April 27, 2020

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

Linda Hansen
Conservation Administrator
Town of Wayland
41 Cochituate Road
Wayland, MA 01778

Re: **Order of Conditions and Chapter 194 Permit for 264 Old Connecticut Path, Wayland MA**
Water Quality Baseline Conditions
DEP File #: 322-928

Dear Ms. Hansen:

Weston & Sampson was contracted by the town of Wayland on March 24, 2020 to conduct both monthly and event water quality sampling at the Wayland High School Athletic Facilities in Wayland, Massachusetts. The scope of work was developed to comply with the Order of Conditions (OOC) letter issued by the Wayland Conservation Commission on November 16, 2018. The OOC established both baseline water quality testing prior to the construction of the artificial turf field as well as post construction monitoring as described in condition #28 of the Chapter 194 Permit issued by the Wayland Conservation Commission. Per the Order of Conditions, Weston & Sampson was instructed to sample from existing monitoring well locations (MW-1 and MW-5), all available cleanout locations (Cleanout 1, Cleanout 2, Cleanout 3 and Cleanout 4) and the overflow discharge pipe (Figure 1) for the following compounds: total benzene, arsenic, styrene, cadmium, chromium, copper, lead, silica, zinc, hardness and Semi Volatile Organic Compounds (SVOCs), including the phthalates BBP, DBP, DEHP and DIBP. After extensive research, it was discovered that DIBP, one of the requested phthalates is not being tested for in commercial laboratories due to the discontinuation of EPA's Integrated Risk Information System (IRIS). As a result, no toxicity value is available, and the compound was not sampled for in this study.

At the request of the town, Weston & Sampson mobilized to Wayland High School on September 26th, 2019 to establish baseline water quality conditions. The sampling protocol was conducted using the following methodology. In an effort to obtain a representative sample, three (3) well volumes were purged using a Waterra hydralift pump and high density polyethene (HDPE) tubing to remove stagnant water from the well immediately prior to sampling in accordance with EPA standards. Groundwater was then sampled using the Waterra hydralift pump from the HDPE tubing at locations MW-1 and MW-5 once the purging was complete.

In addition to the groundwater sampling, all four (4) cleanout locations within the field drainage system and the overflow discharge pipe were required to be sampled for the same compounds listed above. At the time, on-going construction prevented sampling at these locations.

The samples were collected by a qualified Weston & Sampson technician and analyzed by a Massachusetts and EPA certified laboratory, Alpha Analytical (Alpha). The analytical results were compared to the National Ambient Water Quality Criteria of MCP Method 1 GW-3 and summarized in Table 1 (Attachment A). The laboratory report can be found in Attachment B.

The compounds detected at MW-1 were Arsenic (0.047 mg/l), Chromium (0.083 mg/l), Copper (0.123 mg/l), Lead (0.040 mg/l), Silica (114 mg/l), Zinc (0.130 mg/l) and Hardness (155 mg/l). Benzene, Styrene, Cadmium and all SVOC's were not detected. All detections are below Method1- GW-3 Standards except for Lead. The concentration of Lead exceeds the listed standard (0.01mg/l) by 0.03 mg/l.

The compounds detected at MW-5 were Arsenic (0.051 mg/l), Chromium (0.048 mg/l), Copper (0.161 mg/l), Lead (0.056 mg/l), Silica (98.4 mg/l), Zinc (0.154 mg/l) and Hardness (301 mg/l). Benzene, Styrene, Cadmium and all SVOC's were not detected. All detections are below Method1- GW-3 Standards except for Lead. The concentration of Lead exceeds the listed standard (0.01mg/l) by 0.046 mg/l.

Please feel free to call the undersigned if you have any questions.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.

Kevin MacKinnon, P.G., C.G., PH-GW
Senior Technical Leader, Hydrogeology

Attachments/Enclosures

- Figures
- Attachment A – Table 1: Water Quality Results
- Attachment B – Laboratory Report of Water Quality Results

cc: Ben Keefe, Town of Wayland Facilities Director
Brandon Kunkel, Weston & Sampson

Figures

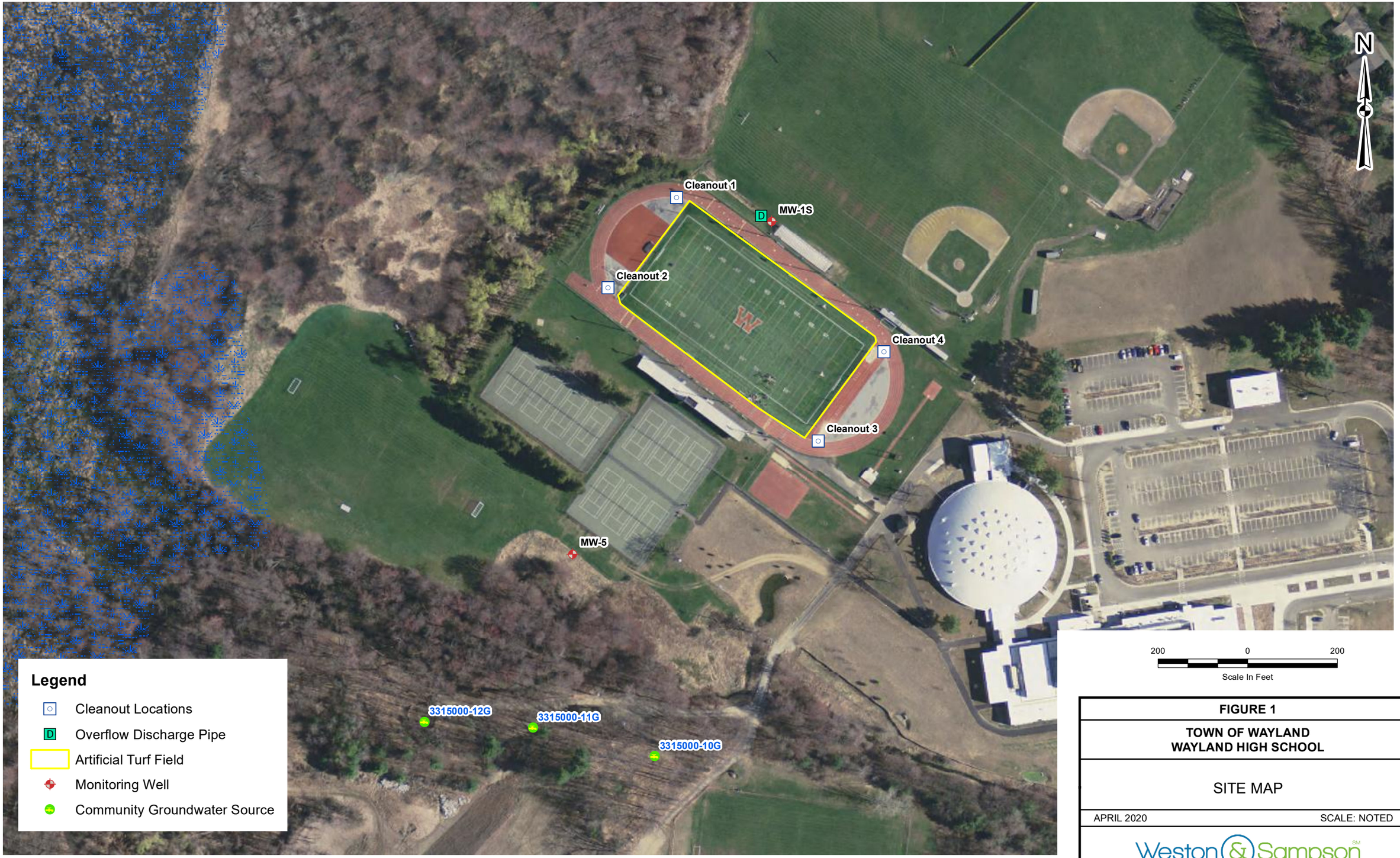

FIGURE 1

TOWN OF WAYLAND
WAYLAND HIGH SCHOOL

SITE MAP

APRIL 2020 SCALE: NOTED

Weston & Sampson SM

Path: P:\MA\Wayland MA\Wayland High School\Athletic Facilities\Hydrogeo\GIS\Mapfiles\Site Map.mxd User: GetchellJ Saved: 4/15/2020 11:44:13 AM Opened: 4/17/2020 3:07:53 PM

Attachment A

Table 1

Analyte	Method 1- GW-3 Standards (310 CMR 40.0974(2): Table 1	Massachusetts Maximum Contaminant Level (MMCLs)/Secondary Contaminant Level (SMCLs)[1]	September 26, 2019 (Baseline Conditions)	
	mg/l	mg/l	MW-1	MW-5
Total Benzene	10	0.005	ND	ND
Arsenic	1	0.01	0.047	0.051
Styrene	6	–	ND	ND
Cadmium	0.004	0.005	ND	ND
Chromium	0.3	0.1	0.083	0.048
Copper	Not Listed	1.3	0.123	0.161
Lead	0.01	0.015	**0.04**	**0.056**
Silica	Not Listed	No Standard	114	98.4
Zinc	0.9	5	0.13	0.154
Hardness	Not Listed	No Standard	155	301
SVOCs	–[2]	–[2]	ND	ND

1. Drinking Water Standards.
2. List of Standards are not included since all SVOCs were undetected.
3. All results recorded in mg/l.
4. Exceedances recorded in **red**.

Attachment B

ANALYTICAL REPORT

Lab Number:	L1944639
Client:	Weston & Sampson 55 Walkers Brook Drive Suite 100 Reading, MA 01867
ATTN:	Kevin MacKinnon
Phone:	(978) 532-1900
Project Name:	WAYLAND HIGH SCHOOL
Project Number:	2180076
Report Date:	10/11/19

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

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

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076

Lab Number: L1944639
Report Date: 10/11/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1944639-01	MW-1S	WATER	WAYLAND, MA	09/26/19 12:35	09/26/19
L1944639-02	MW-5	WATER	WAYLAND, MA	09/26/19 11:05	09/26/19
L1944639-03	TB-01	WATER	WAYLAND, MA	09/26/19 00:00	09/26/19

Project Name:	WAYLAND HIGH SCHOOL	**Lab Number:**	L1944639
Project Number:	2180076	**Report Date:**	10/11/19

Case Narrative

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

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

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. 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:	WAYLAND HIGH SCHOOL	**Lab Number:**	L1944639
Project Number:	2180076	**Report Date:**	10/11/19

Case Narrative (continued)

Report Revision

October 11, 2019: Total Cadmium has been added to L1944639-01 and -02.

October 11, 2019: The project name has been corrected.

Total Metals

The WG1291149-3 MS recovery for silica (308%), performed on L1944639-02, does not apply because the sample concentration is greater than four times the spike amount added.

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 Stenstrom

Title: Technical Director/Representative Date: 10/11/19

ORGANICS

VOLATILES

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-01 Date Collected: 09/26/19 12:35
Client ID: MW-1S Date Received: 09/26/19
Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/02/19 14:06
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-01 Date Collected: 09/26/19 12:35

Client ID: MW-1S Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-01 Date Collected: 09/26/19 12:35

Client ID: MW-1S Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	75		70-130
Dibromofluoromethane	100		70-130

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-02 Date Collected: 09/26/19 11:05
Client ID: MW-5 Date Received: 09/26/19
Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/02/19 14:42
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-02 Date Collected: 09/26/19 11:05

Client ID: MW-5 Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-02 Date Collected: 09/26/19 11:05

Client ID: MW-5 Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	77		70-130
Dibromofluoromethane	100		70-130

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-03 Date Collected: 09/26/19 00:00
Client ID: TB-01 Date Received: 09/26/19
Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/02/19 13:30
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-03 Date Collected: 09/26/19 00:00

Client ID: TB-01 Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-03 Date Collected: 09/26/19 00:00

Client ID: TB-01 Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	76		70-130
Dibromofluoromethane	99		70-130

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/02/19 09:17
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1291484-5					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/02/19 09:17
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1291484-5					
1,2-Dichloroethene, Total	ND		ug/l	0.50	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrolein	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/02/19 09:17
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1291484-5					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,3,5-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Halothane	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	2.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
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	--

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/02/19 09:17
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1291484-5					
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	79		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076

Lab Number: L1944639
Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1291484-3 WG1291484-4								
Methylene chloride	93		93		70-130	0		20
1,1-Dichloroethane	99		99		70-130	0		20
Chloroform	96		94		70-130	2		20
Carbon tetrachloride	120		120		63-132	0		20
1,2-Dichloropropane	92		91		70-130	1		20
Dibromochloromethane	120		120		63-130	0		20
1,1,2-Trichloroethane	89		89		70-130	0		20
2-Chloroethylvinyl ether	**29**	Q	**35**	Q	70-130	19		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	100		100		75-130	0		25
Trichlorofluoromethane	91		87		62-150	4		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	96		95		67-130	1		20
trans-1,3-Dichloropropene	92		92		70-130	0		20
cis-1,3-Dichloropropene	91		92		70-130	1		20
1,1-Dichloropropene	89		85		70-130	5		20
Bromoform	97		97		54-136	0		20
1,1,2,2-Tetrachloroethane	81		83		67-130	2		20
Benzene	80		79		70-130	1		25
Toluene	92		93		70-130	1		25
Ethylbenzene	96		96		70-130	0		20
Chloromethane	96		96		64-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076

Lab Number: L1944639
Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1291484-3 WG1291484-4								
Bromomethane	65		63		39-139	3		20
Vinyl chloride	100		98		55-140	2		20
Chloroethane	98		92		55-138	6		20
1,1-Dichloroethene	100		96		61-145	4		25
trans-1,2-Dichloroethene	100		97		70-130	3		20
Trichloroethene	100		98		70-130	2		25
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	94		92		63-130	2		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	100		99		70-130	1		20
Dibromomethane	90		91		70-130	1		20
1,4-Dichlorobutane	99		99		70-130	0		20
1,2,3-Trichloropropane	76		77		64-130	1		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	85		81		36-147	5		20
Acetone	100		110		58-148	10		20
Carbon disulfide	77		72		51-130	7		20
2-Butanone	120		120		63-138	0		20
Vinyl acetate	130		130		70-130	0		20
4-Methyl-2-pentanone	99		110		59-130	11		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076
Lab Number: L1944639
Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1291484-3 WG1291484-4								
2-Hexanone	120		120		57-130	0		20
Ethyl methacrylate	83		85		70-130	2		20
Acrolein	120		110		70-130	9		20
Acrylonitrile	110		110		70-130	0		20
Bromochloromethane	120		120		70-130	0		20
Tetrahydrofuran	110		110		58-130	0		20
2,2-Dichloropropane	130		120		63-133	8		20
1,2-Dibromoethane	110		110		70-130	0		20
1,3-Dichloropropane	84		85		70-130	1		20
1,1,1,2-Tetrachloroethane	130		130		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	88		86		53-136	2		20
sec-Butylbenzene	90		88		70-130	2		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	84		85		70-130	1		20
p-Chlorotoluene	87		87		70-130	0		20
1,2-Dibromo-3-chloropropane	110		110		41-144	0		20
Hexachlorobutadiene	100		96		63-130	4		20
Isopropylbenzene	90		89		70-130	1		20
p-Isopropyltoluene	110		100		70-130	10		20
Naphthalene	120		120		70-130	0		20
n-Propylbenzene	88		86		69-130	2		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1291484-3 WG1291484-4								
1,2,4-Trichlorobenzene	110		110		70-130	0		20
1,3,5-Trimethylbenzene	88		88		64-130	0		20
1,3,5-Trichlorobenzene	110		100		70-130	10		20
1,2,4-Trimethylbenzene	90		88		70-130	2		20
trans-1,4-Dichloro-2-butene	80		80		70-130	0		20
Halothane	110		100		70-130	10		20
Ethyl ether	84		78		59-134	7		20
Methyl Acetate	110		110		70-130	0		20
Ethyl Acetate	97		91		70-130	6		20
Isopropyl Ether	110		110		70-130	0		20
Cyclohexane	110		100		70-130	10		20
Tert-Butyl Alcohol	**152**	Q	**154**	Q	70-130	1		20
Ethyl-Tert-Butyl-Ether	120		120		70-130	0		20
Tertiary-Amyl Methyl Ether	93		92		66-130	1		20
1,4-Dioxane	92		92		56-162	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	99		92		70-130	7		20
Methyl cyclohexane	88		85		70-130	3		20
p-Diethylbenzene	100		100		70-130	0		20
4-Ethyltoluene	90		89		70-130	1		20
1,2,4,5-Tetramethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1291484-3 WG1291484-4								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		91		70-130
Toluene-d8	91		93		70-130
4-Bromofluorobenzene	79		79		70-130
Dibromofluoromethane	96		96		70-130

SEMIVOLATILES

Project Name: WAYLAND HIGH SCHOOL
Lab Number: L1944639
Project Number: 2180076
Report Date: 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-01
Client ID: MW-1S
Sample Location: WAYLAND, MA

Date Collected: 09/26/19 12:35
Date Received: 09/26/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/01/19 14:26
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 09/30/19 15:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/l	2.0	--	1
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Hexachlorobenzene	ND		ug/l	2.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
2-Chloronaphthalene	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
Fluoranthene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorobutadiene	ND		ug/l	2.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Hexachloroethane	ND		ug/l	2.0	--	1
Isophorone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA	ND		ug/l	2.0	--	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-01 Date Collected: 09/26/19 12:35

Client ID: MW-1S Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Benzo(a)anthracene	ND		ug/l	2.0	--	1
Benzo(a)pyrene	ND		ug/l	2.0	--	1
Benzo(b)fluoranthene	ND		ug/l	2.0	--	1
Benzo(k)fluoranthene	ND		ug/l	2.0	--	1
Chrysene	ND		ug/l	2.0	--	1
Acenaphthylene	ND		ug/l	2.0	--	1
Anthracene	ND		ug/l	2.0	--	1
Benzo(ghi)perylene	ND		ug/l	2.0	--	1
Fluorene	ND		ug/l	2.0	--	1
Phenanthrene	ND		ug/l	2.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--	1
Pyrene	ND		ug/l	2.0	--	1
Biphenyl	ND		ug/l	2.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
1-Methylnaphthalene	ND		ug/l	2.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
2-Methylnaphthalene	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Pentachlorophenol	ND		ug/l	10	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-01 Date Collected: 09/26/19 12:35

Client ID: MW-1S Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	3.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	79		41-149

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076
Lab Number: L1944639
Report Date: 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-02
Client ID: MW-5
Sample Location: WAYLAND, MA

Date Collected: 09/26/19 11:05
Date Received: 09/26/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/01/19 14:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 09/30/19 15:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/l	2.0	--	1
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Hexachlorobenzene	ND		ug/l	2.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
2-Chloronaphthalene	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
Fluoranthene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorobutadiene	ND		ug/l	2.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Hexachloroethane	ND		ug/l	2.0	--	1
Isophorone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA	ND		ug/l	2.0	--	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-02 Date Collected: 09/26/19 11:05

Client ID: MW-5 Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Benzo(a)anthracene	ND		ug/l	2.0	--	1
Benzo(a)pyrene	ND		ug/l	2.0	--	1
Benzo(b)fluoranthene	ND		ug/l	2.0	--	1
Benzo(k)fluoranthene	ND		ug/l	2.0	--	1
Chrysene	ND		ug/l	2.0	--	1
Acenaphthylene	ND		ug/l	2.0	--	1
Anthracene	ND		ug/l	2.0	--	1
Benzo(ghi)perylene	ND		ug/l	2.0	--	1
Fluorene	ND		ug/l	2.0	--	1
Phenanthrene	ND		ug/l	2.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--	1
Pyrene	ND		ug/l	2.0	--	1
Biphenyl	ND		ug/l	2.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
1-Methylnaphthalene	ND		ug/l	2.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
2-Methylnaphthalene	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Pentachlorophenol	ND		ug/l	10	--	1

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-02 Date Collected: 09/26/19 11:05

Client ID: MW-5 Date Received: 09/26/19

Sample Location: WAYLAND, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	3.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	50		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	62		41-149

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/01/19 00:48
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 09/30/19 03:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1290060-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076
Lab Number: L1944639
Report Date: 10/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/01/19 00:48
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 09/30/19 03:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1290060-1					
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Biphenyl	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076
Lab Number: L1944639
Report Date: 10/11/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/01/19 00:48
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 09/30/19 03:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1290060-1					
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	3.5	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	46		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	65		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1290060-2 WG1290060-3								
Acenaphthene	76		64		37-111	17		30
Benzidine	23		22		10-75	4		30
1,2,4-Trichlorobenzene	73		60		39-98	20		30
Hexachlorobenzene	88		75		40-140	16		30
Bis(2-chloroethyl)ether	66		55		40-140	18		30
2-Chloronaphthalene	78		64		40-140	20		30
1,2-Dichlorobenzene	69		59		40-140	16		30
1,3-Dichlorobenzene	66		56		40-140	16		30
1,4-Dichlorobenzene	67		55		36-97	20		30
3,3'-Dichlorobenzidine	66		60		40-140	10		30
2,4-Dinitrotoluene	85		75		48-143	13		30
2,6-Dinitrotoluene	82		72		40-140	13		30
Azobenzene	74		64		40-140	14		30
Fluoranthene	88		76		40-140	15		30
4-Chlorophenyl phenyl ether	82		70		40-140	16		30
4-Bromophenyl phenyl ether	87		77		40-140	12		30
Bis(2-chloroisopropyl)ether	56		47		40-140	17		30
Bis(2-chloroethoxy)methane	68		56		40-140	19		30
Hexachlorobutadiene	79		65		40-140	19		30
Hexachlorocyclopentadiene	83		67		40-140	21		30
Hexachloroethane	66		54		40-140	20		30
Isophorone	69		58		40-140	17		30
Naphthalene	75		60		40-140	22		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1290060-2 WG1290060-3								
Nitrobenzene	69		58		40-140	17		30
NDPA/DPA	83		71		40-140	16		30
n-Nitrosodi-n-propylamine	72		61		29-132	17		30
Bis(2-ethylhexyl)phthalate	75		62		40-140	19		30
Butyl benzyl phthalate	78		70		40-140	11		30
Di-n-butylphthalate	79		68		40-140	15		30
Di-n-octylphthalate	73		65		40-140	12		30
Diethyl phthalate	84		74		40-140	13		30
Dimethyl phthalate	88		77		40-140	13		30
Benzo(a)anthracene	89		76		40-140	16		30
Benzo(a)pyrene	78		68		40-140	14		30
Benzo(b)fluoranthene	94		78		40-140	19		30
Benzo(k)fluoranthene	89		81		40-140	9		30
Chrysene	80		69		40-140	15		30
Acenaphthylene	82		68		45-123	19		30
Anthracene	84		70		40-140	18		30
Benzo(ghi)perylene	94		79		40-140	17		30
Fluorene	81		69		40-140	16		30
Phenanthrene	79		67		40-140	16		30
Dibenzo(a,h)anthracene	89		75		40-140	17		30
Indeno(1,2,3-cd)pyrene	84		72		40-140	15		30
Pyrene	84		72		26-127	15		30
Biphenyl	80		65		40-140	21		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1290060-2 WG1290060-3								
Aniline	**23**	Q	**23**	Q	40-140	0		30
4-Chloroaniline	50		40		40-140	22		30
1-Methylnaphthalene	78		63		41-103	21		30
2-Nitroaniline	81		73		52-143	10		30
3-Nitroaniline	59		54		25-145	9		30
4-Nitroaniline	69		64		51-143	8		30
Dibenzofuran	77		66		40-140	15		30
2-Methylnaphthalene	79		64		40-140	21		30
n-Nitrosodimethylamine	50		42		22-74	17		30
2,4,6-Trichlorophenol	81		69		30-130	16		30
p-Chloro-m-cresol	82		72		23-97	13		30
2-Chlorophenol	72		60		27-123	18		30
2,4-Dichlorophenol	80		67		30-130	18		30
2,4-Dimethylphenol	58		50		30-130	15		30
2-Nitrophenol	75		60		30-130	22		30
4-Nitrophenol	66		57		10-80	15		30
2,4-Dinitrophenol	94		89		20-130	5		30
4,6-Dinitro-o-cresol	96		87		20-164	10		30
Pentachlorophenol	83		74		9-103	11		30
Phenol	56		48		12-110	15		30
2-Methylphenol	70		59		30-130	17		30
3-Methylphenol/4-Methylphenol	74		61		30-130	19		30
2,4,5-Trichlorophenol	82		72		30-130	13		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1290060-2 WG1290060-3								
Benzoic Acid	90		86		10-164	5		30
Benzyl Alcohol	66		55		26-116	18		30
Carbazole	84		72		55-144	15		30
Pyridine	15		11		10-66	**31**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		54		21-120
Phenol-d6	57		46		10-120
Nitrobenzene-d5	59		49		23-120
2-Fluorobiphenyl	66		53		15-120
2,4,6-Tribromophenol	102		89		10-120
4-Terphenyl-d14	71		62		41-149

METALS

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-01 Date Collected: 09/26/19 12:35

Client ID: MW-1S Date Received: 09/26/19

Sample Location: WAYLAND, 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
Total Metals - Mansfield Lab											
Arsenic, Total	0.047		mg/l	0.005	--	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS
Cadmium, Total	ND		mg/l	0.005	--	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS
Calcium, Total	36.8		mg/l	0.100	--	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS
Chromium, Total	0.083		mg/l	0.010	--	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS
Copper, Total	0.123		mg/l	0.010	--	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS
Lead, Total	0.040		mg/l	0.010	--	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS
Silica, Total	114		mg/l	0.500	--	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS
Zinc, Total	0.130		mg/l	0.050	--	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	155		mg/l	0.660	NA	1	09/30/19 16:51	09/30/19 22:11	EPA 3005A	1,6010D	PS

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

SAMPLE RESULTS

Lab ID: L1944639-02 Date Collected: 09/26/19 11:05

Client ID: MW-5 Date Received: 09/26/19

Sample Location: WAYLAND, 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
Total Metals - Mansfield Lab											
Arsenic, Total	0.051		mg/l	0.005	--	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	--	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC
Calcium, Total	71.0		mg/l	0.100	--	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC
Chromium, Total	0.048		mg/l	0.010	--	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC
Copper, Total	0.161		mg/l	0.010	--	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC
Lead, Total	0.056		mg/l	0.010	--	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC
Silica, Total	98.4		mg/l	0.500	--	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC
Zinc, Total	0.154		mg/l	0.050	--	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	301		mg/l	0.660	NA	1	10/02/19 10:10	10/02/19 22:10	EPA 3005A	1,6010D	MC

Project Name: WAYLAND HIGH SCHOOL **Lab Number:** L1944639

Project Number: 2180076 **Report Date:** 10/11/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1290377-1										
Arsenic, Total	ND		mg/l	0.005	--	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS
Cadmium, Total	ND		mg/l	0.005	--	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS
Calcium, Total	ND		mg/l	0.100	--	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS
Chromium, Total	ND		mg/l	0.010	--	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS
Copper, Total	ND		mg/l	0.010	--	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS
Lead, Total	ND		mg/l	0.010	--	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS
Silica, Total	ND		mg/l	0.500	--	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS
Zinc, Total	ND		mg/l	0.050	--	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01 Batch: WG1290377-1										
Hardness	ND		mg/l	0.660	NA	1	09/30/19 16:51	09/30/19 21:37	1,6010D	PS

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1291149-1										
Arsenic, Total	ND		mg/l	0.005	--	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	--	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC
Calcium, Total	ND		mg/l	0.100	--	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC
Chromium, Total	ND		mg/l	0.010	--	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC
Copper, Total	ND		mg/l	0.010	--	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC
Lead, Total	ND		mg/l	0.010	--	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC
Silica, Total	ND		mg/l	0.500	--	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC
Zinc, Total	ND		mg/l	0.050	--	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076
Lab Number: L1944639
Report Date: 10/11/19

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 02 Batch: WG1291149-1										
Hardness	ND		mg/l	0.660	NA	1	10/02/19 10:10	10/02/19 21:58	1,6010D	MC

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1290377-2								
Arsenic, Total	111		-		80-120	-		
Cadmium, Total	103		-		80-120	-		
Calcium, Total	95		-		80-120	-		
Chromium, Total	99		-		80-120	-		
Copper, Total	90		-		80-120	-		
Lead, Total	98		-		80-120	-		
Silica, Total	98		-		80-120	-		
Zinc, Total	103		-		80-120	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 Batch: WG1290377-2								
Hardness	97		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1291149-2								
Arsenic, Total	108		-		80-120	-		
Cadmium, Total	100		-		80-120	-		
Calcium, Total	95		-		80-120	-		
Chromium, Total	96		-		80-120	-		
Copper, Total	97		-		80-120	-		
Lead, Total	97		-		80-120	-		
Silica, Total	101		-		80-120	-		
Zinc, Total	101		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 02 Batch: WG1291149-2					
Hardness	99	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076

Lab Number: L1944639
Report Date: 10/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1290377-3 QC Sample: L1944635-01 Client ID: MS Sample												
Arsenic, Total	ND	0.12	0.127	106		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.052	103		-	-		75-125	-		20
Calcium, Total	0.553	10	9.96	94		-	-		75-125	-		20
Chromium, Total	ND	0.2	0.200	100		-	-		75-125	-		20
Copper, Total	0.091	0.25	0.330	96		-	-		75-125	-		20
Lead, Total	ND	0.51	0.501	98		-	-		75-125	-		20
Silica, Total	1.97	2.14	6.32	**203**	Q	-	-		75-125	-		20
Zinc, Total	0.077	0.5	0.590	102		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1290377-3 QC Sample: L1944635-01 Client ID: MS Sample												
Hardness	5.87	66.2	70.4	98		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1291149-3 QC Sample: L1944639-02 Client ID: MW-5												
Arsenic, Total	0.051	0.12	0.178	106		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.054	106		-	-		75-125	-		20
Calcium, Total	71.0	10	83.1	121		-	-		75-125	-		20
Chromium, Total	0.048	0.2	0.236	94		-	-		75-125	-		20
Copper, Total	0.161	0.25	0.394	93		-	-		75-125	-		20
Lead, Total	0.056	0.51	0.545	96		-	-		75-125	-		20
Silica, Total	98.4	2.14	105	**308**	Q	-	-		75-125	-		20
Zinc, Total	0.154	0.5	0.656	100		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076

Lab Number: L1944639
Report Date: 10/11/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1291149-3 QC Sample: L1944639-02 Client ID: MW-5									
Hardness	301	66.2	360	89	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: WAYLAND HIGH SCHOOL

Project Number: 2180076

Lab Number: L1944639

Report Date: 10/11/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1290377-4 QC Sample: L1944635-01 Client ID: DUP Sample						
Arsenic, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	0.091	0.094	mg/l	3		20
Lead, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.077	0.079	mg/l	2		20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1291149-4 QC Sample: L1944639-02 Client ID: MW-5						
Arsenic, Total	0.051	0.055	mg/l	7		20
Cadmium, Total	ND	ND	mg/l	NC		20
Calcium, Total	71.0	73.6	mg/l	4		20
Chromium, Total	0.048	0.050	mg/l	4		20
Copper, Total	0.161	0.163	mg/l	1		20
Lead, Total	0.056	0.060	mg/l	8		20
Silica, Total	98.4	97.0	mg/l	1		20
Zinc, Total	0.154	0.162	mg/l	5		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1291149-4 QC Sample: L1944639-02 Client ID: MW-5						
Hardness	301	300	mg/l	0		20

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076

Lab Number: L1944639
Report Date: 10/11/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1944639-01A	Vial HCl preserved	A	NA		4.5	Y	Absent		8260(14)
L1944639-01B	Vial HCl preserved	A	NA		4.5	Y	Absent		8260(14)
L1944639-01C	Vial HCl preserved	A	NA		4.5	Y	Absent		8260(14)
L1944639-01D	Plastic 250ml HNO3 preserved	A	<2	<2	4.5	Y	Absent		AS-TI(180),CR-TI(180),CU-TI(180),ZN-TI(180),PB-TI(180),SO-TI(180),HARDT(180),CD-TI(180),CA-TI(180)
L1944639-01E	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		8270TCL-LVI(7)
L1944639-01F	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		8270TCL-LVI(7)
L1944639-02A	Vial HCl preserved	A	NA		4.5	Y	Absent		8260(14)
L1944639-02B	Vial HCl preserved	A	NA		4.5	Y	Absent		8260(14)
L1944639-02C	Vial HCl preserved	A	NA		4.5	Y	Absent		8260(14)
L1944639-02D	Plastic 250ml HNO3 preserved	A	<2	<2	4.5	Y	Absent		AS-TI(180),CR-TI(180),PB-TI(180),CU-TI(180),ZN-TI(180),SO-TI(180),CA-TI(180),HARDT(180),CD-TI(180)
L1944639-02E	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		8270TCL-LVI(7)
L1944639-02F	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		8270TCL-LVI(7)
L1944639-03A	Vial HCl preserved	A	NA		4.5	Y	Absent		8260(14)
L1944639-03B	Vial HCl preserved	A	NA		4.5	Y	Absent		8260(14)

*Values in parentheses indicate holding time in days

Project Name:	WAYLAND HIGH SCHOOL	**Lab Number:**	L1944639
Project Number:	2180076	**Report Date:**	10/11/19

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

Footnotes

Report Format: Data Usability Report

Project Name:	WAYLAND HIGH SCHOOL	**Lab Number:**	L1944639
Project Number:	2180076	**Report Date:**	10/11/19

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

Terms

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

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

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

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol 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.

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

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

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

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report

Project Name: WAYLAND HIGH SCHOOL
Project Number: 2180076
Lab Number: L1944639
Report Date: 10/11/19

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, 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
8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Date Rec'd in Lab: 9/26/19

ALPHA Job #: L1944639

Client Information

Client: Kevin MacKinnon
Address: 55 Walkers Brook Drive Suite 100, Reading, MA
Phone: 978-532-1900 ext 2394
Email: mackinnk@wseinc.com

Project Information

Project Name: Wayland HS Locker Rec. Facilities
Project Location: Wayland, MA
Project #: 2180076
Project Manager:
ALPHA Quote #:

Turn-Around Time

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

Additional Project Information:

Report Information - Data Deliverables

☐ ADEx ☑ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC: ☑ 8260 ☐ 624 ☐ 524.2	SVOC: ☑ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	GRAS, CA, CU, Pb, Zn, SO, Hardness	Sample Comments	TOTAL # BOTTLES
44639-01	MW-1S	9/26/19	1235	GW	JAG	X	X						X			6
-02	MW-5		1105			X	X						X			6
-03	TB-01		1324			X										2

SAMPLE INFO
Filtration ☐ Field ☐ Lab to do
Preservation ☐ Lab to do

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

	Container Type																					
	Preservative																					

Relinquished By:	Date/Time	Received By:	Date/Time
	9/26/19 15:40		9/26/19 15:40
	9/25/19		9-26-19 730
	9-26-19 1935		9/26/19 1935

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

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