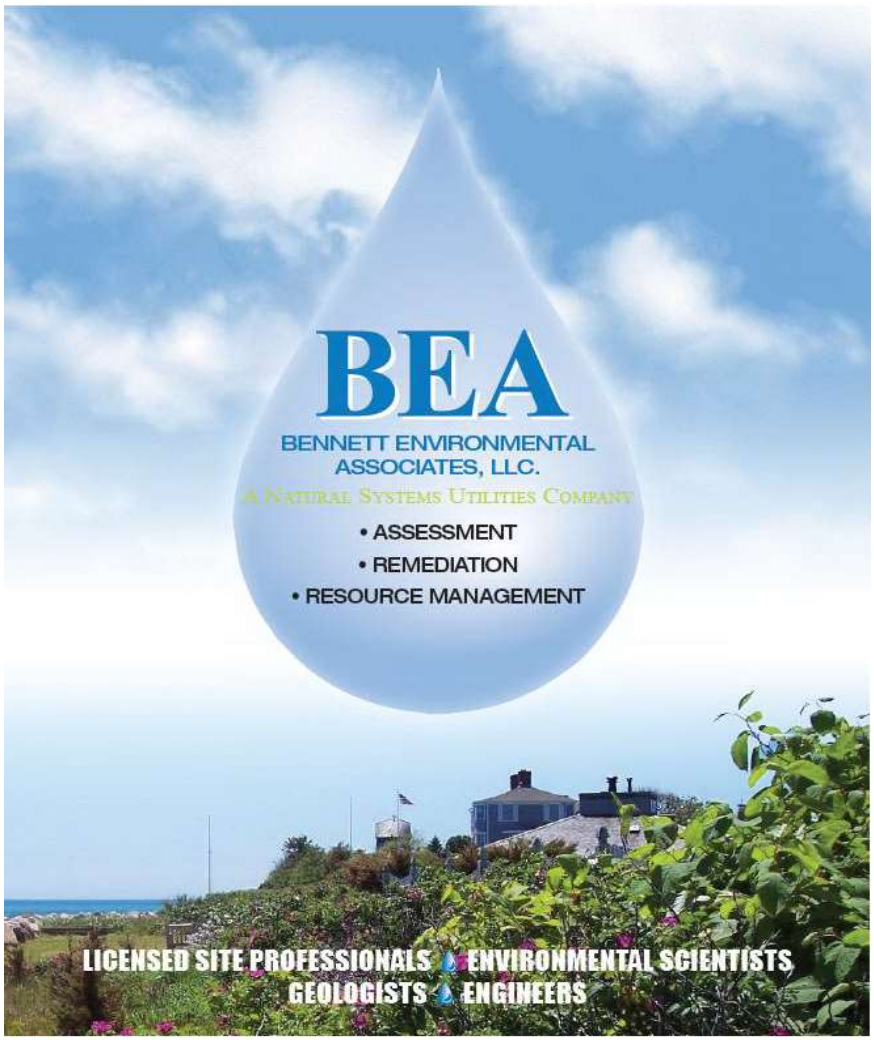
Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.

Refer to the laboratory report in Adobe Acrobat (.PDF) format to check results or read any associated project narrative that may be present. In all cases, the signed, hardcopy Alpha Analytical Labs laboratory report is the official document for reporting laboratory results.

SEMI-ANNUAL GROUNDWATER MONITORING REPORT
November 2023

Cape Sand & Recycling, LLC
Wood Waste Reclamation Facility
Brewster, Massachusetts
K10740A

JANUARY 22, 2024



1573 Main Street, Brewster, MA 02631 • 508-896-1706 • Fax 508-896-5109
www.bennett-ea.com

CAPE SAND & RECYCLING, LLC

WOOD WASTE RECLAMATION FACILITY (WWRF)

SEMI-ANNUAL GROUNDWATER MONITORING REPORT

NOVEMBER 2023 SAMPLING EVENT

1.0 INTRODUCTION

This Groundwater Monitoring Report has been prepared to provide the Massachusetts Department of Environmental Protection (MassDEP) and the Town of Brewster Water Quality Review Committee (WQRC) with results of the most recent groundwater sampling event, associated with the Wood Waste Reclamation Facility (WWRF) located at 1515 Freemans Way in Brewster, Massachusetts, and currently operated by Cape Sand & Recycling, LLC (CS&R). Groundwater sampling was performed by Bennett Environmental Associates, LLC (BEA) on November 14, 2023. The laboratory analyses were performed by Alpha Analytical, as a laboratory certified to perform the requisite analyses. This report is being filed with the Mass DEP and the BWQRC as part of the conditional approvals for the small WWRF.

2.0 GROUNDWATER MONITORING PROGRAM

2.1 Background

On December 29, 2009, the MassDEP issued a Provisional Approval – Authorization to Operate (ATO) a Small Handling Facility/Wood Waste Reclamation to CS&R. The ATO approval included requirements to continue the groundwater monitoring program previously developed to comply with the MassDEP "Wood Waste Reclamation Facilities Siting and Permitting Requirements" Guidance Document - #BWP-98-006 (the WWRF Guidance Document). The ATO approval also declared the Site "Adequately Regulated", pursuant to the provisions of 310 CMR 40.0110 of the Massachusetts Contingency Plan (MCP). This determination was related to concentrations of arsenic and Bis(2ethylhexyl) phthalate reported in groundwater at the site in November 2007. The concentrations reported exceeded the applicable RCGW-1 Reportable Concentrations, triggering a 120-day release notification requirement resulting in release tracking number (RTN) 4-21361. The ATO document stated that the Adequately Regulated determination is valid provided that the required monitoring continues and that all previously buried materials be excavated, and any unacceptable materials be removed.

On October 19, 2010, MassDEP issued a Provisional Approval – Modification of a Small Handling Facility/Wood Waste Reclamation Facility. The Modification Approval

authorized reducing the number of groundwater sampling locations from six (6) monitoring wells to four (4), including MW-1 (later replaced by MW-1R), MW-3A, MW-4A and MW-5. Based on information submitted by the consultant at the time (Prime Engineering), MassDEP found that the reduction in the number of wells would not compromise the sufficiency of the network to monitor groundwater and would remain consistent with the standard Mass DEP requirements for WWRFs. The Modification Approval document also reaffirmed that the Site had been declared "Adequately Regulated" pursuant to the provisions of both the MCP and the Solid Waste Regulations (310 CMR 19.00).

As such, monitoring wells MW-1R, MW-3A, MW-4A and MW-5 are sampled on a semi-annual basis for the parameters included in the Groundwater Monitoring Appendix of the WWRF Guidance Document. Total Phosphorus was added as a parameter in November 2015 at the request of the BWQRC.

In addition, the WQRC has requested sampling two (2) additional downgradient monitoring wells (MW-3B and MW-5B), to evaluate groundwater conditions up-gradient of the Timberlane Drive neighborhood, where private potable wells are currently in-use. These monitoring wells are typically sampled for Total Manganese to evaluate concentrations in these downgradient wells. Monitoring wells MW-3B and MW-5B are also sampled for nitrogen-related parameters when concentrations of Nitrate or Nitrate/Nitrite are reported above the MMCL of 10 mg/L, in any of the MW-3A, MW-4A or MW-5 monitoring wells. During the November 2023 sampling event, MW-3B and MW-5B were also sampled for Total Arsenic, and Total Dissolved Solids due to intermittent spikes in concentrations of these analytes reported in MW-3A in May 2020 and May 2022. Monitoring well locations are shown on the enclosed Site Plan.

2.2 Groundwater Sample Collection

Groundwater samples were collected by BEA personnel on November 14, 2023, from monitoring wells MW-1R, MW-3A, MW-3B, MW-4A, MW-5, and MW-5B. A Monitoring Well Sampling Log is attached for reference. Prior to sampling, depth-to-groundwater measurements were taken at each monitoring well location. The wells were then purged in accordance with MassDEP standard practices and BEA Quality Assurance & Quality Control (QA/QC) methods. Field parameters measured during sampling activities included temperature, pH, conductivity, dissolved oxygen (DO) and oxidation-reduction potential (ORP). The samples were collected using a variable-speed 2" submersible pump, using low-flow sampling methodology. Sample containers were prepared by Alpha Analytical and kept in a cooler or refrigerator pending pick up by lab courier and transported following chain of custody procedures.

2.3 Groundwater Gauging Data

Well gauging data from the date of sampling reports groundwater elevations ranging from 20.77 to 22.12 feet above mean sea level, as measured from the top of the well casings. The November 2023 gauging event shows groundwater flows easterly towards Pleasant Bay, consistent with data from previous monitoring events. Depth-to-groundwater measurements and corresponding elevations are presented on the enclosed Monitoring Well Sampling Log. Groundwater contours are represented on the enclosed Site Plan dated 12/5/23.

3.0 LABORATORY ANAYLTICAL RESULTS

Laboratory results for the November 2023 sampling event were received on November 27, 2023. The results were compared to the Massachusetts Drinking Water Standards (MDWS), published by MassDEP. These standards include Massachusetts Maximum Contaminant Levels (MMCLs), Secondary Maximum Contaminant Levels (SMCLs) and Office of Research and Standards Guideline (ORSG) concentrations. In addition, the results were compared to the MCP Method 1 Risk Characterization Standards for the GW-1 (ingestion) and GW-3 (discharge to surface water) groundwater categories. A tabulation of the laboratory data for the November 2023 sampling event, along with a comparison to the above standards, is presented in Table 1: November 2023 Groundwater Analysis Summary. The results of semi-annual groundwater data over the past three (3) years are presented in Table 2: Temporal Groundwater Analysis Summary – November 2020 through November 2023.

3.1 Total Metals

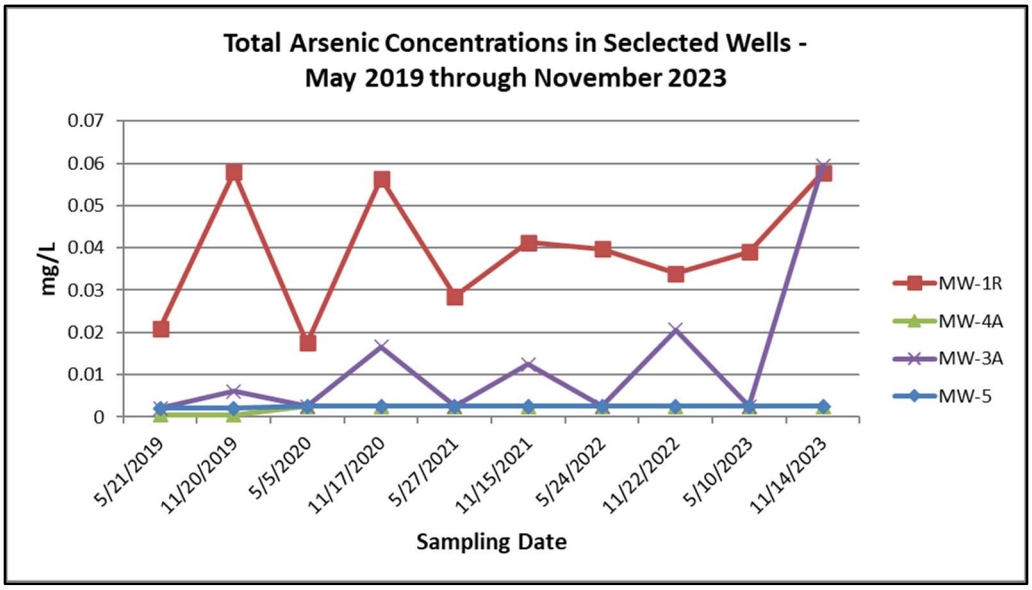
Groundwater samples collected from MW-1R, MW-3A, MW-4A, and MW-5 were analyzed for Total Arsenic, Barium, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Selenium, Silver, and Zinc. Monitoring wells MW-3B and MW-5B were sampled for Total Manganese and Total Arsenic only. Arsenic was reported above the Massachusetts Drinking Water Standard (0.01 mg/L) and the Method 1 GW-1 Risk Characterization Standard in monitoring well MW-1R (0.0578 mg/L) and in monitoring well MW-3A (0.0595 mg/L). All other monitoring wells sampled reported Arsenic as Non-Detect.

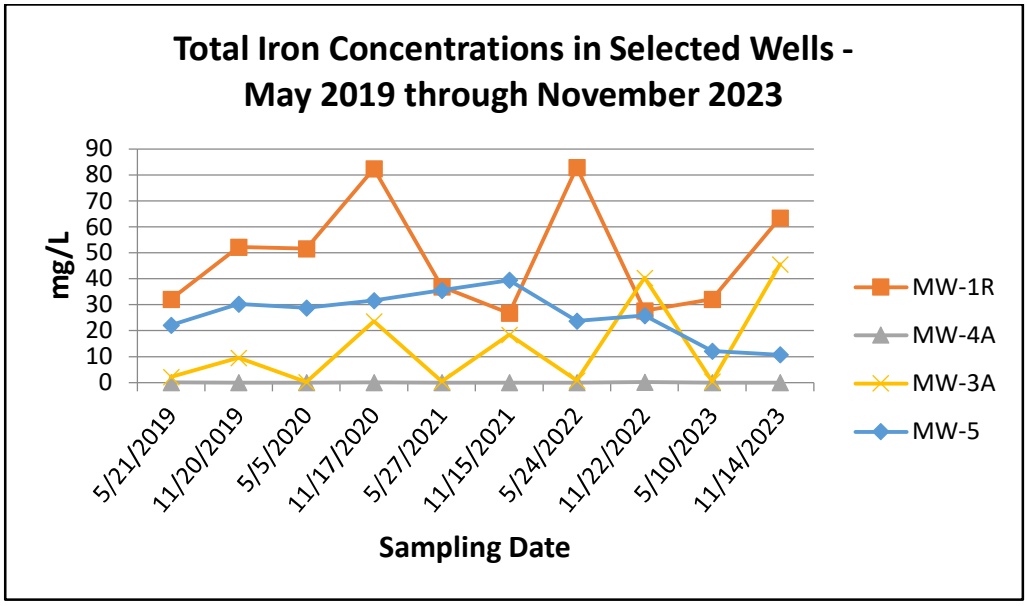
As previously mentioned, Release Notification was made to the DEP for the presence of similar concentrations of Arsenic in groundwater in 2007 (RTN 4-21361). In 2009, the

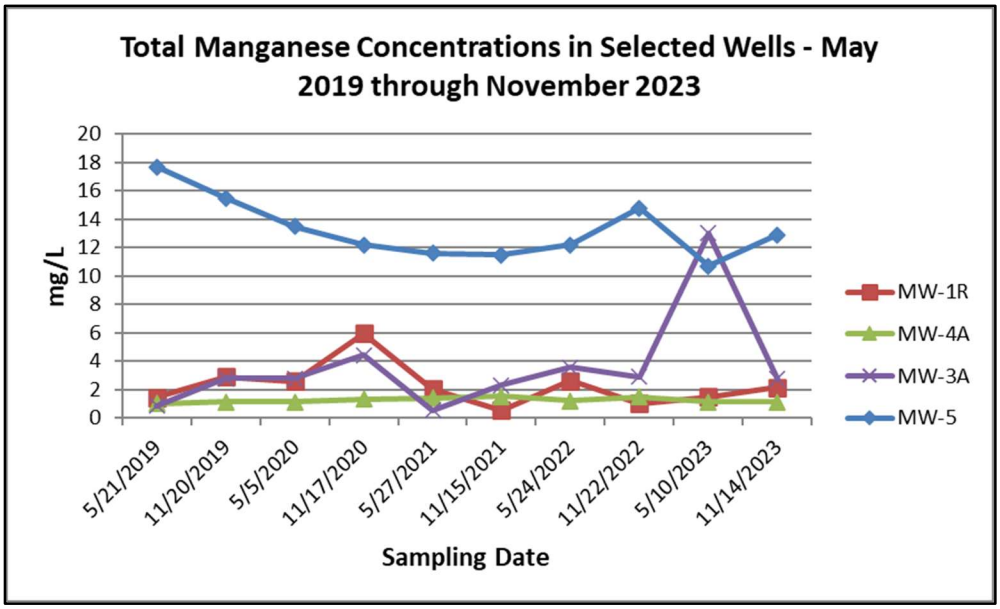
Site was listed as Adequately Regulated by the DEP and therefore Release Notification is not required.

Similar concentrations of Arsenic have been reported in monitoring wells MW-1 (May 2014) and MW-3A (Nov. 2007 and May/Nov. 2012). Arsenic has consistently been reported above the MA Drinking Water Standard and Method 1 GW-1 Standard in monitoring well MW-1R since the well was installed in 2016, with concentrations ranging from 0.0175 mg/L to 0.058 mg/L. The elevated concentrations of total metals reported at MW-1R are attributed to naturally occurring metals leaching from native soils in a reducing environment, as a result of decaying organic matter associated with previously buried wood waste in contact with groundwater in the area where the well is installed. The elevated concentrations of total metals reported at MW-3A may be related to dissolved organic materials leaching to groundwater during the increased rainfall events in the autumn months, wherein higher concentrations are reported during November and the concentrations decrease in May. The effect appears to be limited to a small area, with concentrations of arsenic reported as non-detect in well MW-3B located further downgradient.

Total Iron was reported at concentrations exceeding Secondary Drinking Water Standards (SMCLs) in groundwater samples collected from MW-1R, MW-3A, and MW-5. The highest concentration of Total Iron was reported at MW-1R (63.5 mg/L). SMCLs are not health-based standards but were established to preserve the aesthetic qualities of drinking water. In October 2013, MassDEP adopted an Office of Research and Standards Guideline (ORSG) for Manganese, based on a modified version of the US EPA Health Advisory for this element. The ORSG considers lifetime exposure (0.3 mg/L) and acute exposure (1.0 mg/L) for the general population, as well as a precautionary standard for acute exposure for children <1 year old (0.3 mg/L). Total Manganese was reported at concentrations exceeding the SMCL (0.05 mg/L) and OSRG values for chronic and acute exposures in MW-1R, MW-3A, MW-4A, and MW-5. Monitoring well MW-3B exceeded the SMCL and the ORSG value for chronic/infant exposures. Monitoring well MW-5B only exceeded the SMCL. Iron and Manganese dissolve more readily in low oxygen environments and where the groundwater is slightly acidic, which is consistent with conditions at the site. The tracking charts below show concentrations of Total Arsenic, Iron, and Manganese reported during the semi-annual monitoring events since May 2019.


Total Arsenic Concentrations in Seclected Wells -
May 2019 through November 2023
mg/L
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
5/21/2019
11/20/2019
5/5/2020
11/17/2020
5/27/2021
11/15/2021
5/24/2022
11/22/2022
5/10/2023
11/14/2023
Sampling Date
MW-1R
MW-4A
MW-3A
MW-5


Total Iron Concentrations in Selected Wells -
May 2019 through November 2023
mg/L
90
80
70
60
50
40
30
20
10
0
5/21/2019
11/20/2019
5/5/2020
11/17/2020
5/27/2021
11/15/2021
5/24/2022
11/22/2022
5/10/2023
11/14/2023
Sampling Date
MW-1R
MW-4A
MW-3A
MW-5



3.2 Volatile Organic Compounds (VOCs)

Groundwater samples collected from monitoring wells MW-1R, MW-3A, MW-4A, and MW-5 were analyzed for VOCs via EPA Method 8260B. No VOCs were reported in any of the wells above the laboratory detection limits. Various compounds that were reported as Non-Detect had reporting limits that exceeded different standards. Though, with the lack of any similar compounds reported no VOCs are presumed present.

3.3 Poly-nuclear Aromatic Hydrocarbons (PAHs)

Groundwater samples collected from monitoring wells MW-1R, MW-3A, MW-4A, and MW-5 were analyzed for PAHs. No PAHs were reported above the laboratory detection limits in any of the monitoring wells sampled. Future sampling events will continue to monitor PAH concentrations at these wells.

3.4 Aggregate Organic Constituents

Groundwater samples collected from monitoring wells MW-1R, MW-3A, MW-4A, and MW-5 were analyzed for Tannin & Lignin, Chemical Oxygen Demand (COD) and Total Organic Carbon (TOC). Tannin & Lignin and COD were detected in monitoring wells MW-1R, MW-3A and MW-5. There are no regulatory standards established for these parameters. Concentrations of TOC were reported in all wells. The highest concentrations of Aggregate Organic Constituents were reported at MW-1R. These parameters were reported at concentrations consistent with previous sampling events.

3.5 Formaldehyde

Groundwater samples collected from monitoring wells MW-1R, MW-3A, MW-4A, and MW-5 were analyzed for formaldehyde. No concentrations of formaldehyde were detected in any monitoring wells above the method detection limits.

3.6 General Chemistry

Groundwater samples collected from MW-1R, MW-3A, MW-4A, and MW-5 were analyzed for general chemistry parameters including Alkalinity, Color, Chloride, Total Cyanide, Sulfate, Sulfide and Total Dissolved Solids (TDS). Monitoring wells MW-3B and MW-5B were sampled for TDS only. Historic data for the general chemistry parameters is presented in Table 2.

- The highest alkalinity value of 373 mg/L was reported at MW-1R, which is a historic high for that parameter. Concentrations reported in the remaining wells were consistent with previous data. There are no regulatory standards for alkalinity.
- Color was reported above the SMCL of 15 Color Units (C.U.) in each of the wells except MW-4A. The Color units reported are consistent with historical data.
- Chloride was detected in all wells at concentrations between 20 mg/L and 63 mg/L. All of the wells reported Chloride below the SMCL of 250 mg/L. The highest chloride value was reported at monitoring well MW-3A (63 mg/L).
- Total Cyanide concentrations were reported as Non-Detect in all monitoring wells.
- Sulfate concentrations were reported in MW-3A and MW-5, while MW-1R and MW-4A reported Sulfate as Non-Detect. The concentrations reported in MW-3A and MW-5 were below the Secondary Maximum Contaminant Levels and consistent with historic data, as shown in Table 2. Sulfide was reported in MW-1R at a concentration of 0.09 mg/L. All of the remaining wells reported sulfide as Non-Detect. There is no standard for sulfide.
- TDS concentrations were reported above the SMCL of 500 mg/L in MW-3A (530 mg/L). The remaining wells reported TDS concentrations below the SMCL and consistent with historical results. Low TDS was reported in downgradient wells MW-3B (40 mg/L) and MW-5B (31mg/L). Future groundwater testing will include TDS at the down gradient MW-3B and MW-5B locations while TDS concentrations remain elevated at upgradient locations.

Groundwater samples collected from MW-1R, MW-3A, MW-4A, MW-5 were also analyzed for Total Kjeldahl Nitrogen (TKN), Nitrate, Nitrite, Total Nitrogen and Total Phosphorus.

- Nitrate was reported in MW-4A at 3.74 mg/L, below the MMCL of 10 mg/L. All other wells reported Nitrate as Non-Detect. Concentrations of Nitrate reported are consistent with historical results and trends.
- Nitrite was reported as Non-Detect (<0.05) in all wells.
- Nitrogen, including Nitrate and Nitrite was reported in MW-4A (3.7 mg/L) and MW-5 (0.1 mg/L). Monitoring wells MW-1R and MW-3A reported concentrations of Nitrate/Nitrite as Non-Detect (<0.1mg/L). All of the concentrations reported were below the MMCL of 10 mg/L.
- Concentrations of TKN were reported in samples from MW-1R, MW-3A, and MW-5 ranging from 5.3 mg/L in MW-3A to 9.41 mg/L in MW-1R. Concentrations of TKN in MW-4A were reported as Non-Detect (<0.3 mg/L). There is no groundwater standard for TKN.
- Total Phosphorus was detected in each of the wells sampled, with concentrations ranging from 0.036 mg/L in MW-4A to 1.2 mg/L in MW-1R. There is no state or federal groundwater standard for Phosphorus.

3.7 Field Parameters

Field parameters [temperature, pH, specific conductivity, dissolved oxygen (DO) and oxidation-reduction potential (ORP)] were recorded during the May 2023 groundwater sampling event. The historical data for the field parameters are presented in Table 2.

- Groundwater temperatures varied between wells, ranging from 58.0 to 67.1 degrees Fahrenheit (F). Groundwater at downgradient wells MW-3B and MW-5B reported temperatures of 58.2°F and 58.0°F, respectively. Monitoring wells MW-4A and MW-5 reported groundwater temperatures of 59.6°F to 60.1°F, respectively. While monitoring wells MW-1R and MW-3A reported temperatures of 64.0°F and 67.1°F, respectively.
- Monitoring wells MW-4A, MW-5, MW-3B, and MW-5B reported pH values below the SMCL (<6.5 S.U.). The values ranged from 4.87 to 6.00 and are consistent with previous results. Monitoring wells MW-1R and MW-3A reported pH values of 6.63 and 6.51, respectively.
- Conductivity readings ranged from 1,031 uS/cm to 61.9 uS/cm, with higher conductivity observed in MW-1R (1,031 uS/cm), MW-3A (704 uS/cm), and MW-5 (491 uS/cm) and lower conductivity observed in MW-4A 134.2 uS/cm), MW-3B (96.0 uS/cm), and MW-5B (61.9 uS/cm).
- Dissolved oxygen (DO) concentrations ranged from 0.74 mg/L to 5.44 mg/L, with lower concentrations of DO were observed in MW-1R (0.74 mg/L) and MW-3A (0.87 mg/L), and higher concentrations noted at MW-4A (1.16 mg/L), MW-5 (1.03 mg/L), MW-3B (1.01 mg/L), and MW-5B (5.44 mg/L).

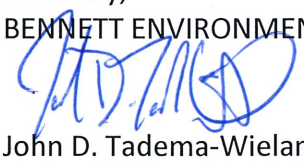
4.0 CONCLUSIONS

The following is a summary of the key findings of the November 2023 groundwater monitoring event:

- Total Arsenic was reported in MW-1R and MW-3A above the MA Drinking Water Standard (0.01 mg/L) and Method 1 GW-1 Risk Characterization Standard (0.01 mg/L). However, the Site is considered Adequately Regulated under the MCP, and therefore no Notification to MassDEP is required. All remaining wells, including downgradient wells MW-3B and MW-5B, reported arsenic concentrations as Non-Detect.
- Various parameters (Color, pH, TDS, Total Iron and Total Manganese) were reported at concentrations exceeding SMCL and/or OSRG parameters. These findings are consistent with previous results. The low pH reported is typical and inherent to the entire Cape Cod aquifer.
- Nitrate and Nitrogen (Nitrate/Nitrite) were not detected at concentrations exceeding regulatory standards at any monitoring well during this sampling event.
- No PAHs were reported in any of the monitoring wells.
- No VOC compounds were detected in any of the monitoring wells.

Should you have any questions regarding the project or require additional information, please contact me at your earliest convenience.

Sincerely,
BENNETT ENVIRONMENTAL ASSOCIATES, LLC



John D. Tadema-Wielandt
Manager of Environmental Services

Encl. Site Plan (12/5/23)
Monitoring Well Sampling Log (11/14/23)
Table 1: November 2023 Groundwater Analysis Summary
Table 2: Temporal Groundwater Analysis Summary – Nov. 2020 through Nov. 2023
Laboratory Analytical Reports
-Alpha Analytical [Lab Report # L2367945 (11/27/23)]

Cc. Brewster Water Quality Review Committee – Attn. Amy Von Hone
MassDEP (SERO), BAW/Solid Waste Section – Attn. Doug Coppi
Cape Sand & Recycling – Attn. Jay Merchant

LEGEND

- MONITORING WELL
- GROUNDWATER CONTOUR 11/14/23

REFERENCE

- PLAN TITLED "GROUNDWATER CONTOUR PLAN", PREPARED BY SITEC ENVIRONMENTAL, DATED FEB 2015
- GOOGLE MAPS IMAGERY © 2022

NOTE: THIS SITE PLAN WAS NOT PREPARED FROM ANY INSTRUMENT SURVEY AND UNDER NO CIRCUMSTANCES SHOULD THE DISTANCES, BEARING AND/OR OTHER FEATURES SHOWN BE USED TO ESTABLISH PROPERTY LINES. ALL LOCATIONS ARE APPROXIMATE.

SKETCH PLAN

0 200 400 600

SCALE 1"=200'

PROJECT:
CAPE SAND & RECYCLING, LLC
c/o JAY MERCHANT
P.O. BOX 1555 - BREWSTER, MA 02631

TITLE:
SMALL WOOD WASTE HANDLING FACILITY
GROUNDWATER MONITORING
1515 FREEMAN'S WAY - BREWSTER, MA 02631

BENNETT ENVIRONMENTAL ASSOCIATES, LLC.
A NATURAL SYSTEMS UTILITIES COMPANY
LICENSED SITE PROFESSIONALS, ENVIRONMENTAL SCIENTISTS, GEOLOGISTS, ENGINEERS
1573 MAIN STREET - BREWSTER, MA 02631
PHONE: (508) 896-1706 www.bennett-ea.com FAX: (508) 896-5109

DATE:	SCALE:	BY:	CHECK:	JOB NUMBER:
12/5/23	As Noted	SRF	JTW	K10740AA.X.EV.910

BENNETT ENVIRONMENTAL ASSOCIATES, LLC

A NATURAL SYSTEMS UTILITIES COMPANY

MONITORING WELL SAMPLING LOG

Job Name: Cape Sand & Recycling Date(s): 11/14/2023 Time: AM/PM Tide: N/A

Location: 1515 Freemans Way, Brewster Job Number: K10740A

Sampler: Jacob Guthrie Measuring Point: Ground Surface or T.O.C TOC

Well Number	Elev. of reference point	Total Depth of Well (feet)	Depth to Water (feet)	Standing Water Height (feet)	Water Table Elevation (feet)	Static Volume (gallons)	Volume Purged (gallons)	HNU PI-101 (ppm)	pH	Dissolved Oxygen (mg/L)	Conductivity	Temperature (F)	ORP	Comments:
MW-1R	37.17	20.0	15.05	4.95	22.12	0.81	2.5	N/A	6.63	0.74	1,031.0	64.0	-131.1	H2S odor, No sheen
MW-3A	66.43	49.0	45.66	3.34	20.77	0.54	2.0	N/A	6.51	0.87	704.0	67.1	-73.7	No odor, No sheen
MW-4A	81.97	66.0	60.10	5.90	21.87	0.96	3.0	N/A	5.01	1.16	134.2	59.6	230.7	No odor, No sheen
MW-5	77.42	64.5	55.94	8.56	21.48	1.40	4.5	N/A	6.00	1.03	491.0	60.1	6.1	No odor, No sheen
MW-5B	68.99	56.0	47.22	8.78	21.77	1.43	4.5	N/A	4.89	5.44	61.9	58.0	174.5	No odor, No sheen
MW-3B	31.15	17.00	9.41	7.59	21.74	1.24	4.0	N/A	4.87	1.01	96.0	58.2	183.9	No odor, No sheen

NOTES: NA = Not Applicable; NE = Not Established; NT = Not Taken

All wells sampled upon stabilization of field parameters.

Table 1: November 2023 Groundwater Analysis Summary

Cape Sand & Recycling - 1515 Freemans Way - Brewster, MA

PARAMETER	STANDARDS (mg/l)			RESULTS (mg/l)					
	MDWS	GW-1	GW-3	MW-1R	MW-3A	MW-4A	MW-5	MW-3B	MW-5B
TOTAL METALS									
Arsenic	0.01	0.01	0.9	**0.0578**	**0.0595**	<0.005	<0.005	<0.005	<0.005
Barium	2	2	50	0.0456	0.0441	<0.01	0.0454	-	-
Cadmium	0.005	0.005	0.004	<0.004	<0.004	<0.004	<0.004	-	-
Chromium	0.100	0.100	0.300	<0.01	<0.01	<0.01	<0.01	-	-
Copper	1.3	NS	NS	<0.01	0.0236	<0.01	<0.01	-	-
Iron	0.3 [S]	NS	NS	**63.5**	**45.6**	<0.05	**10.8**	-	-
Lead	0.015	0.015	0.010	<0.01	<0.01	<0.01	<0.01	-	-
Manganese	0.05 [S], 0.3/1.0 [G]	NS	NS	**2.14**	**2.75**	**1.11**	**12.9**	**0.737**	**0.101**
Mercury	0.002	0.002	0.020	<0.0002	<0.0002	<0.0002	<0.0002	-	-
Selenium	0.05	0.050	0.100	<0.01	<0.01	<0.01	<0.01	-	-
Silver	0.1 [S]	0.100	0.007	<0.007	<0.007	<0.007	<0.007	-	-
Zinc	5 [S]	5	0.900	<0.05	<0.05	<0.05	<0.05	-	-
VOLATILE ORGANIC COMPOUNDS (VOCs)									
Total VOCs	I	I	I	ND	ND	ND	ND	-	-
POLY-NUCLEAR AROMATIC HYDROCARBONS (PAHs)									
2-Methylnaphthalene	NS	0.010	20	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Acenaphthene	NS	0.020	6	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Acenaphthylene	NS	0.030	0.040	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Anthracene	NS	0.060	0.030	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Benzo(a)anthracene	NS	0.001	1	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Benzo(a)pyrene	0.0002	0.0002	0.500	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Benzo(b)fluoranthene	NS	0.001	0.400	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Benzo(ghi)perylene	NS	0.050	0.020	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Benzo(k)fluoranthene	NS	0.001	0.100	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Chrysene	NS	0.002	0.070	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Dibenzo(a,h)anthracene	NS	0.0005	0.040	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Fluoranthene	NS	0.090	0.200	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Fluorene	NS	0.030	0.040	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Indeno(1,2,3-cd)Pyrene	NS	0.0005	0.100	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Naphthalene	0.140 [G]	0.140	20	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Phenanthrene	NS	0.040	10	<0.0001	<0.0001	<0.0001	<0.0001	-	-
Pyrene	NS	0.080	0.020	<0.0001	<0.0001	<0.0001	<0.0001	-	-
AGGREGATE ORGANIC CONSTITUENTS									
Tannin & Lignin	NS	NS	NS	5.3	3.2	<0.2	2.0	-	-
Chemical Oxygen Demand (COD)	NS	NS	NS	98	62	<20	37	-	-
Total Organic Carbon (TOC)	NS	NS	NS	33	22	1	7.7	-	-
ALDEHYDES									
Formaldehyde	NS	NS	NS	<0.075	<0.075	<0.075	<0.075	-	-
GENERAL CHEMISTRY									
Alkalinity (as CaCO3)	NS	NS	NS	373	204	9.6	144	-	-
Color	15 [S]	NS	NS	**350**	**330**	6	**21**	-	-
Chloride	250 [S]	NS	NS	28	63	20	57	-	-
Cyanide, Total	0.2	0.2	0.03	<0.005	<0.005	<0.005	<0.005	-	-
Total K Nitrogen (TKN)	NS	NS	NS	9.41	5.3	<0.3	6.94	-	-
Nitrate-N	10	NS	NS	<0.1	<0.1	3.74	<0.1	-	-
Nitrite-N	1	NS	NS	<0.05	<0.05	<0.05	<0.05	-	-
Nitrogen, Nitrate/Nitrite	10	NS	NS	<0.1	<0.1	3.7	0.1	-	-
Nitrogen, Total	NS	NS	NS	9.4	5.3	3.7	7	-	-
Total Phosphorus	NS	NS	NS	1.2	0.176	0.036	0.16	-	-
Sulfate	250 [S]	NS	NS	<10	63	<10	52	-	-
Sulfide	NS	NS	NS	0.09	<0.05	<0.05	<0.05	-	-
Total Dissolved Solids	500 [S]	NS	NS	420	**530**	99	310	40	31
FIELD PARAMETERS									
Temperature (°F)	NS	NS	NS	64.0	67.1	59.6	60.1	58.2	58.0
pH (pH units)	6.5-8.5 [S]	NS	NS	6.63	6.51	**5.01**	**6.00**	**4.87**	**4.89**
Specific Conductivity (uS/cm)	NS	NS	NS	1031	704	134.2	491.0	96.0	61.9
Dissloved Oxygen	NS	NS	NS	0.74	0.87	1.16	1.03	1.01	5.44

MDWS = Massachusetts Drinking Water Standard (MMCL)
GW-1 = Massachusetts MCP Method 1 GW-1 standard
GW-3 = Massachusetts MCP Method 1 GW-3 standard
[G] = Massachusetts Drinking Water Guideline (ORSG)
[S] = Secondary Maximum Contaminant Levels (SMCL)
- = Not Analyzed for Indicated Compound
NS = No Standard
I = VOCs Standards Specific to Individual Compound
= Indicates an exceedance of MMCL, ORSG, or Method 1 Standard
= Indicates an exceedance of SMCL

Table 2: Temporal Groundwater Analysis Summary - November 2020 through November 2023

Cape Sand & Recycling

1515 Freemans Way - Brewster, MA

PARAMETER	STANDARDS (mg/L)			MW-1R							MW-3A							MW-4A							MW-5						
	MDWS	GW-1	GW-3	Nov-20	May-21	Nov-21	May-22	Nov-22	May-23	Nov-23	Nov-20	May-21	Nov-21	May-22	Nov-22	May-23	Nov-23	Nov-20	May-21	Nov-21	May-22	Nov-22	May-23	Nov-23	Nov-20	May-21	Nov-21	May-22	Nov-22	May-23	Nov-23
METALS																															
Arsenic	0.01	0.01	0.9	**0.0564**	**0.0285**	**0.0413**	**0.0397**	**0.034**	**0.0391**	**0.0578**	**0.0166**	<0.005	**0.0124**	<0.005	**0.0206**	<0.005	**0.0595**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Barium	2	2	50	0.017	<0.01	<0.01	<0.04	0.0203	0.0283	0.0456	0.032	0.034	0.032	0.049	0.0461	0.0666	0.0441	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.048	0.05	0.045	0.046	0.0525	0.0356	0.0454
Cadmium	0.005	0.005	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Chromium	0.100	0.100	0.300	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0262	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	1.3	NS	NS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	0.017	0.022	<0.01	0.0236	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	0.3/1.0 [G]	NS	NS	**82.5**	**37**	**26.8**	**83**	**27.7**	**32.2**	**63.5**	**23.6**	**0.488**	**18.5**	**0.818**	**40.4**	**0.433**	**45.6**	0.084	<0.05	<0.05	<0.05	0.264	<0.05	<0.05	**31.6**	**35.6**	**39.5**	**23.8**	**25.8**	**12.2**	**10.8**
Lead	0.015	0.015	0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese	0.05 [S], 0.3/1.0 [G]	NS	NS	**5.96**	**2.02**	**0.534**	**2.610**	**1.01**	**1.47**	**2.14**	**4.44**	**0.534**	**2.32**	**3.58**	**2.9**	**13**	**2.75**	**1.33**	**1.39**	**1.53**	**1.2**	**1.48**	**1.13**	**1.11**	**12.2**	**11.6**	**11.8**	**12.2**	**14.8**	**10.7**	**12.9**
Mercury	0.002	0.002	0.020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Selenium	0.05	0.050	0.100	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	0.1 [S]	0.100	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Zinc	5 [S]	5	0.900	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
VOLATILE ORGANIC COMPOUNDS (VOCs)																															
Total VOCs	I	I	I	ND	ND	0.0012	0.0858	0.0022	0.0770	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	4.0 [G]	4	50	ND	ND	ND	0.014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6.3 [G]	6.3	50	ND	ND	ND	0.066	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1	1	40	ND	ND	0.0012	0.0058	0.0022	0.0770	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
POLY-NUCLEAR AROMATIC HYDROCARBONS (PAHs)																															
2-Methylnaphthalene	NS	0.010	20	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthene	NS	0.020	6	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	NS	0.030	0.040	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	NS	0.060	0.030	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)anthracene	NS	0.001	1	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	0.0002	0.0002	0.500	<0.0001	0.00012	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	NS	0.001	0.400	<0.0001	0.00028	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(ghi)perylene	NS	0.050	0.020	<0.0001	0.00019	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	NS	0.001	0.100	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	NS	0.002	0.070	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzo(a,h)anthracene	NS	0.0005	0.040	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	NS	0.090	0.200	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	NS	0.030	0.040	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno(1,2,3-cd)Pyrene	NS	0.0005	0.100	<0.0001	0.00023	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.140 [G]	0.140	20	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00014	<0.0001	<0.0001	0.00027	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenanthrene	NS	0.040	10	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	NS	0.080	0.020	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
AGGREGATE ORGANIC CONSTITUENTS																															
Tannin & Lignin	NS	NS	NS	1.5	1.3	1.3	4.3	2	1.8	5.3	2.8	1	1.3	2.2	1.3	5.4	3.2	<0.2	0.3	<0.2	0.29	<0.2	<0.2	<0.2	2.4	2.8	3.9	2.4	2.2	1.6	2.0
Chemical Oxygen Demand (COD)	NS	NS	NS	68	43	92	140	80	76	98	100	70	57	110	56	190	62	<20	<20	<20	<20	<20	<20	<20	48	63	71	49	75	22	37
Total Organic Carbon (TOC)	NS	NS	NS	20	13	33	41	25	26	33	33	25	18	33	16	57	22	0.87	0.76	<1	0.85	0.75	1	1	15	15	18	11	13	8.6	7.7
ALDEHYDES																															
Formaldehyde	NS	NS	NS	<0.075	<0.075	<0.075	<0.075	<0.075	<0.375	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075
GENERAL CHEMISTRY																															
Alkalinity (as CaCO3)	NS	NS	NS	230	127	108	319	151	253	373	202	154	182	219	189	298	204	30.5	30.6	27.7	26.3	29.1	10.3	9.6	180	155	212	144	152	103	144
Color	15 [S]	NS	NS	**650**	**660**	**480**	**270**	**490**	**170**	**350**	**270**	**27**	**300**	**48**	**350**	**85**	**330**	5	<5	<5	<5	7	<5	6	**25**	**54**	**90**	**18**	**33**	**82**	**21**
Chloride	250 [S]	NS	NS	54	20	37	33	16	24	28	48	47	38	150	45	160	63	7.8	7.5	7.7	9.6	13	19	20	44	48	47	37	42	45	57
Cyanide, Total	0.2	0.200	0.030	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005
Total K Nitrogen (TKN)	NS	NS	NS	1.75	0.978	2.51	2.8	3.18	6.27	9.41	7.67	2.77	4.42	3.6	5.06	9.63	5.3	<0.300	<0.3	<0.3	<0.6	<0.3	<0.3	<0.3	3.8	3.53	4.64	3.2	4.1	5.25	6.94
Nitrate-N	10	NS	NS	0.1	<0.1	<0.1	0.159	<0.1	<0.1	<0.1	0.19	3.21	0.47	4.06	0.233	1.61	<0.1	3.84	4.16	6.6	5.41	4.24	3.21	3.74	0.25	0.106	<0.1	0.125	0.14	0.129	<0.1
Nitrite-N	1	NS	NS	<0.05	<0.05	<0.05	0.094	<0.05	<0.05	<0.05	<0.05	0.082	<0.05	0.059	0.051	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.052	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate/Nitrite	10	NS	NS	<0.1	<0.1	<0.1	0.16	<0.1	<0.1	<0.1	0.19	3.2	0.47	4	0.23	1.6	<0.1	3.8	4.2	6.6	5.4	4.2	3.2	3.7	0.25	0.1	<0.1	0.12	0.14	0.13	0.1
Nitrogen, Total	NS	NS	NS	2.1	0.98	2.5	3	3.2	6.3	9.4	7.9	6	4.9	7.6	5.3	11	5.3	3.80	4.2	6.6	5.4	4.2	3.5	3.7	4.00	3.6	4.6	3.3	4.2	5.4	7
Total Phosphorus	NS	NS	NS	0.694	0.727	0.862	0.949	1.17	1.2	1.2	0.166	0.064	0.089	0.075	0.053	0.09	0.176	0.034	0.044	0.048	0.042	0.04	0.039	0.036	0.141	0.182	0.238	0.191	0.201	0.112	0.16
Sulfate	250 [S]	NS	NS	33	17	<25	<10	<10	<10	<10	100	37	27	36	52	37	63	<10	<10	<10	<10	<10	<10	<10	74	56	67	73	54	40	52
Sulfide	NS	NS	NS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.09	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05
Total Dissolved Solids	500 [S]	NS	NS	430	210	300	**500**	250	290	420	470	350	380	**690**	330	**790**	**530**	86	69	130	110	89	79	99	400	330	420	340	300	230	310
FIELD PARAMETERS																															
Temperature (°F)	NS	NS	NS	58.6	46.5	62.4	48.0	60.5	50	64	68.2	67.3	66.5	68.3	67.3	68.4	67.1	61.5	61.3	60.6	60.8	60.3	61.5	59.6	63.3	63.3	62.2	61.8	61.0	61.0	60.1
pH (pH units)	6.5-8.5 [S]	NS	NS	6.85	6.99	7.51	6.87	6.98	7.04	6.63	6.64	**6.11**	7.47	**6.21**	6.86	**6.25**	6.51	**5.22**	**5.04**	**5.90**	**5.19**	**5.54**	**5.30**	**5.01**	**6.06**	**6.01**	6.97	**5.93**	**6.33**	**5.95**	**6.00**
Specific Conductivity (uS/cm)	NS	NS	NS	604	299	272.2	593	357.1	481	1031	680	554	436.2	1043	635	1176	704	110.5	115	104.2	117.1	127.1	140.5	134.2	555	546	477.5	475	490.1	400.7	491.0
Dissolved Oxygen (mg/L)	NS	NS	NS	0.12	0.24	0.24	0.05	0.24	0.82	0.74	0.11	0.11	0.25	0.08	0.29	0.40	0.87	0.12	1.45	0.29	0.38	0.30	2.02	1.16	0.72	0.51	0.22	0.94	0.29	1.68	1.03

MDWS = Massachusetts Drinking Water Standard (MMCL)
GW-1 = Massachusetts MCP Method 1 GW-1 standard
GW-3 = Massachusetts MCP Method 1 GW-3 standard
NA = Not Analyzed for Indicated Compound
[G] = Massachusetts Drinking Water Guideline (ORSG)
[S] = Secondary Maximum Contaminant Levels (SMCL)
NA = Not Analyzed for Indicated Compound
NS = No Standard
I = VOCs Standards Specific to Individual Compound
= Indicates an exceedance of MMCL, ORSG, or Method 1 Standard
= Indicates an exceedance of SMCL
* Dissolved

ANALYTICAL REPORT

Lab Number:	L2367945
Client:	Bennett Environmental Associates 1573 Main Street Brewster, MA 02631
ATTN:	John Tadema-Wielandt
Phone:	(508) 896-1706
Project Name:	MERCHANT/CS&R
Project Number:	K10740A
Report Date:	11/27/23

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2367945-01	MW-1R	WATER	1515 FREEMANS WAY, BREWSTER, MA	11/14/23 14:15	11/15/23
L2367945-02	MW-3A	WATER	1515 FREEMANS WAY, BREWSTER, MA	11/14/23 11:10	11/15/23
L2367945-03	MW-3B	WATER	1515 FREEMANS WAY, BREWSTER, MA	11/14/23 12:05	11/15/23
L2367945-04	MW-4A	WATER	1515 FREEMANS WAY, BREWSTER, MA	11/14/23 13:05	11/15/23
L2367945-05	MW-5	WATER	1515 FREEMANS WAY, BREWSTER, MA	11/14/23 09:55	11/15/23
L2367945-06	MW-5B	WATER	1515 FREEMANS WAY, BREWSTER, MA	11/14/23 10:30	11/15/23
L2367945-07	TRIP BLANK	WATER	1515 FREEMANS WAY, BREWSTER, MA	11/06/23 00:00	11/15/23

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name:	MERCHANT/CS&R	**Lab Number:**	L2367945
Project Number:	K10740A	**Report Date:**	11/27/23

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: MERCHANT/CS&R **Lab Number:** L2367945
Project Number: K10740A **Report Date:** 11/27/23

Case Narrative (continued)

Report Submission

The analysis of Sulfide was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

MCP Related Narratives

Volatile Organics

In reference to question G:

L2367945-01D: The sample has elevated detection limits due to the dilution required by the sample matrix (foam). One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

L2367945-01D, -02, -04, -05, and -07: Initial Calibration did not meet:

Lowest Calibration Standard Minimum Response Factor: cis-1,2-dichloroethene (0.1584), bromochloromethane (0.0701), 1,2-dichloropropane (0.1925), bromodichloromethane (0.2465), 1,4-dioxane (0.0011), cis-1,3-dichloropropane (0.2947), 1,1,2-trichloroethane (0.1343), 1,2-dibromoethane (0.1634)

Average Response Factor: cis-1,2-dichloroethene, bromochloromethane, bromodichloromethane, 1,4-dioxane, 1,1,2-trichloroethane, 1,2-dibromoethane

Initial Calibration Verification: dichlorodifluoromethane (66%)

L2367945L2367945-01D, -02, -04, -05, and -07: The associated continuing calibration standard is outside the acceptance criteria for several compounds; however, it is within overall method allowances. Associated results are considered to be biased high if the %D is negative and biased low if the %D is positive. A copy of the continuing calibration standard is included as an addendum to this report.

Semivolatile Organics by SIM

In reference to question I:

All samples were analyzed for a subset of MCP analytes per client request.

Project Name:	MERCHANT/CS&R	**Lab Number:**	L2367945
Project Number:	K10740A	**Report Date:**	11/27/23

Case Narrative (continued)

Total Metals

In reference to question I:

All samples were analyzed for a subset of MCP analytes per client request.

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: Kelly O'Neill

Title: Technical Director/Representative Date: 11/27/23

QC OUTLIER SUMMARY REPORT

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
MCP Volatile Organics - Westborough Lab								
8260D	Batch QC	WG1854484-3	Methylene chloride	LCS	69	70-130	07	potential low bias
8260D	Batch QC	WG1854484-3	Bromomethane	LCS	52	70-130	07	potential low bias
8260D	Batch QC	WG1854484-3	Chloroethane	LCS	62	70-130	07	potential low bias
8260D	Batch QC	WG1854484-4	Bromomethane	LCSD	50	70-130	07	potential low bias
8260D	Batch QC	WG1854484-4	Chloroethane	LCSD	60	70-130	07	potential low bias
8260D	Batch QC	WG1854484-4	1,1-Dichloroethene	LCSD	68	70-130	07	potential low bias
8260D	Batch QC	WG1854484-4	trans-1,2-Dichloroethene	LCSD	66	70-130	07	potential low bias
8260D	Batch QC	WG1854484-4	Carbon disulfide	LCSD	23	20	07	non-directional bias
8260D	Batch QC	WG1854484-4	Carbon disulfide	LCSD	68	70-130	07	potential low bias
8260D	Batch QC	WG1854484-4	Diethyl ether	LCSD	67	70-130	07	potential low bias
MCP Semivolatile Organics by SIM - Westborough Lab								
8270E-SIM	Batch QC	WG1855371-3	Acenaphthylene	LCSD	24	20	01	non-directional bias

ORGANICS

VOLATILES

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-01 D
Client ID: MW-1R
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 14:15
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 141,8260D
Analytical Date: 11/20/23 13:43
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	10	--	5
1,1-Dichloroethane	ND		ug/l	5.0	--	5
Chloroform	ND		ug/l	5.0	--	5
Carbon tetrachloride	ND		ug/l	5.0	--	5
1,2-Dichloropropane	ND		ug/l	5.0	--	5
Dibromochloromethane	ND		ug/l	5.0	--	5
1,1,2-Trichloroethane	ND		ug/l	5.0	--	5
Tetrachloroethene	ND		ug/l	5.0	--	5
Chlorobenzene	ND		ug/l	5.0	--	5
Trichlorofluoromethane	ND		ug/l	10	--	5
1,2-Dichloroethane	ND		ug/l	5.0	--	5
1,1,1-Trichloroethane	ND		ug/l	5.0	--	5
Bromodichloromethane	ND		ug/l	5.0	--	5
trans-1,3-Dichloropropene	ND		ug/l	2.0	--	5
cis-1,3-Dichloropropene	ND		ug/l	2.0	--	5
1,3-Dichloropropene, Total	ND		ug/l	2.0	--	5
1,1-Dichloropropene	ND		ug/l	10	--	5
Bromoform	ND		ug/l	10	--	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Benzene	ND		ug/l	2.5	--	5
Toluene	ND		ug/l	5.0	--	5
Ethylbenzene	ND		ug/l	5.0	--	5
Chloromethane	ND		ug/l	10	--	5
Bromomethane	ND		ug/l	10	--	5
Vinyl chloride	ND		ug/l	5.0	--	5
Chloroethane	ND		ug/l	10	--	5
1,1-Dichloroethene	ND		ug/l	5.0	--	5
trans-1,2-Dichloroethene	ND		ug/l	5.0	--	5

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-01 D Date Collected: 11/14/23 14:15

Client ID: MW-1R Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	5.0	--	5
1,2-Dichlorobenzene	ND		ug/l	5.0	--	5
1,3-Dichlorobenzene	ND		ug/l	5.0	--	5
1,4-Dichlorobenzene	ND		ug/l	5.0	--	5
Methyl tert butyl ether	ND		ug/l	10	--	5
p/m-Xylene	ND		ug/l	10	--	5
o-Xylene	ND		ug/l	5.0	--	5
Xylenes, Total	ND		ug/l	5.0	--	5
cis-1,2-Dichloroethene	ND		ug/l	5.0	--	5
1,2-Dichloroethene, Total	ND		ug/l	5.0	--	5
Dibromomethane	ND		ug/l	10	--	5
1,2,3-Trichloropropane	ND		ug/l	10	--	5
Styrene	ND		ug/l	5.0	--	5
Dichlorodifluoromethane	ND		ug/l	10	--	5
Acetone	ND		ug/l	25	--	5
Carbon disulfide	ND		ug/l	10	--	5
Methyl ethyl ketone	ND		ug/l	25	--	5
Methyl isobutyl ketone	ND		ug/l	25	--	5
2-Hexanone	ND		ug/l	25	--	5
Bromochloromethane	ND		ug/l	10	--	5
Tetrahydrofuran	ND		ug/l	10	--	5
2,2-Dichloropropane	ND		ug/l	10	--	5
1,2-Dibromoethane	ND		ug/l	10	--	5
1,3-Dichloropropane	ND		ug/l	10	--	5
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Bromobenzene	ND		ug/l	10	--	5
n-Butylbenzene	ND		ug/l	10	--	5
sec-Butylbenzene	ND		ug/l	10	--	5
tert-Butylbenzene	ND		ug/l	10	--	5
o-Chlorotoluene	ND		ug/l	10	--	5
p-Chlorotoluene	ND		ug/l	10	--	5
1,2-Dibromo-3-chloropropane	ND		ug/l	10	--	5
Hexachlorobutadiene	ND		ug/l	3.0	--	5
Isopropylbenzene	ND		ug/l	10	--	5
p-Isopropyltoluene	ND		ug/l	10	--	5
Naphthalene	ND		ug/l	10	--	5
n-Propylbenzene	ND		ug/l	10	--	5

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-01 D Date Collected: 11/14/23 14:15

Client ID: MW-1R Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	10	--	5
1,2,4-Trichlorobenzene	ND		ug/l	10	--	5
1,3,5-Trimethylbenzene	ND		ug/l	10	--	5
1,2,4-Trimethylbenzene	ND		ug/l	10	--	5
Diethyl ether	ND		ug/l	10	--	5
Diisopropyl Ether	ND		ug/l	10	--	5
Ethyl-Tert-Butyl-Ether	ND		ug/l	10	--	5
Tertiary-Amyl Methyl Ether	ND		ug/l	10	--	5
1,4-Dioxane	ND		ug/l	1200	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	121		70-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-02 Date Collected: 11/14/23 11:10
Client ID: MW-3A Date Received: 11/15/23
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 141,8260D
Analytical Date: 11/20/23 14:06
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-02 Date Collected: 11/14/23 11:10

Client ID: MW-3A Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	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	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	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	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-02 Date Collected: 11/14/23 11:10

Client ID: MW-3A Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	118		70-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-04 Date Collected: 11/14/23 13:05

Client ID: MW-4A Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 11/20/23 14:29

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-04 Date Collected: 11/14/23 13:05

Client ID: MW-4A Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	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	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	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	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-04 Date Collected: 11/14/23 13:05

Client ID: MW-4A Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	119		70-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-05 Date Collected: 11/14/23 09:55

Client ID: MW-5 Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 11/20/23 14:52

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-05 Date Collected: 11/14/23 09:55

Client ID: MW-5 Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	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	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	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	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-05 Date Collected: 11/14/23 09:55

Client ID: MW-5 Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	120		70-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-07 Date Collected: 11/06/23 00:00

Client ID: TRIP BLANK Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 141,8260D

Analytical Date: 11/18/23 08:20

Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-07 Date Collected: 11/06/23 00:00

Client ID: TRIP BLANK Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	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	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	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	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-07 Date Collected: 11/06/23 00:00

Client ID: TRIP BLANK Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	103		70-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 11/18/23 07:57
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 07 Batch: WG1854484-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 11/18/23 07:57
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 07 Batch: WG1854484-5					
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	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 11/18/23 07:57
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 07 Batch: WG1854484-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 11/20/23 07:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1854588-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 11/20/23 07:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1854588-5					
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	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8260D
Analytical Date: 11/20/23 07:16
Analyst: MCM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1854588-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	111		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG1854484-3 WG1854484-4								
Methylene chloride	**69**	Q	74		70-130	7		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	99		95		70-130	4		20
Carbon tetrachloride	96		95		70-130	1		20
1,2-Dichloropropane	100		99		70-130	1		20
Dibromochloromethane	94		96		70-130	2		20
1,1,2-Trichloroethane	110		100		70-130	10		20
Tetrachloroethene	95		93		70-130	2		20
Chlorobenzene	100		98		70-130	2		20
Trichlorofluoromethane	75		83		70-130	10		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	96		94		70-130	2		20
Bromodichloromethane	96		96		70-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	99		98		70-130	1		20
1,1-Dichloropropene	99		96		70-130	3		20
Bromoform	91		96		70-130	5		20
1,1,2,2-Tetrachloroethane	100		110		70-130	10		20
Benzene	100		98		70-130	2		20
Toluene	99		96		70-130	3		20
Ethylbenzene	100		97		70-130	3		20
Chloromethane	110		100		70-130	10		20
Bromomethane	**52**	Q	**50**	Q	70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG1854484-3 WG1854484-4								
Vinyl chloride	110		98		70-130	12		20
Chloroethane	**62**	Q	**60**	Q	70-130	3		20
1,1-Dichloroethene	77		**68**	Q	70-130	12		20
trans-1,2-Dichloroethene	81		**66**	Q	70-130	20		20
Trichloroethene	95		91		70-130	4		20
1,2-Dichlorobenzene	100		97		70-130	3		20
1,3-Dichlorobenzene	100		96		70-130	4		20
1,4-Dichlorobenzene	99		96		70-130	3		20
Methyl tert butyl ether	84		77		70-130	9		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	100		95		70-130	5		20
Dibromomethane	95		98		70-130	3		20
1,2,3-Trichloropropane	110		110		70-130	0		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	98		93		70-130	5		20
Acetone	84		95		70-130	12		20
Carbon disulfide	86		**68**	Q	70-130	**23**	Q	20
Methyl ethyl ketone	90		93		70-130	3		20
Methyl isobutyl ketone	92		100		70-130	8		20
2-Hexanone	95		100		70-130	5		20
Bromochloromethane	100		97		70-130	3		20
Tetrahydrofuran	100		110		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG1854484-3 WG1854484-4								
2,2-Dichloropropane	97		93		70-130	4		20
1,2-Dibromoethane	99		99		70-130	0		20
1,3-Dichloropropane	110		100		70-130	10		20
1,1,1,2-Tetrachloroethane	97		96		70-130	1		20
Bromobenzene	96		96		70-130	0		20
n-Butylbenzene	95		91		70-130	4		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	98		99		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	86		97		70-130	12		20
Hexachlorobutadiene	99		86		70-130	14		20
Isopropylbenzene	99		98		70-130	1		20
p-Isopropyltoluene	92		89		70-130	3		20
Naphthalene	83		87		70-130	5		20
n-Propylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	93		94		70-130	1		20
1,2,4-Trichlorobenzene	84		83		70-130	1		20
1,3,5-Trimethylbenzene	100		100		70-130	0		20
1,2,4-Trimethylbenzene	96		96		70-130	0		20
Diethyl ether	78		**67**	Q	70-130	15		20
Diisopropyl Ether	100		100		70-130	0		20
Ethyl-Tert-Butyl-Ether	99		100		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG1854484-3 WG1854484-4								
Tertiary-Amyl Methyl Ether	96		98		70-130	2		20
1,4-Dioxane	96		102		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		104		70-130
Toluene-d8	102		100		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	101		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1854588-3 WG1854588-4								
Methylene chloride	81		74		70-130	9		20
1,1-Dichloroethane	110		97		70-130	13		20
Chloroform	110		98		70-130	12		20
Carbon tetrachloride	120		110		70-130	9		20
1,2-Dichloropropane	100		94		70-130	6		20
Dibromochloromethane	100		93		70-130	7		20
1,1,2-Trichloroethane	99		92		70-130	7		20
Tetrachloroethene	110		99		70-130	11		20
Chlorobenzene	110		100		70-130	10		20
Trichlorofluoromethane	100		91		70-130	9		20
1,2-Dichloroethane	110		98		70-130	12		20
1,1,1-Trichloroethane	110		100		70-130	10		20
Bromodichloromethane	110		98		70-130	12		20
trans-1,3-Dichloropropene	97		89		70-130	9		20
cis-1,3-Dichloropropene	110		98		70-130	12		20
1,1-Dichloropropene	110		98		70-130	12		20
Bromoform	93		89		70-130	4		20
1,1,2,2-Tetrachloroethane	92		87		70-130	6		20
Benzene	110		99		70-130	11		20
Toluene	100		92		70-130	8		20
Ethylbenzene	100		94		70-130	6		20
Chloromethane	98		87		70-130	12		20
Bromomethane	77		72		70-130	7		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1854588-3 WG1854588-4								
Vinyl chloride	77		70		70-130	10		20
Chloroethane	80		71		70-130	12		20
1,1-Dichloroethene	88		77		70-130	13		20
trans-1,2-Dichloroethene	85		77		70-130	10		20
Trichloroethene	110		97		70-130	13		20
1,2-Dichlorobenzene	110		98		70-130	12		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	110		98		70-130	12		20
Methyl tert butyl ether	85		80		70-130	6		20
p/m-Xylene	115		100		70-130	14		20
o-Xylene	115		100		70-130	14		20
cis-1,2-Dichloroethene	110		96		70-130	14		20
Dibromomethane	100		95		70-130	5		20
1,2,3-Trichloropropane	94		91		70-130	3		20
Styrene	110		100		70-130	10		20
Dichlorodifluoromethane	110		95		70-130	15		20
Acetone	80		76		70-130	5		20
Carbon disulfide	82		73		70-130	12		20
Methyl ethyl ketone	85		83		70-130	2		20
Methyl isobutyl ketone	82		77		70-130	6		20
2-Hexanone	85		82		70-130	4		20
Bromochloromethane	120		110		70-130	9		20
Tetrahydrofuran	97		98		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1854588-3 WG1854588-4								
2,2-Dichloropropane	110		96		70-130	14		20
1,2-Dibromoethane	100		96		70-130	4		20
1,3-Dichloropropane	100		92		70-130	8		20
1,1,1,2-Tetrachloroethane	110		99		70-130	11		20
Bromobenzene	110		97		70-130	13		20
n-Butylbenzene	94		84		70-130	11		20
sec-Butylbenzene	110		100		70-130	10		20
tert-Butylbenzene	110		98		70-130	12		20
o-Chlorotoluene	100		92		70-130	8		20
p-Chlorotoluene	100		92		70-130	8		20
1,2-Dibromo-3-chloropropane	90		87		70-130	3		20
Hexachlorobutadiene	92		84		70-130	9		20
Isopropylbenzene	110		97		70-130	13		20
p-Isopropyltoluene	100		89		70-130	12		20
Naphthalene	83		79		70-130	5		20
n-Propylbenzene	100		92		70-130	8		20
1,2,3-Trichlorobenzene	100		92		70-130	8		20
1,2,4-Trichlorobenzene	91		82		70-130	10		20
1,3,5-Trimethylbenzene	110		99		70-130	11		20
1,2,4-Trimethylbenzene	100		93		70-130	7		20
Diethyl ether	80		75		70-130	6		20
Diisopropyl Ether	96		87		70-130	10		20
Ethyl-Tert-Butyl-Ether	100		94		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1854588-3 WG1854588-4								
Tertiary-Amyl Methyl Ether	100		96		70-130	4		20
1,4-Dioxane	92		84		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		105		70-130
Toluene-d8	92		93		70-130
4-Bromofluorobenzene	88		89		70-130
Dibromofluoromethane	106		108		70-130

SEMIVOLATILES

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-01
Client ID: MW-1R
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 14:15
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 11/22/23 13:38
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 11/21/23 18:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	92		30-130
2-Fluorobiphenyl	102		30-130
4-Terphenyl-d14	88		30-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-02
Client ID: MW-3A
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 11:10
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 11/20/23 17:38
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/17/23 19:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	80		30-130
2-Fluorobiphenyl	77		30-130
4-Terphenyl-d14	69		30-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-04
Client ID: MW-4A
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 13:05
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 11/20/23 17:54
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/17/23 19:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	82		30-130
2-Fluorobiphenyl	78		30-130
4-Terphenyl-d14	72		30-130

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-05
Client ID: MW-5
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 09:55
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 141,8270E-SIM
Analytical Date: 11/20/23 18:11
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/17/23 19:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP PAHs by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	74		30-130
2-Fluorobiphenyl	69		30-130
4-Terphenyl-d14	63		30-130

Project Name: MERCHANT/CS&R
Project Number: K10740A
Lab Number: L2367945
Report Date: 11/27/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8270E-SIM
Analytical Date: 11/20/23 17:05
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/17/23 19:39

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 02,04-05 Batch: WG1853938-1					
Acenaphthene	ND		ug/l	0.10	--
Fluoranthene	ND		ug/l	0.10	--
Naphthalene	ND		ug/l	0.10	--
Benzo(a)anthracene	ND		ug/l	0.10	--
Benzo(a)pyrene	ND		ug/l	0.10	--
Benzo(b)fluoranthene	ND		ug/l	0.10	--
Benzo(k)fluoranthene	ND		ug/l	0.10	--
Chrysene	ND		ug/l	0.10	--
Acenaphthylene	ND		ug/l	0.10	--
Anthracene	ND		ug/l	0.10	--
Benzo(ghi)perylene	ND		ug/l	0.10	--
Fluorene	ND		ug/l	0.10	--
Phenanthrene	ND		ug/l	0.10	--
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--
Pyrene	ND		ug/l	0.10	--
2-Methylnaphthalene	ND		ug/l	0.10	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	71		30-130
2-Fluorobiphenyl	68		30-130
4-Terphenyl-d14	74		30-130

Project Name: MERCHANT/CS&R
Project Number: K10740A
Lab Number: L2367945
Report Date: 11/27/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 141,8270E-SIM
Analytical Date: 11/22/23 13:22
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 11/21/23 18:46

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 01 Batch: WG1855371-1					
Acenaphthene	ND		ug/l	0.10	--
Fluoranthene	ND		ug/l	0.10	--
Naphthalene	ND		ug/l	0.10	--
Benzo(a)anthracene	ND		ug/l	0.10	--
Benzo(a)pyrene	ND		ug/l	0.10	--
Benzo(b)fluoranthene	ND		ug/l	0.10	--
Benzo(k)fluoranthene	ND		ug/l	0.10	--
Chrysene	ND		ug/l	0.10	--
Acenaphthylene	ND		ug/l	0.10	--
Anthracene	ND		ug/l	0.10	--
Benzo(ghi)perylene	ND		ug/l	0.10	--
Fluorene	ND		ug/l	0.10	--
Phenanthrene	ND		ug/l	0.10	--
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--
Pyrene	ND		ug/l	0.10	--
2-Methylnaphthalene	ND		ug/l	0.10	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	94		30-130
2-Fluorobiphenyl	89		30-130
4-Terphenyl-d14	95		30-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 02,04-05 Batch: WG1853938-2 WG1853938-3								
Acenaphthene	54		54		40-140	0		20
Fluoranthene	66		66		40-140	0		20
Naphthalene	54		53		40-140	2		20
Benzo(a)anthracene	64		66		40-140	3		20
Benzo(a)pyrene	66		68		40-140	3		20
Benzo(b)fluoranthene	66		65		40-140	2		20
Benzo(k)fluoranthene	62		66		40-140	6		20
Chrysene	60		60		40-140	0		20
Acenaphthylene	64		62		40-140	3		20
Anthracene	59		59		40-140	0		20
Benzo(ghi)perylene	55		58		40-140	5		20
Fluorene	58		58		40-140	0		20
Phenanthrene	59		58		40-140	2		20
Dibenzo(a,h)anthracene	58		61		40-140	5		20
Indeno(1,2,3-cd)pyrene	68		75		40-140	10		20
Pyrene	67		67		40-140	0		20
2-Methylnaphthalene	61		61		40-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 02,04-05 Batch: WG1853938-2 WG1853938-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	74		72		30-130
2-Fluorobiphenyl	72		70		30-130
4-Terphenyl-d14	72		74		30-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01 Batch: WG1855371-2 WG1855371-3								
Acenaphthene	81		73		40-140	10		20
Fluoranthene	101		84		40-140	18		20
Naphthalene	80		74		40-140	8		20
Benzo(a)anthracene	98		85		40-140	14		20
Benzo(a)pyrene	96		85		40-140	12		20
Benzo(b)fluoranthene	92		77		40-140	18		20
Benzo(k)fluoranthene	89		76		40-140	16		20
Chrysene	89		80		40-140	11		20
Acenaphthylene	90		71		40-140	**24**	Q	20
Anthracene	93		82		40-140	13		20
Benzo(ghi)perylene	77		88		40-140	13		20
Fluorene	86		73		40-140	16		20
Phenanthrene	85		76		40-140	11		20
Dibenzo(a,h)anthracene	89		95		40-140	7		20
Indeno(1,2,3-cd)pyrene	103		114		40-140	10		20
Pyrene	104		87		40-140	18		20
2-Methylnaphthalene	86		74		40-140	15		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01 Batch: WG1855371-2 WG1855371-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	94		79		30-130
2-Fluorobiphenyl	85		70		30-130
4-Terphenyl-d14	96		78		30-130

METALS

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-01 Date Collected: 11/14/23 14:15

Client ID: MW-1R Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA 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
MCP Total Metals - Mansfield Lab											
Arsenic, Total	0.0578		mg/l	0.0050	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Barium, Total	0.0456		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Cadmium, Total	ND		mg/l	0.0040	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Calcium, Total	99.7		mg/l	0.100	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Chromium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Copper, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/20/23 10:52	EPA 3005A	97,6010D	DMB
Iron, Total	63.5		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Lead, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Manganese, Total	2.14		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Mercury, Total	ND		mg/l	0.0002	--	1	11/17/23 14:21	11/20/23 16:36	EPA 7470A	97,7470A	DJR
Selenium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Silver, Total	ND		mg/l	0.0070	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Sodium, Total	15.8		mg/l	2.00	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM
Zinc, Total	ND		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 16:10	EPA 3005A	97,6010D	MAM

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-02 Date Collected: 11/14/23 11:10

Client ID: MW-3A Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA 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
MCP Total Metals - Mansfield Lab											
Arsenic, Total	0.0595		mg/l	0.0050	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Barium, Total	0.0441		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Cadmium, Total	ND		mg/l	0.0040	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Calcium, Total	40.4		mg/l	0.100	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Chromium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Copper, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Iron, Total	45.6		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Lead, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Manganese, Total	2.75		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Mercury, Total	ND		mg/l	0.0002	--	1	11/17/23 14:21	11/20/23 16:39	EPA 7470A	97,7470A	DJR
Selenium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Silver, Total	ND		mg/l	0.0070	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Sodium, Total	35.3		mg/l	2.00	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM
Zinc, Total	ND		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 17:01	EPA 3005A	97,6010D	MAM

Project Name: MERCHANT/CS&R
Lab Number: L2367945
Project Number: K10740A
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-03
Client ID: MW-3B
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA
Date Collected: 11/14/23 12:05
Date Received: 11/15/23
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
MCP Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	11/17/23 13:44	11/18/23 17:06	EPA 3005A	97,6010D	MAM
Manganese, Total	0.737		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:06	EPA 3005A	97,6010D	MAM

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-04 Date Collected: 11/14/23 13:05

Client ID: MW-4A Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA 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
MCP Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Barium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Cadmium, Total	ND		mg/l	0.0040	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Calcium, Total	6.68		mg/l	0.100	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Chromium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Copper, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Iron, Total	ND		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Lead, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Manganese, Total	1.11		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Mercury, Total	ND		mg/l	0.0002	--	1	11/17/23 14:21	11/20/23 16:42	EPA 7470A	97,7470A	DJR
Selenium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Silver, Total	ND		mg/l	0.0070	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Sodium, Total	11.5		mg/l	2.00	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM
Zinc, Total	ND		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 17:10	EPA 3005A	97,6010D	MAM

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-05 Date Collected: 11/14/23 09:55

Client ID: MW-5 Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA 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
MCP Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Barium, Total	0.0454		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Cadmium, Total	ND		mg/l	0.0040	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Calcium, Total	21.2		mg/l	0.100	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Chromium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Copper, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Iron, Total	10.8		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Lead, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Manganese, Total	12.9		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Mercury, Total	ND		mg/l	0.0002	--	1	11/17/23 14:21	11/20/23 17:03	EPA 7470A	97,7470A	DJR
Selenium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Silver, Total	ND		mg/l	0.0070	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Sodium, Total	30.1		mg/l	2.00	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM
Zinc, Total	ND		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 17:15	EPA 3005A	97,6010D	MAM

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-06 Date Collected: 11/14/23 10:30

Client ID: MW-5B Date Received: 11/15/23

Sample Location: 1515 FREEMANS WAY, BREWSTER, MA 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
MCP Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	11/17/23 13:44	11/18/23 17:20	EPA 3005A	97,6010D	MAM
Manganese, Total	0.101		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 17:20	EPA 3005A	97,6010D	MAM

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-06 Batch: WG1853164-1										
Arsenic, Total	ND		mg/l	0.0050	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Barium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Cadmium, Total	ND		mg/l	0.0040	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Calcium, Total	ND		mg/l	0.100	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Chromium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Copper, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/20/23 10:39	97,6010D	DMB
Iron, Total	ND		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Lead, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Manganese, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Selenium, Total	ND		mg/l	0.0100	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Silver, Total	ND		mg/l	0.0070	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Sodium, Total	ND		mg/l	2.00	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM
Zinc, Total	ND		mg/l	0.0500	--	1	11/17/23 13:44	11/18/23 15:17	97,6010D	MAM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1853166-1										
Mercury, Total	ND		mg/l	0.0002	--	1	11/17/23 14:21	11/20/23 16:16	97,7470A	DJR

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG1853164-2 WG1853164-3								
Arsenic, Total	102		104		80-120	2		20
Barium, Total	104		104		80-120	0		20
Cadmium, Total	100		100		80-120	0		20
Calcium, Total	105		106		80-120	1		20
Chromium, Total	109		110		80-120	1		20
Copper, Total	95		95		80-120	0		20
Iron, Total	103		105		80-120	2		20
Lead, Total	102		104		80-120	2		20
Manganese, Total	102		101		80-120	1		20
Selenium, Total	103		103		80-120	0		20
Silver, Total	106		109		80-120	3		20
Sodium, Total	109		108		80-120	1		20
Zinc, Total	99		101		80-120	2		20
MCP Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1853166-2 WG1853166-3								
Mercury, Total	92		94		80-120	2		20

INORGANICS
&
MISCELLANEOUS

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-01
Client ID: MW-1R
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 14:15
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	11/17/23 11:50	11/17/23 14:52	97,9014	JER
General Chemistry - Westborough Lab										
Color, Apparent	350		A.P.C.U.	80	--	16	-	11/16/23 01:05	121,2120B	CAR
Alkalinity, Total	373.		mg CaCO3/L	2.00	NA	1	-	11/20/23 08:50	121,2320B	MKT
Solids, Total Dissolved	420		mg/l	20	--	2	-	11/21/23 05:08	121,2540C	DEW
Chloride	28.		mg/l	1.0	--	1	-	11/20/23 21:36	1,9251	TLH
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/16/23 05:28	121,4500NO3-F	KAF
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	11/16/23 05:28	121,4500NO3-F	KAF
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	--	1	-	11/16/23 05:28	121,4500NO3-F	KAF
Total Nitrogen	9.4		mg/l	0.30	--	1	-	11/21/23 18:15	107,-	MRM
Nitrogen, Total Kjeldahl	9.41		mg/l	0.300	--	1	11/17/23 19:07	11/20/23 11:15	121,4500NH3-H	KEP
Phosphorus, Total	1.20		mg/l	0.050	--	5	11/21/23 10:29	11/22/23 08:14	121,4500P-E	EYA
Sulfate	ND		mg/l	10	--	1	11/20/23 16:00	11/20/23 16:00	1,9038	MRW
Chemical Oxygen Demand	98.		mg/l	20	--	1	11/17/23 18:00	11/17/23 20:51	44,410.4	JRG
Total Organic Carbon	33.		mg/l	2.0	--	4	-	11/21/23 02:57	1,9060A	DEW
Tannin & Lignin	5.3		mg/l	0.20	--	1	-	11/22/23 13:22	121,5550B	MKT
Formaldehyde by EPA 8315A - Westborough Lab										
Formaldehyde	ND		mg/l	0.075	--	1	11/16/23 12:30	11/16/23 17:51	1,8315A	AAS

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-02
Client ID: MW-3A
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 11:10
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	11/17/23 11:50	11/17/23 14:53	97,9014	JER
General Chemistry - Westborough Lab										
Color, Apparent	330		A.P.C.U.	50	--	10	-	11/16/23 01:05	121,2120B	CAR
Alkalinity, Total	204.		mg CaCO3/L	2.00	NA	1	-	11/20/23 08:50	121,2320B	MKT
Solids, Total Dissolved	530		mg/l	13	--	1.3	-	11/21/23 05:08	121,2540C	DEW
Chloride	63.		mg/l	1.0	--	1	-	11/20/23 20:24	1,9251	TLH
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/16/23 05:34	121,4500NO3-F	KAF
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	11/16/23 05:34	121,4500NO3-F	KAF
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	--	1	-	11/16/23 05:34	121,4500NO3-F	KAF
Total Nitrogen	5.3		mg/l	0.30	--	1	-	11/21/23 18:15	107,-	MRM
Nitrogen, Total Kjeldahl	5.30		mg/l	0.300	--	1	11/17/23 19:07	11/20/23 11:16	121,4500NH3-H	KEP
Phosphorus, Total	0.176		mg/l	0.010	--	1	11/21/23 10:29	11/22/23 07:52	121,4500P-E	EYA
Sulfate	63.		mg/l	25	--	2.5	11/20/23 16:00	11/20/23 16:00	1,9038	MRW
Chemical Oxygen Demand	62.		mg/l	20	--	1	11/17/23 18:00	11/17/23 20:51	44,410.4	JRG
Total Organic Carbon	22.		mg/l	4.0	--	8	-	11/21/23 02:57	1,9060A	DEW
Tannin & Lignin	3.2		mg/l	0.20	--	1	-	11/22/23 13:22	121,5550B	MKT
Formaldehyde by EPA 8315A - Westborough Lab										
Formaldehyde	ND		mg/l	0.075	--	1	11/16/23 12:30	11/16/23 18:11	1,8315A	AAS

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-03
Client ID: MW-3B
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 12:05
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Dissolved	40.		mg/l	13	--	1.3	-	11/21/23 05:08	121,2540C	DEW

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-04
Client ID: MW-4A
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 13:05
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	11/17/23 11:50	11/17/23 14:54	97,9014	JER
General Chemistry - Westborough Lab										
Color, Apparent	6.0		A.P.C.U.	5.0	--	1	-	11/16/23 01:05	121,2120B	CAR
Alkalinity, Total	9.60		mg CaCO3/L	2.00	NA	1	-	11/20/23 08:50	121,2320B	MKT
Solids, Total Dissolved	99.		mg/l	13	--	1.3	-	11/21/23 05:08	121,2540C	DEW
Chloride	20.		mg/l	1.0	--	1	-	11/20/23 20:35	1,9251	TLH
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/16/23 05:35	121,4500NO3-F	KAF
Nitrogen, Nitrate	3.74		mg/l	0.100	--	1	-	11/16/23 05:35	121,4500NO3-F	KAF
Nitrogen, Nitrate/Nitrite	3.7		mg/l	0.10	--	1	-	11/16/23 05:35	121,4500NO3-F	KAF
Total Nitrogen	3.7		mg/l	0.30	--	1	-	11/21/23 18:15	107,-	MRM
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	11/17/23 19:07	11/20/23 11:17	121,4500NH3-H	KEP
Phosphorus, Total	0.036		mg/l	0.010	--	1	11/21/23 10:29	11/22/23 07:53	121,4500P-E	EYA
Sulfate	ND		mg/l	10	--	1	11/20/23 16:00	11/20/23 16:00	1,9038	MRW
Chemical Oxygen Demand	ND		mg/l	20	--	1	11/17/23 18:00	11/17/23 20:51	44,410.4	JRG
Total Organic Carbon	1.0		mg/l	0.50	--	1	-	11/21/23 02:57	1,9060A	DEW
Tannin & Lignin	ND		mg/l	0.20	--	1	-	11/22/23 13:23	121,5550B	MKT
Formaldehyde by EPA 8315A - Westborough Lab										
Formaldehyde	ND		mg/l	0.075	--	1	11/16/23 12:30	11/16/23 18:31	1,8315A	AAS

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-05
Client ID: MW-5
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 09:55
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	11/17/23 11:50	11/17/23 14:55	97,9014	JER
General Chemistry - Westborough Lab										
Color, Apparent	21		A.P.C.U.	5.0	--	1	-	11/16/23 01:05	121,2120B	CAR
Alkalinity, Total	144.		mg CaCO3/L	2.00	NA	1	-	11/20/23 08:50	121,2320B	MKT
Solids, Total Dissolved	310		mg/l	13	--	1.3	-	11/21/23 05:08	121,2540C	DEW
Chloride	57.		mg/l	1.0	--	1	-	11/20/23 20:36	1,9251	TLH
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/16/23 05:44	121,4500NO3-F	KAF
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	11/16/23 05:44	121,4500NO3-F	KAF
Nitrogen, Nitrate/Nitrite	0.10		mg/l	0.10	--	1	-	11/16/23 05:44	121,4500NO3-F	KAF
Total Nitrogen	7.0		mg/l	0.30	--	1	-	11/21/23 18:15	107,-	MRM
Nitrogen, Total Kjeldahl	6.94		mg/l	0.300	--	1	11/17/23 19:07	11/20/23 11:18	121,4500NH3-H	KEP
Phosphorus, Total	0.160		mg/l	0.010	--	1	11/21/23 10:29	11/22/23 07:54	121,4500P-E	EYA
Sulfate	52.		mg/l	25	--	2.5	11/20/23 16:00	11/20/23 16:00	1,9038	MRW
Chemical Oxygen Demand	37.		mg/l	20	--	1	11/17/23 18:00	11/17/23 20:52	44,410.4	JRG
Total Organic Carbon	7.7		mg/l	0.50	--	1	-	11/21/23 02:57	1,9060A	DEW
Tannin & Lignin	2.0		mg/l	0.20	--	1	-	11/22/23 13:23	121,5550B	MKT
Formaldehyde by EPA 8315A - Westborough Lab										
Formaldehyde	ND		mg/l	0.075	--	1	11/16/23 12:30	11/16/23 19:33	1,8315A	AAS

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

SAMPLE RESULTS

Lab ID: L2367945-06
Client ID: MW-5B
Sample Location: 1515 FREEMANS WAY, BREWSTER, MA

Date Collected: 11/14/23 10:30
Date Received: 11/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Dissolved	31.		mg/l	13	--	1.3	-	11/21/23 05:08	121,2540C	DEW

Project Name: MERCHANT/CS&R **Lab Number:** L2367945

Project Number: K10740A **Report Date:** 11/27/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1852883-1										
Nitrogen, Nitrite	ND		mg/l	0.050	--	1	-	11/16/23 04:21	121,4500NO3-F	KAF
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1852891-1										
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	11/16/23 04:35	121,4500NO3-F	KAF
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1853028-1										
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	--	1	-	11/16/23 04:35	121,4500NO3-F	KAF
Formaldehyde by EPA 8315A - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1853220-1										
Formaldehyde	ND		mg/l	0.075	--	1	11/16/23 12:30	11/16/23 15:28	1,8315A	AAS
MCP General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1853670-1										
Cyanide, Total	ND		mg/l	0.005	--	1	11/17/23 11:50	11/17/23 14:47	97,9014	JER
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1853723-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	--	1	11/17/23 19:07	11/20/23 11:02	121,4500NH3-H	KEP
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1853915-1										
Chemical Oxygen Demand	ND		mg/l	20	--	1	11/17/23 18:00	11/17/23 20:50	44,410.4	JRG
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1854626-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	11/20/23 08:50	121,2320B	MKT
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1854817-1										
Sulfate	ND		mg/l	10	--	1	11/20/23 16:00	11/20/23 16:00	1,9038	MRW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1854831-1										
Chloride	ND		mg/l	1.0	--	1	-	11/20/23 20:05	1,9251	TLH
General Chemistry - Westborough Lab for sample(s): 04-05 Batch: WG1854834-1										
Chloride	ND		mg/l	1.0	--	1	-	11/20/23 20:05	1,9251	TLH
General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG1854949-1										
Solids, Total Dissolved	ND		mg/l	10	--	1	-	11/21/23 05:08	121,2540C	DEW
General Chemistry - Westborough Lab for sample(s): 05 Batch: WG1854961-1										
Total Organic Carbon	ND		mg/l	0.50	--	1	-	11/21/23 02:57	1,9060A	DEW
General Chemistry - Westborough Lab for sample(s): 01-02,04 Batch: WG1854962-1										
Total Organic Carbon	ND		mg/l	0.50	--	1	-	11/21/23 02:57	1,9060A	DEW

Project Name: MERCHANT/CS&R
Project Number: K10740A
Lab Number: L2367945
Report Date: 11/27/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1855057-1										
Phosphorus, Total	ND		mg/l	0.010	--	1	11/21/23 10:29	11/22/23 07:28	121,4500P-E	EYA
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1855743-1										
Tannin & Lignin	ND		mg/l	0.20	--	1	-	11/22/23 13:21	121,5550B	MKT

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1852883-2								
Nitrogen, Nitrite	104		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1852891-2								
Nitrogen, Nitrate	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1853028-2								
Nitrogen, Nitrate/Nitrite	98		-		90-110	-		20
Formaldehyde by EPA 8315A - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1853220-2								
Formaldehyde	102		-		39-153	-		
MCP General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1853670-2 WG1853670-3								
Cyanide, Total	86		80		80-120	7		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1853723-2								
Nitrogen, Total Kjeldahl	98		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1853915-2								
Chemical Oxygen Demand	96		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1854626-2					
Alkalinity, Total	108	-	90-110	-	10
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1854817-2					
Sulfate	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1854831-2					
Chloride	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 04-05 Batch: WG1854834-2					
Chloride	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1854949-2					
Solids, Total Dissolved	82	-	80-120	-	
General Chemistry - Westborough Lab Associated sample(s): 05 Batch: WG1854961-2					
Total Organic Carbon	99	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1854962-2					
Total Organic Carbon	99	-	90-110	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1855057-2					
Phosphorus, Total	99	-	80-120	-	
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1855743-2					
Tannin & Lignin	104	-	80-120	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1852883-4 QC Sample: L2367945-01 Client ID: MW-1R												
Nitrogen, Nitrite	ND	4	4.50	112		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1852891-4 QC Sample: L2367945-01 Client ID: MW-1R												
Nitrogen, Nitrate	ND	4	4.02	100		-	-		83-113	-		17
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1853028-4 QC Sample: L2367945-01 Client ID: MW-1R												
Nitrogen, Nitrate/Nitrite	ND	4	4.0	100		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1855743-4 QC Sample: L2367945-04 Client ID: MW-4A												
Tannin & Lignin	ND	1.6	1.5	91		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: MERCHANT/CS&R

Project Number: K10740A

Lab Number: L2367945

Report Date: 11/27/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1852865-1 QC Sample: L2367945-01 Client ID: MW-1R						
Color, Apparent	350	340	A.P.C.U.	3		
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1852883-3 QC Sample: L2367945-01 Client ID: MW-1R						
Nitrogen, Nitrite	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1852891-3 QC Sample: L2367945-01 Client ID: MW-1R						
Nitrogen, Nitrate	ND	ND	mg/l	NC		17
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1853028-3 QC Sample: L2367945-01 Client ID: MW-1R						
Nitrogen, Nitrate/Nitrite	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1855743-3 QC Sample: L2367945-04 Client ID: MW-4A						
Tannin & Lignin	ND	ND	mg/l	NC		20

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2367945-01A	Vial HCl preserved	C	NA		3.8	Y	Absent		MCP-8260-21(14)
L2367945-01B	Vial HCl preserved	C	NA		3.8	Y	Absent		MCP-8260-21(14)
L2367945-01C	Vial HCl preserved	C	NA		3.8	Y	Absent		MCP-8260-21(14)
L2367945-01D	Vial H2SO4 preserved	C	NA		3.8	Y	Absent		TOC-9060(28)
L2367945-01E	Vial H2SO4 preserved	C	NA		3.8	Y	Absent		TOC-9060(28)
L2367945-01F	Plastic 250ml unpreserved/No Headspace	C	NA		3.8	Y	Absent		ALK-T-2320(14)
L2367945-01G	Plastic 250ml HNO3 preserved	C	<2	<2	3.8	Y	Absent		MCP-CR-6010T-10(180),MCP-FE-6010T-10(180),MCP-MN-6010T-10(180),MCP-7470T-10(28),MCP-CA-6010T-10(180),MCP-AS-6010T-10(180),MCP-NA-6010T-10(180),MCP-CD-6010T-10(180),MCP-ZN-6010T-10(180),MCP-CU-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L2367945-01H	Plastic 250ml NaOH preserved	C	>12	>12	3.8	Y	Absent		MCP-TCN9014-10(14)
L2367945-01I	Plastic 250ml Zn Acetate/NaOH preserved	C	>9	>9	3.8	Y	Absent		SUB-SULFIDE()
L2367945-01J	Plastic 250ml Zn Acetate/NaOH preserved	C	>9	>9	3.8	Y	Absent		SUB-SULFIDE()
L2367945-01K	Plastic 950ml H2SO4 preserved	C	<2	<2	3.8	Y	Absent		TKN-4500(28),COD-410(28),TPHOS-4500(28),NO3/NO2-4500(28),TNITROGEN(28)
L2367945-01L	Plastic 950ml unpreserved	C	7	7	3.8	Y	Absent		CL-9251(28),SO4-9038(28),NO3-4500(2),NO2-4500NO3(2),T&L(),TDS-2540(7)
L2367945-01M	Amber 1000ml unpreserved	C	7	7	3.8	Y	Absent		COLOR-A-2120(2),FORM-8315(3)
L2367945-01N	Amber 1000ml unpreserved	C	7	7	3.8	Y	Absent		MCP-PAHSIM-21(7)
L2367945-01O	Amber 1000ml unpreserved	C	7	7	3.8	Y	Absent		MCP-PAHSIM-21(7)
L2367945-02A	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)
L2367945-02B	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2367945-02C	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)
L2367945-02D	Vial H2SO4 preserved	A	NA		4.9	Y	Absent		TOC-9060(28)
L2367945-02E	Vial H2SO4 preserved	A	NA		4.9	Y	Absent		TOC-9060(28)
L2367945-02F	Plastic 250ml unpreserved/No Headspace	A	NA		4.9	Y	Absent		ALK-T-2320(14)
L2367945-02G	Plastic 250ml HNO3 preserved	A	<2	<2	4.9	Y	Absent		MCP-CR-6010T-10(180),MCP-FE-6010T-10(180),MCP-MN-6010T-10(180),MCP-CA-6010T-10(180),MCP-AS-6010T-10(180),MCP-7470T-10(28),MCP-NA-6010T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-ZN-6010T-10(180),MCP-CU-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L2367945-02H	Plastic 250ml NaOH preserved	A	>12	>12	4.9	Y	Absent		MCP-TCN9014-10(14)
L2367945-02I	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	4.9	Y	Absent		SUB-SULFIDE()
L2367945-02J	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	4.9	Y	Absent		SUB-SULFIDE()
L2367945-02K	Plastic 950ml H2SO4 preserved	A	<2	<2	4.9	Y	Absent		TKN-4500(28),TPHOS-4500(28),COD-410(28),NO3/NO2-4500(28),TNITROGEN(28)
L2367945-02L	Plastic 950ml unpreserved	A	7	7	4.9	Y	Absent		SO4-9038(28),CL-9251(28),NO3-4500(2),NO2-4500NO3(2),TDS-2540(7),T&L()
L2367945-02M	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		COLOR-A-2120(2),FORM-8315(3)
L2367945-02N	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		MCP-PAHSIM-21(7)
L2367945-02O	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		MCP-PAHSIM-21(7)
L2367945-03A	Plastic 250ml unpreserved	B	7	7	4.3	Y	Absent		TDS-2540(7)
L2367945-03B	Plastic 250ml HNO3 preserved	B	<2	<2	4.3	Y	Absent		MCP-MN-6010T-10(180),MCP-AS-6010T-10(180)
L2367945-04A	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)
L2367945-04B	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)
L2367945-04C	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)
L2367945-04D	Vial H2SO4 preserved	A	NA		4.9	Y	Absent		TOC-9060(28)
L2367945-04E	Vial H2SO4 preserved	A	NA		4.9	Y	Absent		TOC-9060(28)
L2367945-04F	Plastic 250ml unpreserved/No Headspace	A	NA		4.9	Y	Absent		ALK-T-2320(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2367945-04G	Plastic 250ml HNO3 preserved	A	<2	<2	4.9	Y	Absent		MCP-FE-6010T-10(180),MCP-CR-6010T-10(180),MCP-MN-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-CA-6010T-10(180),MCP-NA-6010T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-ZN-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L2367945-04H	Plastic 250ml NaOH preserved	A	>12	>12	4.9	Y	Absent		MCP-TCN9014-10(14)
L2367945-04I	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	4.9	Y	Absent		SUB-SULFIDE()
L2367945-04J	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	4.9	Y	Absent		SUB-SULFIDE()
L2367945-04K	Plastic 950ml H2SO4 preserved	A	<2	<2	4.9	Y	Absent		TKN-4500(28),COD-410(28),TPHOS-4500(28),NO3/NO2-4500(28),TNITROGEN(28)
L2367945-04L	Plastic 950ml unpreserved	A	7	7	4.9	Y	Absent		CL-9251(28),SO4-9038(28),NO3-4500(2),NO2-4500NO3(2),TDS-2540(7),T&L()
L2367945-04M	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		COLOR-A-2120(2),FORM-8315(3)
L2367945-04N	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		MCP-PAHSIM-21(7)
L2367945-04O	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		MCP-PAHSIM-21(7)
L2367945-05A	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)
L2367945-05B	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)
L2367945-05C	Vial HCl preserved	A	NA		4.9	Y	Absent		MCP-8260-21(14)
L2367945-05D	Vial H2SO4 preserved	A	NA		4.9	Y	Absent		TOC-9060(28)
L2367945-05E	Vial H2SO4 preserved	A	NA		4.9	Y	Absent		TOC-9060(28)
L2367945-05F	Plastic 250ml unpreserved/No Headspace	A	NA		4.9	Y	Absent		ALK-T-2320(14)
L2367945-05G	Plastic 250ml HNO3 preserved	A	<2	<2	4.9	Y	Absent		MCP-CR-6010T-10(180),MCP-FE-6010T-10(180),MCP-MN-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-CA-6010T-10(180),MCP-NA-6010T-10(180),MCP-CD-6010T-10(180),MCP-ZN-6010T-10(180),MCP-CU-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L2367945-05H	Plastic 250ml NaOH preserved	A	>12	>12	4.9	Y	Absent		MCP-TCN9014-10(14)
L2367945-05I	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	4.9	Y	Absent		SUB-SULFIDE()
L2367945-05J	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	4.9	Y	Absent		SUB-SULFIDE()
L2367945-05K	Plastic 950ml H2SO4 preserved	A	<2	<2	4.9	Y	Absent		TKN-4500(28),COD-410(28),TPHOS-4500(28),NO3/NO2-4500(28),TNITROGEN(28)

*Values in parentheses indicate holding time in days

Project Name: MERCHANT/CS&R
Project Number: K10740A

Lab Number: L2367945
Report Date: 11/27/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2367945-05L	Plastic 950ml unpreserved	A	7	7	4.9	Y	Absent		SO4-9038(28),CL-9251(28),NO3-4500(2),NO2-4500NO3(2),TDS-2540(7),T&L()
L2367945-05M	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		COLOR-A-2120(2),FORM-8315(3)
L2367945-05N	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		MCP-PAHSIM-21(7)
L2367945-05O	Amber 1000ml unpreserved	A	7	7	4.9	Y	Absent		MCP-PAHSIM-21(7)
L2367945-06A	Plastic 250ml unpreserved	B	7	7	4.3	Y	Absent		TDS-2540(7)
L2367945-06B	Plastic 250ml HNO3 preserved	B	<2	<2	4.3	Y	Absent		MCP-MN-6010T-10(180),MCP-AS-6010T-10(180)
L2367945-07A	Vial HCl preserved	B	NA		4.3	Y	Absent		MCP-8260-21(14)
L2367945-07B	Vial HCl preserved	B	NA		4.3	Y	Absent		MCP-8260-21(14)

*Values in parentheses indicate holding time in days

Project Name:	MERCHANT/CS&R	**Lab Number:**	L2367945
Project Number:	K10740A	**Report Date:**	11/27/23

GLOSSARY

Acronyms

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

Report Format: Data Usability Report

Project Name:	MERCHANT/CS&R	**Lab Number:**	L2367945
Project Number:	K10740A	**Report Date:**	11/27/23

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.

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

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

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

Report Format: Data Usability Report

Project Name:	MERCHANT/CS&R	**Lab Number:**	L2367945
Project Number:	K10740A	**Report Date:**	11/27/23

Data Qualifiers

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.

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

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

Report Format: Data Usability Report

Project Name:	MERCHANT/CS&R	**Lab Number:**	L2367945
Project Number:	K10740A	**Report Date:**	11/27/23

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

107 Alpha Analytical - In-house calculation method.

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

141 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA and IIB, November 2021.

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

Mansfield Facility
SM 2540D: TSS.
EPA 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 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).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

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

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 11/15/23

ALPHA Job #: L2367945

Client Information

Client: Bennett Environmental Associates
Address: 1573 Main Street
Brewster, MA 02631
Phone: (508) 896-1706
Fax: (508) 896-5109
Email: JTadema-Wielandt@NSUWater.com
☒ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Merchant/CS&R
Project Location: 1515 Freemans Way, Brewster MA
Project #: K10740A
Project Manager: John Tadema-Wielandt/JCG
ALPHA Quote #: 10135

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)
Due Date: Time:

Report Information Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #: K10740A

Regulatory Requirements/Report Limits

State/Fed Program MA MCP Criteria GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes	☐ No	Are MCP Analytical Methods Required?
☐ Yes	☒ No	Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes	☒ No	Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☒ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PAHs, Formaldehyde	Cyanide	Total Landfill Metals	TDS	Alkalinity	Sulfide	VOCs 8260B	COD, TKN, TOC	Total Phosphorus, Total Nitrogen	NO2, NO3, SO4, TDS, T & L	Chloride, Color	Mn, As	Sample Specific Comments	TOTAL # BOTTLES
67945 01	MW-1R	11/14/23	2:15	GW	JCG	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒	☐		
02	MW-3A	11/14/23	11:10	GW	JCG	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒	☐		
03	MW-3B	11/14/23	12:05	GW	JCG	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☒		
04	MW-4A	11/14/23	1:05	GW	JCG	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒	☐		
05	MW-5	11/14/23	9:55	GW	JCG	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒	☐		
06	MW-5B	11/14/23	10:30	GW	JCG	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☒		
07	Trip Blank	11/6	LAB	GW	SB	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
Container Type						-	-	-	-	-	-	-	-	-	-	-	-		
Preservative						-	-	-	-	-	-	-	-	-	-	-	-		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01(I) (rev. 20-JAN-2010)

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	11/14/23 3:30PM	Fridge	11/14/23 3:30
FRIDGE	11/15	[signature] ADL	11/15 15:22
[signature]	11/15 17:37	[signature]	11/15 1737

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

Method Blank Summary
Form 4
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2367945
Project Name	: MERCHANT/CS&R	**Project Number**	: K10740A
Lab Sample ID	: WG1854484-5	**Lab File ID**	: VQ231118D05
Instrument ID	: QUIMBY		
Matrix	: WATER	**Analysis Date**	: 11/18/23 07:57

Client Sample No.	Lab Sample ID	Analysis Date
WG1854484-3LCS	WG1854484-3	11/18/23 06:25
WG1854484-4LCSD	WG1854484-4	11/18/23 07:11
TRIP BLANK	L2367945-07	11/18/23 08:20

Method Blank Summary
Form 4
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2367945
Project Name	: MERCHANT/CS&R	**Project Number**	: K10740A
Lab Sample ID	: WG1854588-5	**Lab File ID**	: VQ231120A06
Instrument ID	: QUIMBY		
Matrix	: WATER	**Analysis Date**	: 11/20/23 07:16

Client Sample No.	Lab Sample ID	Analysis Date
WG1854588-3LCS	WG1854588-3	11/20/23 05:45
WG1854588-4LCSD	WG1854588-4	11/20/23 06:08
MW-1R	L2367945-01D	11/20/23 13:43
MW-3A	L2367945-02	11/20/23 14:06
MW-4A	L2367945-04	11/20/23 14:29
MW-5	L2367945-05	11/20/23 14:52

Calibration Verification Summary
Form 7
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2367945		
Project Name	: MERCHANT/CS&R	**Project Number**	: K10740A		
Instrument ID	: QUIMBY	**Calibration Date**	: 11/18/23 06:25		
Lab File ID	: VQ231118D01	**Init. Calib. Date(s)**	: 11/14/23	11/14/23	
Sample No	: WG1854484-2	**Init. Calib. Times**	: 05:41	08:21	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	107	0
Dichlorodifluoromethane	0.31	0.304	-	1.9	20	97	0
Chloromethane	0.289	0.309	-	-6.9	20	110	0
Vinyl chloride	0.272	0.288	-	-5.9	20	103	0
Bromomethane	0.146	0.076	-	47.9*	20	56	0
Chloroethane	0.151	0.094	-	37.7*	20	64	0
Trichlorofluoromethane	0.355	0.265	-	25.4*	20	73	0
Ethyl ether	0.095	0.074	-	22.1*	20	80	0
1,1-Dichloroethene	0.174	0.134	-	23*	20	78	0
Carbon disulfide	0.504	0.434	-	13.9	20	89	0
Methylene chloride	0.199	0.138	-	30.7*	20	70	0
Acetone	0.045	0.038	-	15.6	20	86	-.01
trans-1,2-Dichloroethene	0.182	0.147	-	19.2	20	82	0
Methyl tert-butyl ether	0.542	0.455	-	16.1	20	84	0
Diisopropyl ether	0.756	0.773	-	-2.2	20	104	0
1,1-Dichloroethane	0.396	0.419	-	-5.8	20	104	0
Ethyl tert-butyl ether	0.648	0.641	-	1.1	20	101	0
cis-1,2-Dichloroethene	0.192	0.191*	-	0.5	20	99	0
2,2-Dichloropropane	0.36	0.348	-	3.3	20	97	0
Bromochloromethane	0.087	0.088*	-	-1.1	20	100	-.01
Chloroform	0.366	0.363	-	0.8	20	99	0
Carbon tetrachloride	0.3	0.287	-	4.3	20	92	-.01
Tetrahydrofuran	0.05	0.052	-	-4	20	107	-.01
Dibromofluoromethane	0.267	0.269	-	-0.7	20	104	0
1,1,1-Trichloroethane	0.353	0.34	-	3.7	20	95	0
2-Butanone	0.079	0.07	-	11.4	20	101	0
1,1-Dichloropropene	0.272	0.269	-	1.1	20	101	-.01
Benzene	0.766	0.767	-	-0.1	20	100	0
tert-Amyl methyl ether	0.506	0.485	-	4.2	20	98	0
1,2-Dichloroethane-d4	0.387	0.413	-	-6.7	20	107	0
1,2-Dichloroethane	0.32	0.326	-	-1.9	20	99	0
Trichloroethene	0.204	0.194*	-	4.9	20	97	0
Dibromomethane	0.113	0.108	-	4.4	20	97	0
1,2-Dichloropropane	0.213	0.213	-	0	20	102	-.01
Bromodichloromethane	0.288	0.277*	-	3.8	20	97	-.01
1,4-Dioxane	0.00123	0.00118*	-	4.1	20	100	-.02
cis-1,3-Dichloropropene	0.321	0.317	-	1.2	20	101	-.01
Chlorobenzene-d5	1	1	-	0	20	105	0
Toluene-d8	1.413	1.437	-	-1.7	20	105	-.01
Toluene	0.633	0.628	-	0.8	20	100	-.01
4-Methyl-2-pentanone	0.069	0.064	-	7.2	20	103	0
Tetrachloroethene	0.265	0.253	-	4.5	20	96	0
trans-1,3-Dichloropropene	0.391	0.391	-	0	20	100	-.01

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2367945		
Project Name	: MERCHANT/CS&R	**Project Number**	: K10740A		
Instrument ID	: QUIMBY	**Calibration Date**	: 11/18/23 06:25		
Lab File ID	: VQ231118D01	**Init. Calib. Date(s)**	: 11/14/23	11/14/23	
Sample No	: WG1854484-2	**Init. Calib. Times**	: 05:41	08:21	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.168	0.179*	-	-6.5	20	103	0
Chlorodibromomethane	0.248	0.233	-	6	20	94	0
1,3-Dichloropropane	0.365	0.389	-	-6.6	20	105	0
1,2-Dibromoethane	0.186	0.186*	-	0	20	100	0
2-Hexanone	0.123	0.117	-	4.9	20	106	0
Chlorobenzene	0.646	0.648	-	-0.3	20	100	0
Ethylbenzene	1.17	1.17	-	0	20	98	-.01
1,1,1,2-Tetrachloroethane	0.259	0.251	-	3.1	20	97	0
p/m Xylene	0.427	0.428	-	-0.2	20	99	0
o Xylene	0.41	0.41	-	0	20	97	0
Styrene	20	19.322	-	3.4	20	100	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	104	0
Bromoform	0.27	0.246	-	8.9	20	93	-.01
Isopropylbenzene	1.777	1.758	-	1.1	20	97	-.01
4-Bromofluorobenzene	0.92	0.921	-	-0.1	20	106	-.01
Bromobenzene	0.474	0.456	-	3.8	20	95	0
n-Propylbenzene	2.21	2.249	-	-1.8	20	98	0
1,1,2,2-Tetrachloroethane	0.389	0.407	-	-4.6	20	108	0
2-Chlorotoluene	1.668	1.713	-	-2.7	20	99	0
1,3,5-Trimethylbenzene	1.598	1.604	-	-0.4	20	97	-.01
1,2,3-Trichloropropane	0.348	0.378	-	-8.6	20	111	-.01
4-Chlorotoluene	1.473	1.517	-	-3	20	100	-.01
tert-Butylbenzene	1.284	1.261	-	1.8	20	96	0
1,2,4-Trimethylbenzene	1.656	1.595	-	3.7	20	98	0
sec-Butylbenzene	1.791	1.844	-	-3	20	98	-.01
p-Isopropyltoluene	10	9.177	-	8.2	20	98	0
1,3-Dichlorobenzene	0.915	0.928	-	-1.4	20	100	0
1,4-Dichlorobenzene	0.937	0.926	-	1.2	20	98	0
n-Butylbenzene	10	9.469	-	5.3	20	102	-.01
1,2-Dichlorobenzene	0.875	0.874	-	0.1	20	99	0
1,2-Dibromo-3-chloropropan	0.064	0.054	-	15.6	20	93	0
Hexachlorobutadiene	0.248	0.246	-	0.8	20	108	-.01
1,2,4-Trichlorobenzene	0.663	0.554	-	16.4	20	96	0
Naphthalene	10	8.309	-	16.9	20	95	0
1,2,3-Trichlorobenzene	0.577	0.537	-	6.9	20	95	-.01

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2367945		
Project Name	: MERCHANT/CS&R	**Project Number**	: K10740A		
Instrument ID	: QUIMBY	**Calibration Date**	: 11/20/23 05:45		
Lab File ID	: VQ231120A02	**Init. Calib. Date(s)**	: 11/14/23	11/14/23	
Sample No	: WG1854588-2	**Init. Calib. Times**	: 05:41	08:21	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	77	0
Dichlorodifluoromethane	0.31	0.332	-	-7.1	20	76	0
Chloromethane	0.289	0.283	-	2.1	20	72	0
Vinyl chloride	0.272	0.21	-	22.8*	20	54	0
Bromomethane	0.146	0.112	-	23.3*	20	59	0
Chloroethane	0.151	0.122	-	19.2	20	60	0
Trichlorofluoromethane	0.355	0.372	-	-4.8	20	74	0
Ethyl ether	0.095	0.077	-	18.9	20	59	0
1,1-Dichloroethene	0.174	0.153	-	12.1	20	64	0
Carbon disulfide	0.504	0.412	-	18.3	20	61	0
Methylene chloride	0.199	0.162	-	18.6	20	59	0
Acetone	0.045	0.036	-	20	20	59	0
trans-1,2-Dichloroethene	0.182	0.154	-	15.4	20	62	0
Methyl tert-butyl ether	0.542	0.462	-	14.8	20	61	0
Diisopropyl ether	0.756	0.725	-	4.1	20	70	0
1,1-Dichloroethane	0.396	0.432	-	-9.1	20	77	0
Ethyl tert-butyl ether	0.648	0.669	-	-3.2	20	75	0
cis-1,2-Dichloroethene	0.192	0.209	-	-8.9	20	78	0
2,2-Dichloropropane	0.36	0.389	-	-8.1	20	78	0
Bromochloromethane	0.087	0.102	-	-17.2	20	83	0
Chloroform	0.366	0.406	-	-10.9	20	79	0
Carbon tetrachloride	0.3	0.363	-	-21*	20	84	0
Tetrahydrofuran	0.05	0.049	-	2	20	73	0
Dibromofluoromethane	0.267	0.283	-	-6	20	79	0
1,1,1-Trichloroethane	0.353	0.396	-	-12.2	20	80	0
2-Butanone	0.079	0.067	-	15.2	20	69	0
1,1-Dichloropropene	0.272	0.3	-	-10.3	20	81	0
Benzene	0.766	0.864	-	-12.8	20	81	0
tert-Amyl methyl ether	0.506	0.524	-	-3.6	20	76	0
1,2-Dichloroethane-d4	0.387	0.396	-	-2.3	20	74	0
1,2-Dichloroethane	0.32	0.343	-	-7.2	20	75	0
Trichloroethene	0.204	0.221	-	-8.3	20	79	0
Dibromomethane	0.113	0.115	-	-1.8	20	74	0
1,2-Dichloropropane	0.213	0.224	-	-5.2	20	77	0
Bromodichloromethane	0.288	0.316	-	-9.7	20	80	0
1,4-Dioxane	0.00123	0.00114*	-	7.3	20	69	0
cis-1,3-Dichloropropene	0.321	0.345	-	-7.5	20	79	0
Chlorobenzene-d5	1	1	-	0	20	83	0
Toluene-d8	1.413	1.306	-	7.6	20	75	0
Toluene	0.633	0.642	-	-1.4	20	81	0
4-Methyl-2-pentanone	0.069	0.057	-	17.4	20	72	0
Tetrachloroethene	0.265	0.29	-	-9.4	20	87	0
trans-1,3-Dichloropropene	0.391	0.379	-	3.1	20	77	-.01

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Bennett Environmental Associates	**Lab Number**	: L2367945		
Project Name	: MERCHANT/CS&R	**Project Number**	: K10740A		
Instrument ID	: QUIMBY	**Calibration Date**	: 11/20/23 05:45		
Lab File ID	: VQ231120A02	**Init. Calib. Date(s)**	: 11/14/23	11/14/23	
Sample No	: WG1854588-2	**Init. Calib. Times**	: 05:41	08:21	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,1,2-Trichloroethane	0.168	0.167*	-	0.6	20	76	0
Chlorodibromomethane	0.248	0.249	-	-0.4	20	80	0
1,3-Dichloropropane	0.365	0.37	-	-1.4	20	79	0
1,2-Dibromoethane	0.186	0.192*	-	-3.2	20	81	0
2-Hexanone	0.123	0.104	-	15.4	20	74	0
Chlorobenzene	0.646	0.718	-	-11.1	20	87	0
Ethylbenzene	1.17	1.222	-	-4.4	20	81	-.01
1,1,1,2-Tetrachloroethane	0.259	0.284	-	-9.7	20	87	0
p/m Xylene	0.427	0.494	-	-15.7	20	90	0
o Xylene	0.41	0.469	-	-14.4	20	87	0
Styrene	20	22.039	-	-10.2	20	90	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	86	0
Bromoform	0.27	0.253	-	6.3	20	79	0
Isopropylbenzene	1.777	1.952	-	-9.8	20	89	0
4-Bromofluorobenzene	0.92	0.81	-	12	20	77	0
Bromobenzene	0.474	0.515	-	-8.6	20	89	0
n-Propylbenzene	2.21	2.278	-	-3.1	20	82	0
1,1,2,2-Tetrachloroethane	0.389	0.358	-	8	20	79	0
2-Chlorotoluene	1.668	1.719	-	-3.1	20	82	0
1,3,5-Trimethylbenzene	1.598	1.809	-	-13.2	20	91	-.01
1,2,3-Trichloropropane	0.348	0.326	-	6.3	20	79	-.01
4-Chlorotoluene	1.473	1.503	-	-2	20	81	-.01
tert-Butylbenzene	1.284	1.408	-	-9.7	20	88	0
1,2,4-Trimethylbenzene	1.656	1.741	-	-5.1	20	89	0
sec-Butylbenzene	1.791	2.034	-	-13.6	20	89	0
p-Isopropyltoluene	10	10.063	-	-0.6	20	89	-.01
1,3-Dichlorobenzene	0.915	1.019	-	-11.4	20	90	0
1,4-Dichlorobenzene	0.937	1.03	-	-9.9	20	90	0
n-Butylbenzene	10	9.432	-	5.7	20	84	0
1,2-Dichlorobenzene	0.875	0.959	-	-9.6	20	89	0
1,2-Dibromo-3-chloropropan	0.064	0.057	-	10.9	20	81	0
Hexachlorobutadiene	0.248	0.228	-	8.1	20	83	-.01
1,2,4-Trichlorobenzene	0.663	0.601	-	9.4	20	86	0
Naphthalene	10	8.321	-	16.8	20	79	0
1,2,3-Trichlorobenzene	0.577	0.575	-	0.3	20	84	0

* Value outside of QC limits.

PHOENIX
Environmental Laboratories, Inc.

Monday, November 20, 2023

Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Project ID: L2367945
SDG ID: GCP49024
Sample ID#s: CP49024 - CP49027

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

November 20, 2023

SDG I.D.: GCP49024

Project ID: L2367945

Client Id	Lab Id	Matrix
MW-1R	CP49024	WATER
MW-3A	CP49025	WATER
MW-4A	CP49026	WATER
MW-5	CP49027	WATER

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 20, 2023

FOR: Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		11/14/23	14:15
Location Code:	ALPHA	Received by:	SR1	11/16/23	11:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCP49024
Phoenix ID: CP49024

Project ID: L2367945
Client ID: MW-1R

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfide	0.09	0.05	mg/L	1	11/17/23	GD	SM4500S-D-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
November 20, 2023
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 20, 2023

FOR: Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		11/14/23	11:10
Location Code:	ALPHA	Received by:	SR1	11/16/23	11:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCP49024
Phoenix ID: CP49025

Project ID: L2367945
Client ID: MW-3A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfide	< 0.05	0.05	mg/L	1	11/17/23	GD	SM4500S-D-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
November 20, 2023
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 20, 2023

FOR: Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		11/14/23	13:05
Location Code:	ALPHA	Received by:	SR1	11/16/23	11:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCP49024
Phoenix ID: CP49026

Project ID: L2367945
Client ID: MW-4A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfide	< 0.05	0.05	mg/L	1	11/17/23	GD	SM4500S-D-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
November 20, 2023
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 20, 2023

FOR: Attn: Dave Sanford
Alpha Analytical Lab
8 Walkup Drive
Westborough, MA 01581

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		11/14/23	9:55
Location Code:	ALPHA	Received by:	SR1	11/16/23	11:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCP49024
Phoenix ID: CP49027

Project ID: L2367945
Client ID: MW-5

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfide	< 0.05	0.05	mg/L	1	11/17/23	GD	SM4500S-D-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
November 20, 2023
Reviewed and Released by: Anil Makol, Project Manager

Ver 1

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

QA/QC Report

November 20, 2023

QA/QC Data

SDG I.D.: GCP49024

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 706850 (mg/L), QC Sample No: CP49914 (CP49024, CP49025, CP49026, CP49027)													
Sulfide	BRL	0.05	3.86	3.93	1.80	93.4			95.6			90 - 110	20

Comment:

Additional: LCS acceptance range is 90-110% MS acceptance range 75-125%.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
November 20, 2023

Monday, November 20, 2023

Criteria: MA: GW1

State: MA

Sample Criteria Exceedances Report

GCP49024 - ALPHA

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

November 20, 2023 SDG I.D.: GCP49024

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

WC Ice 1c0

Subcontract Chain of Custody

Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040

Alpha Job Number
L2367945

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 508.439.5157 Email: dsanford@alphalab.com	Project Location: MA Project Manager: Dave Sanford **Turnaround & Deliverables Information** Due Date: Deliverables:	State/Federal Program: Regulatory Criteria: GW-1-14

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2367945

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
49024	MW-1R	11-14-23 14:15	WATER	Sulfide	
49025	MW-3A	11-14-23 11:10	WATER	Sulfide	
49026	MW-4A	11-14-23 13:05	WATER	Sulfide	
49027	MW-5	11-14-23 09:55	WATER	Sulfide	

Rcvd 2x NAOH + ZnAc per Sample

Relinquished By:	Date/Time:	Received By:	Date/Time:
	11/16/23		11/16/23 927
	11/16/23 1129		11/16/23 1140
Form No: AL_subcoc			

Sample Results Comparison with Reportable Concentrations RCGW-1 Criteria.

CLIENT SAMPLE ID				MW-1R		MW-3A		MW-3B		MW-4A		MW-5		MW-5B		TRIP BLANK	
SAMPLING DATE				14-NOV-23		14-NOV-23		14-NOV-23		14-NOV-23		14-NOV-23		14-NOV-23		06-NOV-23	
LAB SAMPLE ID				L2367945-01		L2367945-02		L2367945-03		L2367945-04		L2367945-05		L2367945-06		L2367945-07	
	CAS Number	RCGW-1-1	Units		Qual		Qual		Qual		Qual		Qual		Qual		Qual
General Chemistry																	
Color, Apparent	COLOR		A.P.C.U.	350		330				6		21					
Alkalinity, Total	471-34-1		mg CaCO3/l	373		204				9.6		144					
Solids, Total Dissolved	---		mg/l	420		530		40		99		310		31			
MCP General Chemistry																	
Cyanide, Total	57-12-5	0.03	mg/l	0.005	U	0.005	U			0.005	U	0.005	U				
General Chemistry																	
Chloride	16887-00-6		mg/l	28		63				20		57					
Nitrogen, Nitrite	---		mg/l	0.05	U	0.05	U			0.05	U	0.05	U				
Nitrogen, Nitrate	14797-55-8		mg/l	0.1	U	0.1	U			3.74		0.1	U				
Nitrogen, Nitrate/Nitrite	---		mg/l	0.1	U	0.1	U			3.7		0.1					
Total Nitrogen	---		mg/l	9.4		5.3				3.7		7					
Nitrogen, Total Kjeldahl	---		mg/l	9.41		5.3				0.3	U	6.94					
Phosphorus, Total	7723-14-0		mg/l	1.2		0.176				0.036		0.16					
Sulfate	14808-79-8		mg/l	10	U	63				10	U	52					
Chemical Oxygen Demand	COD		mg/l	98		62				20	U	37					
Total Organic Carbon	7440-44-0		mg/l	33		22				1		7.7					
Tannin & Lignin	---		mg/l	5.3		3.2				0.2	U	2					
Formaldehyde by EPA 8315A																	
Formaldehyde	50-00-0		mg/l	0.075	U	0.075	U			0.075	U	0.075	U				
MCP Total Metals																	
Arsenic, Total	7440-38-2	0.01	mg/l	0.0578		0.0595		0.005	U	0.005	U	0.005	U	0.005	U		
Barium, Total	7440-39-3	2	mg/l	0.0456		0.0441				0.01	U	0.0454					
Cadmium, Total	7440-43-9	0.004	mg/l	0.004	U	0.004	U			0.004	U	0.004	U				
Calcium, Total	7440-70-2		mg/l	99.7		40.4				6.68		21.2					
Chromium, Total	7440-47-3	0.1	mg/l	0.01	U	0.01	U			0.01	U	0.01	U				
Copper, Total	7440-50-8	10	mg/l	0.01	U	0.01	U			0.01	U	0.01	U				
Iron, Total	7439-89-6		mg/l	63.5		45.6				0.05	U	10.8					
Lead, Total	7439-92-1	0.01	mg/l	0.01	U	0.01	U			0.01	U	0.01	U				
Manganese, Total	7439-96-5		mg/l	2.14		2.75		0.737		1.11		12.9		0.101			
Mercury, Total	7439-97-6	0.002	mg/l	0.0002	U	0.0002	U			0.0002	U	0.0002	U				
Selenium, Total	7782-49-2	0.05	mg/l	0.01	U	0.01	U			0.01	U	0.01	U				
Silver, Total	7440-22-4	0.007	mg/l	0.007	U	0.007	U			0.007	U	0.007	U				
Sodium, Total	7440-23-5		mg/l	15.8		35.3				11.5		30.1					
Zinc, Total	7440-66-6	0.9	mg/l	0.05	U	0.05	U			0.05	U	0.05	U				
MCP Volatile Organics																	
1,1,1,2-Tetrachloroethane	630-20-6	0.005	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,1,1-Trichloroethane	71-55-6	0.2	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,1,2,2-Tetrachloroethane	79-34-5	0.002	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,1,2-Trichloroethane	79-00-5	0.005	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,1-Dichloroethane	75-34-3	0.07	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,1-Dichloroethene	75-35-4	0.007	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,1-Dichloropropene	563-58-6		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,2,3-Trichlorobenzene	87-61-6		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,2,3-Trichloropropane	96-18-4	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,2,4-Trichlorobenzene	120-82-1	0.07	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,2,4-Trimethylbenzene	95-63-6	10	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,2-Dibromo-3-chloropropane	96-12-8	0.1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,2-Dibromoethane	106-93-4	0.00002	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,2-Dichlorobenzene	95-50-1	0.6	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,2-Dichloroethane	107-06-2	0.005	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,2-Dichloroethene, Total	540-59-0		mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,2-Dichloropropane	78-87-5	0.003	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,3,5-Trimethylbenzene	108-67-8	0.1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,3-Dichlorobenzene	541-73-1	0.1	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,3-Dichloropropane	142-28-9	5	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
1,3-Dichloropropene, Total	542-75-6	0.0004	mg/l	0.002	U	0.0004	U			0.0004	U	0.0004	U			0.0004	U
1,4-Dichlorobenzene	106-46-7	0.005	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
1,4-Dioxane	123-91-1	0.0003	mg/l	1.2	U	0.25	U			0.25	U	0.25	U			0.25	U
2,2-Dichloropropane	594-20-7		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
2-Hexanone	591-78-6	1	mg/l	0.025	U	0.005	U			0.005	U	0.005	U			0.005	U
Acetone	67-64-1	6.3	mg/l	0.025	U	0.005	U			0.005	U	0.005	U			0.005	U
Benzene	71-43-2	0.005	mg/l	0.0025	U	0.0005	U			0.0005	U	0.0005	U			0.0005	U
Bromobenzene	108-86-1	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Bromochloromethane	74-97-5		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Bromodichloromethane	75-27-4	0.003	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Bromoform	75-25-2	0.004	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Bromomethane	74-83-9	0.007	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Carbon disulfide	75-15-0	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Carbon tetrachloride	56-23-5	0.002	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Chlorobenzene	108-90-7	0.1	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Chloroethane	75-00-3	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Chloroform	67-66-3	0.05	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Chloromethane	74-87-3	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
cis-1,2-Dichloroethene	156-59-2	0.02	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
cis-1,3-Dichloropropene	10061-01-5	0.0004	mg/l	0.002	U	0.0004	U			0.0004	U	0.0004	U			0.0004	U
Dibromochloromethane	124-48-1	0.002	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Dibromomethane	74-95-3	5	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Dichlorodifluoromethane	75-71-8	10	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Diethyl ether	60-29-7	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Diisopropyl Ether	108-20-3	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Ethyl-Tert-Butyl-Ether	637-92-3		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Ethylbenzene	100-41-4	0.7	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Hexachlorobutadiene	87-68-3	0.0006	mg/l	0.003	U	0.0006	U			0.0006	U	0.0006	U			0.0006	U
Isopropylbenzene	98-82-8	10	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Methyl ethyl ketone	78-93-3	4	mg/l	0.025	U	0.005	U			0.005	U	0.005	U			0.005	U
Methyl isobutyl ketone	108-10-1	0.35	mg/l	0.025	U	0.005	U			0.005	U	0.005	U			0.005	U
Methyl tert butyl ether	1634-04-4	0.07	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Methylene chloride	75-09-2	0.005	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
n-Butylbenzene	104-51-8		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
n-Propylbenzene	103-65-1	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Naphthalene	91-20-3	0.14	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
o-Chlorotoluene	95-49-8	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
o-Xylene	95-47-6	3	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
p-Chlorotoluene	106-43-4		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
p-Isopropyltoluene	99-87-6	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
p/m-Xylene	179601-23-1	3	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
sec-Butylbenzene	135-98-8		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Styrene	100-42-5	0.1	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
tert-Butylbenzene	98-06-6	1	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Tertiary-Amyl Methyl Ether	994-05-8		mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Tetrachloroethene	127-18-4	0.005	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Tetrahydrofuran	109-99-9	5	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Toluene	108-88-3	1	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
trans-1,2-Dichloroethene	156-60-5	0.08	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
trans-1,3-Dichloropropene	10061-02-6	0.0004	mg/l	0.002	U	0.0004	U			0.0004	U	0.0004	U			0.0004	U
Trichloroethene	79-01-6	0.005	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Trichlorofluoromethane	75-69-4	10	mg/l	0.01	U	0.002	U			0.002	U	0.002	U			0.002	U
Vinyl chloride	75-01-4	0.002	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
Xylenes, Total	1330-20-7	3	mg/l	0.005	U	0.001	U			0.001	U	0.001	U			0.001	U
MCP PAHs by SIM																	
2-Methylnaphthalene	91-57-6	0.01	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Acenaphthene	83-32-9	0.02	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Acenaphthylene	208-96-8	0.03	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Anthracene	120-12-7	0.03	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Benzo(a)anthracene	56-55-3	0.001	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Benzo(a)pyrene	50-32-8	0.0002	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Benzo(b)fluoranthene	205-99-2	0.001	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Benzo(ghi)perylene	191-24-2	0.02	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Benzo(k)fluoranthene	207-08-9	0.001	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Chrysene	218-01-9	0.002	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Dibenzo(a,h)anthracene	53-70-3	0.0005	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Fluoranthene	206-44-0	0.09	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Fluorene	86-73-7	0.03	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Indeno(1,2,3-cd)pyrene	193-39-5	0.0005	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Naphthalene	91-20-3	0.14	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Phenanthrene	85-01-8	0.04	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				
Pyrene	129-00-0	0.02	mg/l	0.0001	U	0.0001	U			0.0001	U	0.0001	U				

Alpha Analytical Labs provides this custom reporting format as a convenience to our clients. As such, we cannot be held liable for errors or omissions associated with the regulatory standards listed above and/or the sample results highlighted by comparison with the standards (Effective as of April 25, 2014).

Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.

Refer to the laboratory report in Adobe Acrobat (.PDF) format to check results or read any associated project narrative that may be present. In all cases, the signed, hardcopy Alpha Analytical Labs laboratory report is the official document for reporting laboratory results.

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention / Solid Waste Management

Third-Party Inspection Report – 310 CMR 19.018(8)
Operation & Maintenance

Important: When completing this form on a computer, use only the Tab key to move your cursor – not the Return key.

Instructions

Use this form to record and report the results of a Third-Party Operation and Maintenance Inspection conducted pursuant to 310 CMR 19.018. Be sure to obtain the most recent version of this form. All applicable sections of the submitted form must be completed to be accepted by MassDEP.

Pursuant to 310 CMR 19.018(8)(a), the third-party inspector and facility owner/operator must sign this Third-Party Inspection Report form and submit the completed report to the appropriate MassDEP regional office and one copy of each completed report to the board of health of the municipality in which the facility is located.

In the event that this inspection report contains a recommendation for corrective action(s), the owner/operator shall also submit the information required by 310 CMR 19.018(8)(c)2.

Forms and instructions are available online:
http://www.mass.gov/eea/agencies/massdep/recycle/approvals/solid-waste-applications-and-forms.html#8

Note: This form does not identify all of the requirements applicable to each solid waste management facility; other requirements and/or policies may apply to the operation, maintenance and monitoring for each facility.

MassDEP Use Only

Rec'd Date:

FMF #:

RO #:

Reviewer:

Comments:

I. Facility Information

Facility Type (check one):

☒ Transfer Station/Handling Facility ☐ C&D Waste Processor or C&D Waste Transfer Station ☐ Municipal Waste Combustor

☐ Active Landfill ☐ Closed Landfill ☒ Other: Wood Waste Reclamation Facility
Specify

Facility:

Cape Sand and Recycling WWRF
Facility Name

Brewster	MA	02631
City/Town	State	ZIP Code
508-255-1550	298388	
Telephone Number	Regulated Object Account Number	FMF Number

Operator:

Cape Sand and Recycling, LLC
Operator Name (Doing Business As/Company Name)

508-294-1010	info@capesandandrecycling.com
Telephone Number	Email Address

PO Box 1555
Mailing Address

Brewster	MA	02631
City/Town	State	ZIP Code

Permittee:

Cape Sand and Recycling, LLC
Permittee Name (Entity Identified on Facility Permit)

PO Box 1555
Mailing Address

Brewster	MA	02631
City/Town	State	ZIP Code

Responsible Official for the Facility:

Jay Merchant	theo@capesandandrecycling.com
Responsible Official Name (Individual)	Responsible Official Email Address
Cape Sand and Recycling, LLC	508-294-1010
Responsible Official Company Name	Responsible Official Telephone Number

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention / Solid Waste Management

Third-Party Inspection Report – 310 CMR 19.018(8)
Operation & Maintenance

II. Third-Party Inspector

Peter Flood	Green Seal Environmental, LLC
Third-Party Inspector Name	Company Name
SW48-0000045	06/01/2025
MassDEP Third-Party Inspector Identification Number	MassDEP Third-Party Inspector Expiration Date (MM/DD/YYYY)
508-888-6034	peter@gseenv.com
Telephone Number	Email Address

114 State Road Building B
Mailing Address

Sagamore Beach	MA	02562
City/Town	State	ZIP Code

Construction and Demolition Waste (C&D Waste) Processing Facility or C&D Waste Transfer Station Only:
Identify the qualified individual that conducted the observation of incoming waste loads and collection of samples of suspect asbestos-containing materials during the inspection [pursuant to 310 CMR 19.018(6)(f)]. If the entire inspection was conducted by the third-party inspector listed above, then check the box and enter only the Asbestos Inspector Certification Number.

☒ Same as above. **Provide Asbestos Certification Number ►** AI-014709
MA Dept. of Labor Standards Asbestos Inspector Certification Number

Asbestos Inspector Name	Company Name
Telephone Number	Email Address

Mailing Address

City/Town	State	ZIP Code

III. Inspection Details

A. FREQUENCY

Indicate the scheduled inspection frequency for this facility as required by 310 CMR 19.018(6)(b), or a more frequent schedule set forth in the Facility Permit/Other Approval:

☐ Bi-Monthly ☐ Quarterly ☒ Semi-Annual ☐ Annual ☐ Biennial
☐ Other (include permit/approval type and date of issuance):

B. DATE, TIME & PERSONNEL

Inspection Date (MM/DD/YYYY): 12/22/2023
Inspection Start Time: 8:50 ☒ AM ☐ PM
Facility Representatives in Attendance During Inspection: Theo Mintz and several CSR employees

C. CONDITIONS

Air Temperature: *Approximately 28 degrees F.*

Weather: ☐ Clear ☒ Partly Cloudy ☐ Cloudy ☒ Dry ☐ Rain ☐ Snow

Wind Speed: ☐ Calm ☒ Breeze ☐ Moderate ☐ Strong

Wind Direction (direction from which the wind is blowing):

☒NW	☐ N	☐ NE
☐ W	Wind	☐ E
☐ SW	☐ S	☐ SE

IV. Pre-Inspection Preparation

A. FACILITY-SPECIFIC O&M REQUIREMENTS

During each third-party inspection, the third-party inspector shall examine and evaluate the facility's solid waste activities, equipment, operations, practices, procedures, and records relevant to the type of third-party inspection being conducted in order to determine the facility's compliance with all applicable requirements as set forth in 310 CMR 19.018(6)(a)1.

Therefore, pursuant to 310 CMR 19.018(6)(a)1, prior to conducting a third-party facility operation and maintenance inspection, the third-party inspector shall, without limitation, complete all of the following:

☒ Review and become familiar with the regulations set forth at 310 CMR 19.000 – *Massachusetts Solid Waste Regulations.*

☒ Identify, review and become familiar with all solid waste permits, plans, approvals, and orders (or other enforcement documents issued to the facility by the Department), and the solid waste requirements applicable to the operation and maintenance of the facility.

Relevant requirements may include, without limitation, specific practices and procedures for the operation, maintenance and monitoring of the facility, waste acceptance/storage limits, and other requirements related to the facility's solid waste activities. Without limitation, these facility-specific requirements may be contained in the Facility Permit, Authorization to Construct, Authorization to Operate, Operation and Maintenance Plan, Closure/Post-Closure Plans and Approvals, Facility Modification Approvals, Beneficial Use Determinations, Administrative Consent Orders, and other determinations, authorizations or enforcement actions issued by the Department.

I, Peter Flood**, have identified, reviewed and understand all of the aforementioned requirements that are applicable to this facility and the following are my observations and recommendations related to the facility-specific requirements.**

► PF
Inspector Initials

B. SOLID WASTE PERMITS, PLANS, APPROVALS & ORDERS

List all relevant solid waste permits, plans, approvals, orders or other enforcement actions issued to the facility by the Department that contain specific practices, procedures and other requirements still in effect for the operation, maintenance and monitoring or closure/post-closure of the facility. Where applicable, provide the plan or issue date for each item. For enforcement actions, include the document number, effective date, and status of implementation by the facility.

Discussion: MassDEP (#234209) Sequence Change GW Monitoring (#X234209) – October 19, 2010; MassDEP ATO (#W229293) - December 29, 2009; MassDEP ATC (#W227916), February 10, 2009.

V. Performance Standards

Examine and evaluate the facility's solid waste activities, equipment, operations, practices, procedures and records relevant to the type of solid waste facility.

Using the tables below, identify all areas evaluated by the inspector during the inspection by checking the box in the first column. Describe all deviations noted during the inspection in the third column. Provide recommendations for corrective action to return to compliance with the applicable performance standard in the fourth column.

Facility Type	Performance Standards
Transfer Station/Handling Facility (Including C&D Facility)	Complete Section A. If C&D Handling/ Processing Facility, then also complete Section B.
Municipal Waste Combustor	Complete Section A.
Active Landfill	Complete Sections C. and F. If active ash landfill, then also complete Section D.
Closed Landfill	Complete Sections E. and F.

A. TRANSFER STATION, HANDLING FACILITY, OR MUNICIPAL WASTE COMBUSTOR (INCLUDING C&D FACILITY)

Evaluated	Performance Standard	Deviation(s)	Comments/Observations and Recommended Corrective Action(s)
☐	19.205(1) Storm Water Controls.		
☐	19.205(2) Equipment.		
☐	19.205(3) Weighing Facilities.		
☐	19.207(1) General.	Discuss in Section VI.	Discuss in Section VI.
☐	19.207(2) Supervision of Operation.		
☐	19.207(3) Access to Facilities.		
☐	19.207(4) Security.		
☐	19.207(5) Posting of Handling Facility.		
☐	19.207(6) Unloading of Refuse.		
☐	19.207(7) Special Wastes.		
☐	19.207(8) Banned/Restricted Wastes.		
☐	19.207(9) Hazardous Waste.		
☐	19.207(10) Household Hazardous Waste and Waste Oil Collections.		
☐	19.207(11) Bulky Waste.		
☐	19.207(12) Liquid Wastes.		

Evaluated	Performance Standard	Deviation(s)	Comments/Observations and Recommended Corrective Action(s)
☐	19.207(13) Bird Hazards.		
☐	19.207(14) Dust Control.		
☐	19.207(15) Vector Control.		
☐	19.207(16) Control of Wind-blown Litter.		
☐	19.207(17) Staffing.		
☐	19.207(18) Employee Facilities.		
☐	19.207(19) Accident Prevention/Safety.		
☐	19.207(20) Fire Protection.		
☐	19.207(21) Recycling Operations.		
☐	19.207(22) Records for Operational and Plan Execution.		
☐	19.207(23) Screening and/or Fencing.		
☐	19.207(24) Open Burning.		
☐	19.207(25) Inspections.		
☐	19.207(26) End-of-Life Mercury-added Products.		

B. CONSTRUCTION AND DEMOLITION (C&D) WASTE PROCESSING FACILITY OR C&D WASTE TRANSFER STATION

Evaluated	Performance Standard	Deviation(s)	Comments/Observations and Recommended Corrective Action(s)
☐	19.206(1) Enclosed Operations.		
☐	19.206(2) Storage.		
☐	19.206(3) Contact Water.		
☐	Suspect Asbestos-Containing Material (ACM) Inspection and Management Protocol.		
☐	Sample collection of suspect ACM from incoming loads.	Discuss sample results: ► ☐ Attach analytical reports.	

C. ACTIVE LANDFILL

Evaluated	Performance Standard	Deviation(s)	Comments/Observations and Recommended Corrective Action(s)
☒	19.130(1) General.	Discuss in Section VI.	Discuss in Section VI.
☒	19.130(2) Operator Supervision.	None observed	Facility care and maintenance under the supervision of a qualified operator.
☒	19.130(3) Special Wastes.	Not applicable	Facility does not accept or manage Special Wastes
☒	19.130(4) Banned/Restricted Wastes.	None observed	Facility accepts stumps and brush for recycling.
☒	19.130(5) Hazardous Waste.	Not applicable	Facility does not accept Hazardous Waste
☒	19.130(6) Bulky Wastes.	Not applicable	Facility does not accept Bulky Wastes
☒	19.130(7) Liquid Wastes.	Not applicable	Facility does not accept Liquid Wastes
☒	19.130(8) Solid Waste Handling.	None observed	Yard manager/load inspector directly supervising waste handling
☒	19.130(9) Bird Hazards.	None observed	There was no indication of bird hazards and/or bird congregation at the time of the inspection
☒	19.130(10) Equipment and Shelter.	None observed	Facility has enough on-site mobile equipment to properly run the WWRF. Significant quantities of spare equipment exist on-site as part of the construction entity of the facility
☒	19.130(11) Staffing.	None observed	Adequate staff on site to properly run the facility
☒	19.130(12) Employee Facilities.	None observed	Full facilities are provided to staff in the office building, scale house and maintenance building
☒	19.130(13) Accident Prevention/Safety.	None observed	Employees reportedly participate in regular safety training
☒	19.130(14) Spreading and Compacting of Solid Waste.	Not applicable	Although permitted to do so, the facility is not currently landfilling materials. Stumps and brush are stockpiled and chipped on the surface
☒	19.130(15) Cover Material.	None observed	Sufficient quantities of cover material are available on site if needed
☒	19.130(16) Vector, Dust and Odor Control.	None observed	No vector, dust or odor issues noted on the day of inspection. Dust is controlled by reducing vehicle speeds through the WWRF and wetting of access roads if

Evaluated	Performance Standard	Deviation(s)	Comments/Observations and Recommended Corrective Action(s)
			needed.
☒	19.130(17) Litter Control.	None observed	No windblown materials were observed on and/or off-site from the WWRF operations during inspection. Facility in excellent condition
☒	19.130(18) Top Slope and Side Slopes.	None observed	Facility not currently landfilling stumps and brush. Stockpiles of stumps, brush, processed materials and tailings were neat and orderly.
☒	19.130(19) Storm Water Drainage.	None observed	Controls consist of loose permeable sands, and directing stormwater to lower portions of the WWRF
☒	19.130(20) Erosion Control.	None observed	Controls consist of grading to lower portions of the site.
☒	19.130(21) Boundary/Elevation Markers.	None observed	No landfilling/sloping taking place, only temporarily stockpiling of materials
☒	19.130(22) Access Roads.	None observed	Paved surfaces appeared to be in excellent condition on the day of inspection. Dirt roads within the WWRF area were properly graded to promote safe and easy access
☒	19.130(23) Security.	None observed	Gates, berms and fencing were in good condition and observed to be functioning properly to limit unauthorized access to the facility
☒	19.130(24) Posting of the Landfill.	None observed	Appropriate signage posted at entrance to WWRF. Signs direct users to unloading areas.
☒	19.130(25) Open Burning.	Not applicable	No open burning exists on-site
☒	19.130(26) Fire Protection and Control.	None observed	Facility in compliance with requirements. Extinguishers mounted strategically around the facility as well as in mobile equipment as needed.
☒	19.130(27) Convenience and Recycling Drop-off Areas at Landfills.	Not applicable	
☒	19.130(28) Waste Oil Collections at Landfills.	Not applicable	Waste oil is not accepted at this facility
☒	19.130(29) Household Hazardous Waste	Not applicable	Household hazardous waste

Evaluated	Performance Standard	Deviation(s)	Comments/Observations and Recommended Corrective Action(s)
	Collections at Landfills.		collection does not occur at this facility
☒	19.130(30) Leachate Collection, Treatment and Disposal.	Not applicable	
☒	19.130(31) Phase Completion of the Landfill.	Not applicable	
☒	19.130(32) Disruption of Landfilled Areas.	None observed	Facility is permitted for active stump recovery and recycling
☒	19.130(33) Construction of Buildings.	Not applicable	
☒	19.130(34) Records for Operational and Plan Execution.	None observed	Maintained and accessible in the scalehouse and/or office. Annual reporting done by facility personnel.
☒	19.130(35) Inspections.	None observed	Inspections performed by a MassDEP approved 3rd party inspector per 310 CMR 19.018
☒	19.130(36) Re-circulation of Leachate.	Not applicable	
☒	19.130(37) End-of-Life Mercury-added Products.	None observed	Facility only accepts stumps and brush

D. ASH LANDFILL

Evaluated	Performance Standard	Deviation(s)	Comments/Observations and Recommended Corrective Action(s)
☐	19.131(1) General.	Discuss in Section VI.	Discuss in Section VI.
☐	19.131(2) Fugitive Emissions.		
☐	19.131(3) Ash Moisture Content.		
☐	19.131(4) Spreading/Compacting of Ash.		
☐	19.131(5) Vehicle Washdown / Wheelwash / Other Measures.		

E. CLOSED LANDFILL

Evaluated	Performance Standard	Deviation(s)	Comments/Observations and Recommended Corrective Action(s)
☐	19.016 Post-closure Use.		
☐	19.142(1) General.	Discuss in Section VI.	Discuss in Section VI.
☐	19.142(2) Post-closure Period.		
☐	19.142(3) Post-closure Period Waiver.		
☐	19.142(4) Post-closure Period Extension.		
☐	19.142(5) Post-closure Requirements.		
☐	19.142(6) Inspection Requirements.		
☐	19.142(7) Additional Measures.		
☐	19.142(8) Termination of the Post-Closure Period.		
☐	19.143(1) Applicability.		
☐	19.143(2) Submission of Post-closure Use Plans.		
☐	19.143(3) Criteria for Approval of Post-closure Use.		
☐	19.143(4) Post-closure Construction.		

F. ADDITIONAL LANDFILL REQUIREMENTS

Evaluated	Performance Standard	Comments/Observations and Recommended Corrective Action(s)
☒	19.132 Environmental Monitoring Requirements.	Groundwater monitoring and reporting conducted by Bennett Environmental Associates.
	Is the monitoring of surface water, ground water, landfill gas and any other media as determined by the Department, including without limitation, soil and sediment, being conducted on the schedule established in the permit or as otherwise required by the Department? ☒ YES ☐ NO	
	Are the analytical results of the environmental monitoring submitted to the Department within 60 days after the date of sample collection or as otherwise specified by the Department? ☒ YES ☐ NO	
☒	19.133 Maintenance of Environmental Control and Monitoring Systems.	
	Are the facility operations conducted in a manner which protects all environmental control systems as approved in the Operation and Maintenance plan and monitoring systems as approved in the Operation and Maintenance plan or permit? ☒ YES ☐ NO	
	Is regular maintenance of all landfill environmental control systems performed as approved in the Operation and Maintenance plan or permit? ☒ YES ☐ NO	
	Has the Department been notified of the existence and extent of damaged or destroyed environmental control systems, monitoring devices, or surface water sampling location markers in accordance with 310 CMR 19.133(1)(c) and/or 19.133(1)(e)? ☒ N/A (if no damage to report) ☐ YES ☐NO	

Continue to Next Page ►

F. ADDITIONAL LANDFILL REQUIREMENTS – Continued

Evaluated	Performance Standard	Comments/Observations and Recommended Corrective Action(s)
☐	19.121(4) Landfill Gas Recovery Operation and Maintenance Requirements.	N/A
	Is condensate generation kept to a minimum and condensate recirculation, if proposed, performed in accordance with the permit? ☐ YES ☐ NO	
	Are the sampling and analysis of condensate conducted on the schedule established in the permit or as otherwise required by the Department? ☐ YES ☐ NO	
	Are the analytical results of condensate monitoring reported to the Department as established in the permit or as otherwise required by the Department? ☐ YES ☐ NO	
	Is an annual report on the operation of the landfill gas recovery facility submitted to the Department as specified in the permit? ☐ YES ☐ NO	

VI. Inspection Observations

A. FACILITY CONDITION AND OPERATIONS

Examine and evaluate the facility condition and operations as observed during the inspection, including the following:

☒ Describe any evidence of the following conditions observed at the time of the inspection:
- Unpermitted discharges to air, water, land or other natural resources of the Commonwealth; and
- Dust, odors, litter, and/or other nuisance conditions.

☒ Document and discuss all deviations from any specific requirements for the facility that are not addressed in the previous section (*Section V. – Performance Standards*), including without limitation, the requirements set forth in the facility's operation and maintenance plan, orders or other enforcement documents, and other solid waste permits, approvals, and authorizations issued to the facility by MassDEP.

☒ List the types and estimated quantities of all waste and materials stored at the facility at the time of the inspection.

☒ Provide a narrative that describes the overall status of the general condition, operation and performance of the facility as observed at the time of the inspection.

⇨Attach photographs taken during the inspection that depict the general condition and operation of the facility. At a minimum, include photographs, as applicable, of the waste unloading (tipping) area, waste storage areas, recyclable material storage and, for transfer stations, the waste reloading activity.

Discussion: No unpermitted discharges to air, water or land were noted on site on the day of inspection. No deviations were noted from the facility operation and maintenance plan. The facility appeared to be in excellent condition on the day of inspection. Stockpiles of loam, mulch, wood chips, stumps brush and tailings were noted neat and orderly on the day of inspection.

Several material product stockpiles (loam, mulch and wood chips) were noted across the site. Wood waste reclamation activities are ongoing in the previous deposition areas. Conditionally exempt ABC stockpile was below the permitted volume of 3,000 cubic yards.

B. RECORD REVIEW

Examine and evaluate the facility's record-keeping. Without limitation, document the status of the facility's compliance with, and any deviations from, the record-keeping required by 310 MCR 19.000; the facility's operation and maintenance plan; orders or other enforcement documents issued to the facility; and other solid waste permits, approvals, determinations and authorizations issued to the facility by the Department, including the following:

☒ Discuss the evaluation of the Facility's "daily log" such as, daily tonnage records.

☒ List and discuss any special incidents that have occurred since the previous inspection such as exceedances of the facility's permitted waste acceptance limits, nature and outcome of complaints reported to the facility operator (including the identity of the complainant, if known), fires, emergencies, or other disruptions to the routine operation of the facility.

Discussion: Inbound and outbound tonnage and volumes are maintained in the scalehouse and is orderly and up to date. Annual reports prepared and submitted by CSR. No special incidents were reported to GSE since the previous inspection of the facility.

VII. Summary and Recommendations

Pursuant to 310 CMR 19.018(6)(a)4., where a third-party inspector observes that the operation or maintenance of the facility deviates from the aforementioned applicable requirements, he or she shall document all such deviations and recommend corrective actions for the facility to take to return to compliance.

A. INSPECTION RESULTS

Based on the examinations and evaluations conducted in Sections V. and VI., please summarize the inspection results by checking one of the following determinations:

☒ **No deviations from the applicable performance standards or additional requirements listed at 310 CMR 19.018(6) were identified during this inspection.**
If no deviations were identified during the inspection, check this box and proceed to Section VII.B.

☐ **Deviations from the applicable performance standards or additional requirements listed at 310 CMR 19.018(6) were identified during this inspection and are discussed further in this report.**
If deviations were identified during the inspection, check this box and ensure that each deviation and the recommended corrective actions are discussed in the applicable section(s) below.

B. STATUS OF PREVIOUS RECOMMENDATIONS FOR CORRECTIVE ACTION

If a previous inspection report identified deviations with recommendations for corrective action, please describe the action(s) taken since the last inspection to return the facility to compliance with the applicable requirements.

Discussion: N/A

C. RECOMMENDATIONS FOR CORRECTIVE ACTION

Based on the results of this inspection, please list all deviations noted during the inspection and provide recommendations for corrective action to return to compliance with the applicable requirement.

Recommendations: None at this time

D. ADDITIONAL COMMENTS

Comments: None at this time.

VIII. Additional Information Checklist

Attach the following additional information, as applicable, to complete the inspection report.*

☒ Attach photographs taken during the inspection that depict the general condition and operation of the facility, as required in Section VI.A.

☐ For C&D Waste facilities only, attach the analytical results, as required in Section V.B.

**Note: Pursuant to 310 CMR 19.018(8), MassDEP may request additional information.*

Continue to Certification Statement on Next Page ►

IX. Certification – THIRD-PARTY INSPECTOR

"I attest under the pains and penalty of perjury that:

1. I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification statement;
2. Based on my inquiry of those persons responsible for obtaining the information, the information contained in this submittal is, to the best of my knowledge, true, accurate and complete;
3. I have been able to conduct the third-party inspection and prepare the third-party inspection report without being influenced by the facility owner or operator and, (if I am a municipal employee) without being influenced by my municipal employer, by any coworker or by any elected or appointed official of the municipality; and
4. I am aware that there are significant penalties, including, but not limited to, possible administrative and civil penalties for submitting false, inaccurate, or incomplete information and possible fines and imprisonment for knowingly submitting false, inaccurate, or incomplete information."

Peter Flood
Print Full Name

Green Seal Environmental, LLC
Company Name

01/08/2024
Date (MM/DD/YYYY)

X. Certification – FACILITY OWNER/OPERATOR

Does the facility maintain a Financial Assurance Mechanism (FAM) pursuant to 310 CMR 19.051? ☒ YES ☐ NO

If yes:
- Enter the amount of the current FAM: $37,500
- Enter the date of the last revision of the FAM amount, pursuant to 310 CMR 19.051(6):

As a reminder, pursuant to 310 CMR 19.051(6), the estimate of the cost of closure and post-closure maintenance must be revised every year, and every second year shall be submitted to the Department.

"I certify under the penalty of law:

1. That I have personally examined and am familiar with the information submitted in this third-party inspection report, including but not limited to the statements above concerning the financial assurance mechanism in place in accordance with any facility permit and 310 CMR 19.051, and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties both civil and criminal for submitting false information including possible fines and imprisonment.
2. That, in the event that this inspection report contains a recommendation for corrective action(s), I have completed and attached to this report a Corrective Action Plan and Schedule*, pursuant to 310 CMR 19.018(8)(c)2."

**Note: The owner or operator may elect to correct deviations identified in the Third-Party Inspection Report in a manner that is different than that recommended by the Third-Party Inspector, so long as the facility is brought back into compliance with applicable requirements.*

Signature of Responsible Official

Jay A. Merchant
Print Full Name

President
Title

01/19/2024
Date (MM/DD/YYYY)

► Pursuant to 310 CMR 19.018(8)(c), a copy of each third-party inspection report shall be maintained at the facility in accordance with the requirements of 310 CMR 19.000. The owner and operator shall make third-party inspection reports available to personnel or authorized representatives of the Department for review at the facility upon request.

Within 30 days of the inspection date:	• Mail this completed form to the MassDEP Regional Office that serves the municipality in which the facility is located. (Attention: Solid Waste Management) • Send one copy to the local board of health for the municipality in which the facility is located.	A list of municipalities and MassDEP Regional Offices is available online at: http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html

Scales and scalehouse

WWRF general area

Recovered stumps stockpiled for drying and grinding.

Stump and brush grinding and processing

WQRC count	Comm Park		
Zone	Y	N	Grand Total
CH		3	3
I	11	2	13
RL		2	2
RM		2	2
RR		8	8
Grand Total	**11**	**17**	**28**

No.	Name	Address	Commerce Park	Infrastructure	Church/Camp	New Building	Use change	SP	Site Plan
1	AEH Home Builders	1 Bog Hill Rd					X	X	
2	AMA Excavators	Commerce Park	X					X	X
9	Brewster Captains Golf Course	1000 Freemans Way						X	X
3	Brewster Rec Ball Fields	Freemans Way							
4	Brewster Solar Garden	Commerce Park	X	X					X
5	Brewster Water Dept	165 Commerce Rd	X			X		X	
28	Brewster Wind Towers	Freemans Way		X				X	
6	Camp Mitton	46 Featherbed Rd			X	X		X	
7	Cape Cod Grow Labs	1399 Freemans Way	X				X	X	X
8	Cape Sand & Recycling/Jay Merchant	Freemans Way	X					X	
10	Church of Latter Day Saints	94 Freeman Way			X	X			
11	Colsons Landscaping/Tree Service	4 Commerce Park	X			X		X	X
12	Crockers Nursery	1132 Long Pond Rd				X			
13	Deam Day on Cape Cod	Nickerson State Park			X	X		X	X
14	Eldridge Farm	24 Eldridge Farm Cartway				X			
15	Evangelical Covenant Church of Cape Cod	11 Satucket Rd			X	X		X	
16	GTP Towers LLC/American Towers	1147 Freemans Way	X	X					
17	Harris Custom Builders	89A Commerce Park	X						
18	Mayflower Glass	111 Freemans Way	X			X			
19	Northside United Methodist Church	701 Airline Rd			X	X		X	X
20	Pleasant Bay Community Boating	2070 ROUTE 28			X		X	X	X
21	Pleasant Bay Nursing Rehab	383 S Orleans Rd					X		
22	Realty Executives	15 Cape Lane					X		
23	SBA Towers Infrastructure	10/395 Freemans Way		X				X	X
24	Secure Storage	28 Commerce Park	X			X		X	X
25	Specialty Builders Supply	59 Commerce Park	X				X	X	X
26	Steve Allard Custom Builders	1273 Millstone Rd				X	X	X	X
27	VFW Brewster Post	898 Freemans Way				X			

Project	Zone	WQRC conditions
growing trees and vegetables, subdivision plan , road waivers approved 2002	RR	
Photo-voltaic system on 2 parcels, post-closure use permit former "Stump Dump"	I	oil tanks bermed, 30% lot natural state, no haz mat,approve detergent to wash truck.
Solar canopy, stormwater infrastructure	RR	well monitoring
Herbicide application for turf mgt.	RR	
60 solar subarrays at WD site	I	No storage hazardous waste
New operations facility (admin office, garage, material storage)	I	
2 wind turbines at Captains Golf Course	RR	spill containment, no storage on site, monitoring 24/7
Construct program building pavilion 35' X 65'	RR	
Growing marijuana	I	Well monitoring, 3 year review
Post-closure clean-up	I	Well monitoring
New building addition & parking	RM	30% lot remain natural state, < 40% lot impervious, <10% cultivated lawn.
New building to store equipment	I	No more than 50 gal waste oil, no debris dumping, no land filling, well testing
Add to existing greenhouse and convert part to retail & increase parking	CH	
Constructing 14' X 18' building addition to cabin 1, 30'X40' storage facility	RR	No equip stored on site, only fuel self-contained in excavator
Greenhouse and other building structures, composting	RR	
tree removal triggered letter from WQRC, building & small playground added 1995	RL	
	I	
	I	
construct 24'X24' building for office & showroom	I	
Church addition & parking	RL	
Use change from residential to educational exemption, enlarge parking lot	RM	
Wellness center expand use to outpatients	RR	
office use	CH	
wireless antenna next to existing tower	I	
Added 10 movable storage structures	I	no hazardous materials, no storage of oil
Use change to furniture and lumber storage and auto garage & storage building	I	Enforcement actions, commercial boat storage, illegal auto storage < 100' wetlands
New office/storage building/apt, commercial kitchen, food storage for food truck, access road, bldg violation	CH	plan for pervious/impervious surfaces, covered dumpster, no hazardous materials
Outdoor building pavilion construction	I	

TOWN OF BREWSTER
Water Quality Review Committee
2198 Main Street
Brewster, Massachusetts 02631-1898
(508) 896-3701 x1121
FAX (508) 896-8089

Date Approved:
Vote:

TOWN OF BREWSTER
MINUTES of WATER QUALITY REVIEW COMMITTEE
Friday, December 22, 2023 at 9:00 AM
WQRC MEETING AGENDA

Attending Committee Members:
Chair Robert Michaels convened the Water Quality Review Committee meeting at 9:00AM with members Vice Chair Amy von Hone, Kimberley Crocker Pearson, Ned Chatelain, Chris Miller, and Susan Brown, deemed there to be a quorum and read the recording statement.

Members Absent: John Keith

Guests:

Item 1: Update on Solar Array Project, Freemans Way – BOH approval letter for termination of the Site Assignment as part of the Landfill Closure and Post-Closure Use under DEP regulations.

Amy gave a quick update because we have done a lot of work with the applicant on that as part of the solar array project. As part of the DEP approval for that site, because it did have an open landfill permit for its prior use, BOH was required to approve the site assignment. Because that landfill has now been closed, DEP, as part of the administrative process for closure of the landfill, BOH formally voted to close the site assignment that had been earmarked for that property on 12/6. They are continuing to move forward with that process through DEP to get that property developed with a new solar array project. Just FYI for everybody. They do still have monitoring wells that they will be forwarding those results to us on an annual basis. No further questions.

Item 2: Discussion to prioritize upcoming topics for WQRC to review and make recommendations:

a. **Review and revise application and renewal process for WQRC certificates**
b. **Continue discussion of current and future role of WQRC**
c. **Continue discussion of Zoning Bylaw pertaining to the Water Quality Protection District, its current function, and future needs to be addressed**

Amy said this was derived from the conversation from our last meeting where Jon Idman, Town Planner, gave a thorough background on the zoning bylaw and how he interprets it and how the bylaw defines the role of this committee, which is narrow as it is currently written in the bylaw. It was

written for a reason at the time. Right now, there is a strong need to review the bylaw and figure out what needs to be revised. Bottom line, this is going to involve a much broader and higher-level policy decision with our new water quality resource taskforce and Select Board Policy decision. It is going to affect how we review certificates. This will be presented at the next taskforce meeting in January. Amy's recommendation is to place certificates on hold for 2024 until that decision is made. Chris asked if we should vote to extend all existing permits, so they are not delinquent in the next year, or are we planning to do something different. We probably won't solve this in the next 6 months. Amy said the way she sees it, we've all of 2024 to renew these. She is not concerned as she doesn't know any that have had changes. Chris asked if it's useful to have a Board to review these so staff aren't under as much pressure from businesses. Amy agreed. She doesn't think this board process would change, just the procedure for renewals. Robert asked if it was useful to think about two separate processes – special permit with change of use, versus the renewal? Chris said there have been many changes in the last few years and we are looking at many big changes coming. The original WQRC delt with the area around the wells, and that expanded to the wells on both sides of town and included the watershed from pleasant bay and the Herring River Watershed. We are going to have a much larger charge going forward. We may need to get a professional to draft it. Amy said water quality issues are not going away, it's a matter of how we can be more efficient. We need to update how we are addressing our water quality issues. Ned said he would be comfortable holding off on renewals at this time. Robert thinks it would be a good idea to proactively let these certificate holders know that things are in flux for now and we are re-addressing this, so they don't waste their time and effort. Ned said we will wait for some feedback from the taskforce before moving forward. Robert asked what would trigger another WQRC Meeting – it would meet on an as needed basis. Amy said we probably wouldn't meet next until February after we get information from the taskforce. She will also look into Cape Sand and see what to do there.

Item 2: Approval of Minutes from 5/26/23 & 8/25/23

5/26/23 – as written
8/25/23- edit on page 4 under Susan's name - tested water with a ?, please change to - testing our water for 29 specific PFOS levels in October 2024

***MOTION* to approve the 5/26/23 Meeting Minutes as written and the 8/25/23 Meeting Minutes with that edit.**
***MOVED* by Ned Chatelain. Seconded by Kimberley Pearson.**
VOTE: 6-yes 0-no

Item 4: For Your Information-none

Item 5: Matters Not Reasonably Anticipated by the Chair -none

Next Meeting: January 26, 2024

***MOTION* to adjourn the meeting at 9:38AM.**
***MOVED* by Susan Brown. Kimberley Pearson second.**
VOTE: 6-yes 0-no

Respectfully Submitted by: Beth Devine
Packet of additional documents available on the website for public review