

October 28, 2020

Mr. Larry Hanson
Massachusetts Department of
Environmental Protection
Division of Solid Waste
436 Dwight Street
Springfield, MA 01103

RE: Environmental Monitoring Report
Annual Groundwater, Residential Drinking Water, and
Landfill Gas Migration Monitoring Event
Old Orebed Road Landfill
Lanesborough, Massachusetts
ATC Group Services Project No.: 183TD20066

Dear Mr. Hanson:

On behalf of the Town of Lanesborough, ATC Group Services, LLC. (ATC) has prepared this environmental monitoring report describing the annual groundwater, residential drinking water, and landfill gas migration monitoring event(s) that occurred on September 16, 2020 with corresponding field screening and laboratory results. Samples were collected at select monitoring points at and/or in the vicinity of the Old Orebed Road Landfill located in Lanesborough, Massachusetts.

1.0 WATER SAMPLING AND ANALYSIS

On September 16, 2020, ATC field personnel collected samples at groundwater monitoring locations MW-7, MW-8, MW-16, MW-17, MW-18, MW-103D, MW-104D, surface water monitoring location S-2, and residential drinking water well monitoring locations 55 Old Orebed Road, 87 Old Orebed Road, 95 Old Orebed Road, and 99 Old Orebed Road. ATC gauged groundwater monitoring wells MW-7 and MW-17 as dry and consequently, a sample set was not collected at these locations. Note that ATC inadvertently did not collect a sample at S-1 on September 16, 2020. On September 23, 2020, ATC returned to the site and collected the required sample.

Samples were transferred into laboratory provided glassware and submitted in ice to a Massachusetts State Certified Laboratory under standard Chain of Custody (COC) procedures and subsequently, analyzed for parameters promulgated by MassDEP Solid Waste Regulation 310 CMR 19.132(1)(h)(1 through 3) consisting of: Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260 or 524.2 (including the compounds 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), acetone, and unknown peaks having intensities greater than 5x the background intensity (tentatively identified compounds-TICs)); 1,4-dioxane by USEPA Method 8270 via Selected Ion Monitoring (SIM); Polychlorinated Biphenyls (PCBs) by USEPA Method 8080; Total Dissolved Solids (TDS); alkalinity; chloride;

sulfate; nitrate nitrogen; Chemical Oxygen Demand (COD); total cyanide (CN⁻); dissolved or total metals (silver (Ag), arsenic (As), barium (Ba), calcium (Ca), cadmium (Cd), chromium (Cr), copper (Cu), iron (Fe), mercury (Hg), manganese (Mn), sodium (Na), lead (Pb), selenium (Se), and zinc (Zn)); and field parameters (dissolved oxygen (D.O.), pH, specific conductance, and temperature). All sample procedures were conducted in accordance with MassDEP and ATC Standard Operating Procedures (SOPs). Laboratory reports documenting the results of samples collected and associated COCs are provided as Appendix D. A well gauging and field parameter sample log summarizing the field results documented is provided as Appendix E.

Laboratory results concerning the sample parameters described above were tabularized and compared to the Winter 2020 Standards and Guidelines for Contaminants in Massachusetts Drinking Waters, which presents the Massachusetts Maximum Contaminant Level (MMCL) standards, Secondary Maximum Contaminant Level (SMCL) standards, and the MassDEP Office of Research & Standard Guidelines (ORSG) standards. The MMCL standards are the Primary Massachusetts Drinking Water Standards which are used to evaluate groundwater quality. The SMCL standards are secondary standards related to aesthetic water quality properties and are equivalent to the USEPA secondary drinking water guidelines. The MassDEP ORSG issues standards for chemical compounds other than those designated an MMCL or SMCL standard. Massachusetts Surface Water Quality Standards (MA SWQ), 314 CMR 4.05(5)(3) Freshwater Acute Criteria (NRWQA), 314 CMR 4.05(5)(3) Freshwater Chronic Criteria (NRWQC), and along with the aforementioned standards are used to evaluate the surface water quality in Massachusetts. Note that on October 5, 2020, ATC notified MassDEP via e-mail upon receiving/reviewing the laboratory report associated with the September 16, 2020 sampling event. The laboratory report indicated that several applicable standards were exceeded. See the following description for said results.

Spreadsheets summarizing the results of analyses performed and comparing said results to the applicable MMCL, SMCL, ORSG, and/or MA SWQ standards are provided as: Table – 1 (final field screening results and laboratory indicator parameter analyses); Table – 2 (total or dissolved metals analyses); and Table – 3 (VOCs and PCB analysis).

2.0 GROUNDWATER RESULTS

The laboratory indicator parameter analyses indicated that no applicable MMCL standards were exceeded relative to the groundwater samples collected during this event. The applicable SMCL standard for TDS was exceeded in the samples collected at groundwater monitoring well MW-8, MW-16, MW-18, MW-101D, MW-103D, and MW-104D. Final field screening results indicated that the applicable SMCL standard for pH was not exceeded relative to the groundwater samples collected during this event. See Table – 1 for individual sample results. No applicable ORSG standards apply.

The dissolved metals analysis indicated that the applicable MMCL standard for lead was exceeded in the sample collected at groundwater monitoring well location MW-104D. The applicable SMCL standards were exceeded for iron in the samples collected at groundwater monitoring well location MW-8, MW-101D, and MW-104D and for manganese at MW-18, MW-101D, and MW-104D. The applicable ORSG standard for manganese was exceeded in the samples collected at MW-101D and MW-104D. See Table – 2 for individual sample results. Samples for dissolved metals analysis were filtered in the field at the time of collection.

The VOCs analysis indicated that no applicable ORSG standards were exceeded relative to the groundwater samples collected during this event. The applicable MMCL standard for trichloroethene was exceeded in the sample collected at groundwater monitoring well location MW-16 and MW-104D. No TICs were documented during this monitoring period. See Table – 3 for individual sample results. No applicable SMCL standards apply.

The PCBs analysis indicated that the ORSG standard was exceeded in the sample collected at groundwater monitoring well location MW-16. See Table – 3 for individual sample results.

3.0 SURFACE WATER RESULTS

The laboratory indicator parameter analyses indicated that no applicable MMCL and/or SMCL standards were exceeded relative to the groundwater samples collected during this event. The applicable FWCC standard for alkalinity was exceeded in the samples collected surface water monitoring locations S-1 and S-2. Final field screening results indicated that the applicable SMCL standard for pH was not exceeded relative to the groundwater samples collected during this event. See Table – 1 for individual sample results. No applicable ORSG standards apply.

The dissolved metals analysis indicated that no applicable MMCL and/or ORSG standards were exceeded relative to the groundwater samples collected during this event. The applicable SMCL standards for iron and manganese were exceeded in the sample collected at S-1. See Table – 2 for individual sample results.

The VOCs analysis indicated that no applicable MMCL and/or ORSG standards were exceeded relative to the groundwater samples collected during this event. No TICs were documented during this monitoring period. See Table – 3 for individual sample results. No applicable SMCL standards apply.

4.0 RESIDENTIAL DRINKING WATER RESULTS

Final field screening results and the laboratory indicator parameter analyses indicated that no applicable MMCL and/or SMCL standards were exceeded relative to the residential drinking water samples collected during this event. See Table – 1 for individual sample results. No applicable ORSG standards apply.

The total metals analysis indicated that no applicable MMCL and/or SMCL standards were exceeded relative to the residential drinking water samples collected during this event. The applicable ORSG standard for sodium was exceeded in the sample collected at 95 Old Orebed Road. See Table – 2 for individual sample results.

The VOCs analysis indicated that no applicable MMCL and/or ORSG standards were exceeded relative to the residential drinking water samples collected during this event. It should be noted that all concentrations reported were documented below the laboratory reportable detection limit(s) (RDLs). No TICs were documented during this monitoring period. See Table – 3 for individual sample results. No applicable SMCL standards apply.

5.0 HISTORICAL DATA TREND SUMMARY

The following description provides a summary of laboratory result trends documented during the period of September 2018 through September 2020. A spreadsheet summarizing focal historical data documented during the referenced period is provided as Table – 4. Laboratory reports documenting the results of samples collected during the referenced period were provided as attachments with previously submitted annual environmental monitoring reports.

5.1 pH

Field screening results documented during the period of September 2018 through September 2020 indicated the following exceedances of the applicable SMCL standard for pH: MW-8 (2018) and 87 Old Orebed Road (2018 - 2019). Concentrations of pH recorded at and/or in the vicinity of the landfill ranged from 5.78 s.u. at MW-8 (2018) to 8.53 s.u. at 87 Old Orebed Road (2018 - 2019).

5.2 Chloride

No exceedances of the applicable SMCL standard for chloride have been documented concerning samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. Concentrations of chloride ranged from below laboratory RDLs to 10 mg/l at MW-104D (2020).

5.3 Cyanide

No exceedances of the applicable MMCL standard for cyanide have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. Concentrations of cyanide ranged from below laboratory RDLs to 0.11 mg/l at S-1 (2019).

5.4 Sulfate

No exceedances of the applicable SMCL standard for sulfate have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. Concentrations of sulfate ranged from below laboratory RDLs to 126 mg/l at MW-8 (2018).

5.5 TDS

The following exceedances of the applicable SMCL standard for TDS were documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020: MW-8 (2020); MW-16 (2020), MW-18 (2020); MW-101D (2020); MW-103D (2020); and MW-104D (2020). Concentrations of TDS ranged from below laboratory RDLs to 1,410 mg/l at MW-103D (2020).

5.6 Nitrate

No exceedances of the applicable MMCL standard for nitrate have been documented concerning samples collected at and/or in the vicinity of the landfill during the period of

September 2018 through September 2020. Concentrations of nitrate ranged from below laboratory RDLs to 2.2 mg/l at MW-8 (2019).

5.7 Arsenic

No exceedances of the applicable MMCL standard for arsenic have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. All concentrations of arsenic documented have been reported below laboratory RDLs.

5.8 Barium

No exceedances of the applicable SMCL standard for barium have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. Concentrations of barium ranged from below laboratory RDLs to 0.452 mg/l at MW-104D (2020).

5.9 Chromium

No exceedances of the applicable MMCL standard for chromium have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. All concentrations of chromium have been reported below laboratory RDLs.

5.10 Copper

No exceedances of the applicable MMCL standard for copper have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. Concentrations of copper ranged from below laboratory RDLs to 0.18 mg/l at 95 Old Orebed Road (2019).

5.11 Iron

The following exceedances of the applicable SMCL standard for iron were documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020: MW-8 (2020); MW-101D (2020); MW-104D (2020); and S-1 (2020). Concentrations of iron ranged from below laboratory RDLs to 1.54 mg/l at MW-101D (2020).

5.12 Manganese

The following exceedances of the applicable SMCL and/or ORSG standard for manganese were documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020: MW-18 (2020); MW-101D (2019 – 2020); MW-104D (2020); S-1 (2019 – 2020) and S-2 (2019). Concentrations of manganese ranged from below laboratory RDLs to 1.18 mg/l at MW-104D (2020).

5.13 Lead

The following exceedances of the applicable MMCL standard for lead were documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020: MW-104D (2020). Concentrations of lead ranged from below laboratory RDLs to 0.0178 mg/l at MW-104D (2020).

5.14 Mercury

No exceedances of the applicable MMCL standard for mercury have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. All concentrations of mercury documented have been reported below laboratory RDLs.

5.15 Sodium

The following exceedances of the applicable ORSG standard for sodium has been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020: 95 Old Orebed Road (2018 – 2020). Concentrations of sodium ranged from below laboratory RDLs to 49.2 mg/l at 95 Old Orebed Road (2018).

5.16 Selenium

No exceedances of the applicable MMCL standard for selenium have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. All concentrations of selenium were reported below laboratory RDLs.

5.17 Zinc

No exceedances of the applicable SMCL standard for zinc have been documented concerning the samples collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020. Concentrations of zinc ranged from below laboratory RDLs to 0.063 mg/l at 87 Old Orebed Road (2018).

5.18 VOCs

The following exceedances of the applicable MMCL standards have been documented concerning the sample collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020: MW-16 (trichloroethene 2019 – 2020) and MW-104D (trichloroethene 2018 – 2020). Concentrations of VOCs ranged from below the laboratory RDL to 0.26 mg/l at MW-104D (trichloroethene 2018).

5.19 1,4-Dioxane

The following exceedances of the applicable ORSG standard for 1,4-dioxane has been documented concerning the sample collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020: MW-7 (2019) and MW-

16 (2018). Concentrations of 1,4-dioxane ranged from below the laboratory RDL to 0.00052 mg/l at MW-16 (2018).

5.20 PCBs

The following exceedances of the applicable MMCL standard for PCBs has been documented concerning the sample collected at and/or in the vicinity of the landfill during the period of September 2018 through September 2020: MW-16 (2018 – 2020). Concentrations of PCBs ranged from below the laboratory RDL to 0.0072 mg/l at MW-16 (2020).

6.0 LANDFILL GAS MONITORING

ATC conducted the annual landfill gas migration monitoring survey on September 16, 2020. A total of twenty-six (26) monitoring points (GW-1, GW-2, and V-1 through V-24) were located and field screened via a Landtec GEM™ 5000 Plus for % methane (% CH₄), % Lower Explosive Limit (% LEL), % oxygen (% O₂), % carbon dioxide (% CO₂), and hydrogen sulfide (H₂S parts per million (ppm)) and a PhoCheck Tiger – handheld volatile organic compound gas detector for VOCs (ppm). A concentration of methane was detected above the 25% LEL threshold at landfill gas migration monitoring points V-1, V-3, V-4, V-6, V-9, V-11, V-19, V-22, and V-23. Note that these locations are passive landfill gas vents and are designed to allow gas to escape the former landfill unit and consequently, a notification to MassDEP is not required. See Table – 5 for individual gas monitoring location results.

7.0 LANDFILL CAP/PROPERTY INSPECTION

On September 16, 2020, ATC conducted a visual inspection of the landfill cap and immediate vicinity. The inspection was performed via walking the outer perimeter of the landfill footprint and traversing the landfill crown and side slopes. At the time of the visual inspection, ATC field personnel did not observe any evidence of the following: unexplained volumetric changes in surface impoundments; ponding; visible signs of stress in plant and animal life; thinning vegetation; unexplained changes in soil characteristics; visible signs of leaching, seeping, and/or erosion; breakdown and/or damage to the landfill cover system as a result of storm water runoff, burrowing animals, trespassing, and/or recreational use; visual or olfactory evidence of landfill gas emissions which may cause an odor nuisance; indications of trespassing and/or recreational use; damage to landfill gas venting structures; damage to and/or insufficient operation of storm water drainage systems; unapproved post-closure use activities; and/or any other change to the environment that could reasonably be expected to be the result of a release from the landfill unit.

Additional Observations:

- ATC also observed the condition(s) of the gas monitoring wells, passive landfill gas vents, and groundwater monitoring wells. The referenced monitoring locations were found to be in sound condition; locked (if applicable), with no signs of vandalism, and/or other required maintenance issues.
- The former landfill unit does not have any rip-rap lined channels and/or detention basins. Storm water tends to be surface runoff which is directed into the abutting woodland.

8.0 ENGINEER'S CERTIFICATION STATEMENT

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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."



Nathan Berube, P.E.



If you have any questions and/or concerns regarding this information, please contact ATC at (413) 781-0070.

Sincerely,
ATC GROUP SERVICES, LLC.



Todd Donze
Project Manager
Phone: (413) 544-2700
Email: todd.donze@atcgs.com



John Niedzielski
Environmental Services Manager
Phone: (413) 504-1903
Email: john.niedzielski@atcgs.com

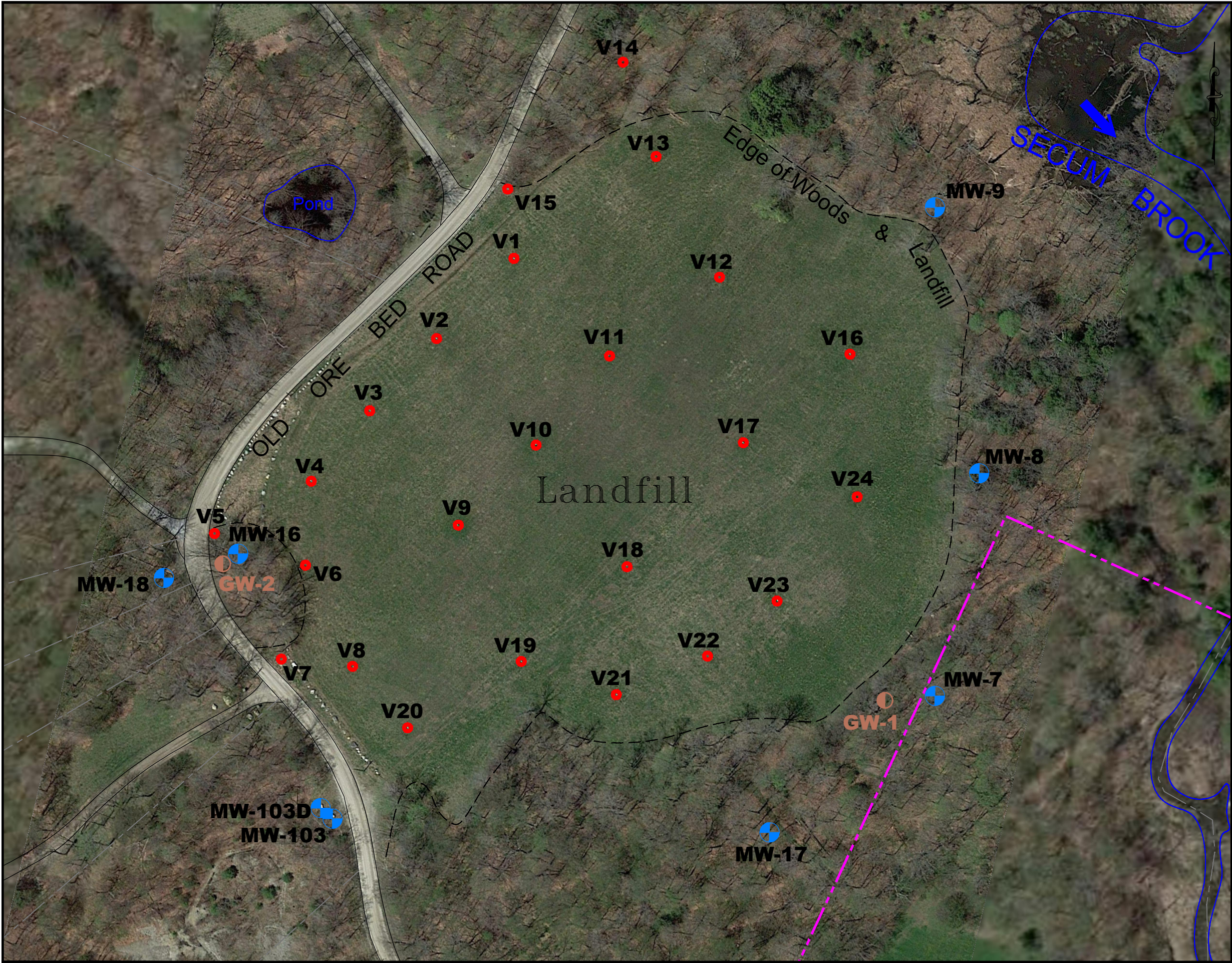
Attachments:

Appendix A	Figures
Appendix B	Tables
Appendix C	Charts
Appendix D	Laboratory Analytical Reports
Appendix E	Well Gauging and Field Parameter Log
Appendix F	Landfill Cap Inspection Photographs

cc: Mrs. Kelli Robbins, Esq.
Town of Lanesborough
Newton Memorial Town Hall
83 North Main Street, P.O. Box 1492
Lanesborough, MA 01237

APPENDIX A

FIGURES



Legend

Property Line (Other)

MW-1

Monitoring Well

V1

Landfill Vent Well

GW-2

Landfill Gas Well

S-2

Surface Water/Stream Sample

Downstream

General Notes:

Site plan based on a plans provided to ATC by Town of Lanesboro, Berkshire County Middle District Registry of Deeds plans ODR-8291, ODR-8356, ODR-8751, ODR-8870, OPL-A83, ORD-8460, Town of Lanesboro Assessors maps airphotos by Google Earth circa 9/18/11, 5/10/14, 10/14/18 and observations made by representatives of ATC.

All locations on this plan are approximate only. This plan should not be used for construction or land conveyance purposes.

ATLAS

ATC

73 William Franks Drive • West Springfield, MA 01089

Phone: 413-781-0070 Fax: 413-781-3734

PROJECT:

Old Ore Bed Road Landfill

Old Ore Bed Road

Lanesboro, Massachusetts

TITLE:

Site Plan with Gas Monitoring & Vent Well Locations

CLIENT:

Town of Lanesboro

GRAPHIC SCALE:

100

50

0

50

100

COMPUTER CADFILE : 183TD20066-Landfill.dwg

DRAWN BY:

DESIGNED BY:

CHECKED BY:

APPROVED BY:

RAS

TD

TD

TD

SCALE:

DATE:

JOB NO.:

FIGURE NO.:

1"=100'

11/3/20

183TD20066

2

APPENDIX B

TABLES

TABLE - 1
Indicator Parameters Analyses of Samples Collected at
and in the Vicinity of the Old Orebed Road Landfill
September 2020

Sample Location	Date	Field	Field	Field	Field	Indicator Parameters						
		pH	Temp.	Sp. Cond	D.O.	Alkalinity	Chloride	Chemical Oxygen Demand	Total Cyanide	Nitrate-(N)	Sulfate	Total Dissolved Solids
		(S.U.)	(°C)	(umhos)	(mg/L)	(mg/l)	(mg/l)	(COD)	(T CN ⁻)	(mg/l)	(mg/l)	(TDS)
MA Surface Water Stds.												
MA SWQS		6.5-8.3	20	N/S	< 5.0	N/S	N/S	N/S	N/S	N/S	N/S	N/S
MA Drinking Water Stds.												
MMCL or SMCL		6.5-8.5	N/S	N/S	N/S	N/S	250	N/S	0.2	10	250	500
314 CMR 4.05(5) e Fresh Water Acute Criteria		N/S	N/S	N/S	N/S	N/S	860	N/S	0.022	N/S	N/S	N/S
314 CMR 4.05(5) e Fresh Water Cronic Criteria		6.5-9.0	N/S	N/S	N/S	20	230	N/S	0.0052	N/S	N/S	N/S
MCP 40.0974(2) Std Table GW -1		N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.2	N/S	N/S	N/S
MCP 40.0974(2) Std Table GW -3		N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.03	N/S	N/S	N/S
Surface Water												
S-1	9/23/2020	6.99	18.50	250	6.01	110	11	< 10	< 0.010	< 0.05	< 5.0	160
S-2	9/16/2020	8.05	17.51	750	5.46	110	10	< 10	< 0.010	< 0.05	< 5.0	145
Groundwater												
MW-7	9/16/2020	Groundwater monitoring well location gauged as dry and consequently, a sample set was not collected during the monitoring period.										
MW-8	9/16/2020	7.31	13.13	3,745	5.37	200	5.5	110	< 0.010	0.52	110	841
MW-16	9/16/2020	7.03	15.78	1,164	1.38	240	7.8	32	< 0.010	0.46	49	1,350
MW-17	9/16/2020	Groundwater monitoring well location gauged as dry and consequently, a sample set was not collected during the monitoring period.										
MW-18	9/16/2020	7.44	14.68	677	4.07	68	1.8	33	< 0.010	0.08	< 5.0	632
MW-101D	9/16/2020	7.90	15.73	1,525	2.24	85	2.2	38	< 0.010	< 0.05	17	703
MW-103D	9/16/2020	7.77	16.38	1,789	1.44	92	< 1.0	< 10	< 0.010	0.16	< 5.0	1,410
MW-104D	9/16/2020	7.72	18.99	1,743	0.88	91	10	62	< 0.010	0.51	28	1,290
Drinking Water												
55 Old Orebed Rd	9/16/2020	8.05	16.96	788	1.17	100	1.6	< 10	< 0.005	0.07	13	210
87 Old Orebed Rd	9/16/2020	7.98	17.30	3,192	2.41	77	0.50	< 10	< 0.005	0.19	5.9	220
95 Old Orebed Rd	9/16/2020	7.71	19.77	2,448	2.43	86	6.9	< 10	< 0.005	0.81	6.8	250
99 Old Orebed Rd	9/16/2020	7.74	19.35	699	4.19	79	0.65	< 10	< 0.005	0.10	3.9	< 10

Notes:

1. N/A = Not Applicable.
2. N/S no standard promulgated.
3. **MMCL** = Massachusetts Maximum Contaminant Level (Winter 2020) Primary Drinking Water Standards.
4. **SMCL** = Secondary Maximum Contaminant Level (Winter 2020) Secondary Drinking Water Standards.
5. **Bold Red** indicates an exceedance of the Primary Drinking Water Standards **MMCLs**.
6. **Bold Blue** indicates an exceedance of the Secondary Drinking Water Standards **SMCLs**.

TABLE - 2
Metals Analysis of Samples Collected at
and in the Vicinity of the Old Orebed Road Landfill
September 2020

Sample Location	Date	Soluble/ Total Metals	Silver Ag (mg/l)	Arsenic As (mg/l)	Barium Ba (mg/l)	Calcium Ca (mg/l)	Cadmium Cd (mg/l)	Chromium Cr (mg/l)	Copper Cu (mg/l)	Iron Fe (mg/l)	Mercury Hg (mg/l)	Manganese Mn (mg/l)	Sodium Na (mg/l)	Lead Pb (mg/l)	Selenium Se (mg/l)	Zinc Zn (mg/l)
MA Drinking Water Stds.																
ORSG, MMCL, or SMCL			0.10	0.010	2	NA	0.005	0.1	1.3	0.3	0.002	0.05/0.30	20	0.015	0.05	5
314 CMR 4.05(5) e Fresh Water Acute Criteria			3.2	0.34	N/S	N/S	0.0018	N/S	N/S	N/S	0.0014	N/S	N/S	0.065	N/S	0.12
314 CMR 4.05(5) e Fresh Water Chronic Criteria			N/S	0.15	N/S	N/S	0.00072	N/S	N/S	1	0.00077	N/S	N/S	0.025	N/S	0.12
MCP 40.0974(2) Std Table GW -1			0.1	0.010	2.0	N/S	0.004	0.1	1.3	N/S	0.002	N/S	N/S	0.015	0.05	0.9
MCP 40.0974(2) Std Table GW -3			0.007	0.9	50	N/S	0.004	0.3	N/S	N/S	0.02	N/S	N/S	0.01	0.1	5
Surface Water																
S-1	9/23/2020	Soluble	< 0.00050	< 0.0080	< 0.0100	37.8	< 0.0050	< 0.0100	< 0.0100	0.314	< 0.00020	0.101	4.09	< 0.0150	< 0.0300	< 0.0200
S-2	9/16/2020	Soluble	< 0.00050	< 0.0080	< 0.0100	38.3	< 0.0050	< 0.0100	< 0.0100	< 0.100	< 0.00020	0.0366	3.98	< 0.0150	< 0.0300	< 0.0200
Groundwater																
MW-7	9/16/2020	Soluble	Groundwater monitoring well location gauged as dry and consequently, a sample set was not collected during the monitoring period.													
MW-8	9/16/2020	Soluble	< 0.00050	< 0.0080	< 0.0100	97.2	< 0.0050	< 0.0100	< 0.0100	0.314	< 0.00020	0.0480	4.46	< 0.0150	< 0.0300	< 0.0200
MW-16	9/16/2020	Soluble	< 0.00050	< 0.0080	0.0117	87.4	< 0.0050	< 0.0100	< 0.0100	< 0.100	< 0.00020	< 0.0100	4.71	< 0.0150	< 0.0300	< 0.0200
MW-17	9/16/2020	Soluble	Groundwater monitoring well location gauged as dry and consequently, a sample set was not collected during the monitoring period.													
MW-18	9/16/2020	Soluble	< 0.00050	< 0.0080	< 0.0100	19.7	< 0.0050	< 0.0100	< 0.0100	< 0.100	< 0.00020	0.137	< 2.00	< 0.0150	< 0.0300	< 0.0200
MW-101D	9/16/2020	Soluble	< 0.00050	< 0.0080	0.141	43.7	< 0.0050	< 0.0100	0.0104	1.54	< 0.00020	0.665	2.91	< 0.0150	< 0.0300	0.0226
MW-103D	9/16/2020	Soluble	< 0.00050	< 0.0080	< 0.0100	27.9	< 0.0050	< 0.0100	< 0.0100	< 0.100	< 0.00020	0.0198	< 2.00	< 0.0150	< 0.0300	< 0.0200
MW-104D	9/16/2020	Soluble	< 0.00050	< 0.0080	0.452	53.4	< 0.0050	< 0.0100	0.0195	1.49	< 0.00020	1.18	2.03	0.0178	< 0.0300	0.0378
Drinking Water																
55 Old Orebed Rd	9/16/2020	Total	< 0.00050	< 0.00100	0.00253	29.9	< 0.00050	< 0.00200	< 0.00500	0.222	< 0.00030	0.0247	3.55	< 0.00100	< 0.00200	0.0113
87 Old Orebed Rd	9/16/2020	Total	< 0.00050	< 0.00100	0.00205	22.3	< 0.00050	< 0.00200	< 0.00500	< 0.100	< 0.00030	< 0.00500	< 2.00	< 0.00100	< 0.00200	< 0.0100
95 Old Orebed Rd	9/16/2020	Total	< 0.00050	< 0.00100	< 0.00100	< 0.500	< 0.00050	< 0.00200	< 0.00500	< 0.100	< 0.00030	< 0.00500	45.6	< 0.00100	< 0.00200	< 0.0100
99 Old Orebed Rd	9/16/2020	Total	< 0.00050	< 0.00100	0.00187	27.9	< 0.00050	< 0.00200	0.0197	< 0.100	< 0.00030	< 0.00500	< 2.00	< 0.00100	< 0.00200	< 0.0100

Notes:

1. N/A = Not Applicable.
2. N/S no standard promulgated.
3. MMCL = Massachusetts Maximum Contaminant Level (Winter 2020) Primary Drinking Water Standards.
4. SMCL = Secondary Maximum Contaminant Level (Winter 2020) Secondary Drinking Water Standards.
5. ORSG = Office of Research and Standards Guidelines (Winter 2020).
6. Bold Red indicates an exceedance of the Primary Drinking Water Standards MMCLs.
7. Bold Blue indicates an exceedance of the Secondary Drinking Water Standards SMCLs.
8. Bold Black indicates an exceedance of the ORSGs.
9. ORSG = Office of Research and Standards Guidelines of 0.30 mg/L for manganese also provided in addition to the SMCL value of 0.05 mg/L

TABLE - 3
VOCs Analysis of Samples Collected at
and in the Vicinity of the Old Orebed Road Landfill
September 2020

Sample Location	Date	TICs (ug/L)	1,4 Dioxane (mg/L)	Acetone (mg/L)	2-Butanone (MEK) (mg/L)	4-Methyl-2-pentanone (MIBK) (mg/L)	Methyl tert-butyl ether MtBE (mg/L)	Tetrachloroethene (mg/L)	Trichloroethene (mg/L)	Total PCBs (mg/l)
MA Drinking Water Stds.										
MMCL or ORSG		N/S	0.0003	6.3	4.0	0.35	0.07	0.005	0.005	0.0005
314 CMR 4.05(5) e Fresh Water Acute Criteria		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
314 CMR 4.05(5) e Fresh Water Cronic Criteria		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
MCP 40.0974(2) Std Table GW -1		N/S	0.0003	6.3	4.0	0.35	0.07	0.005	0.005	0.0005
MCP 40.0974(2) Std Table GW -3		N/S	50	50	50	50	50	30	5	0.01
Surface Water										
S-1	9/23/2020	0	< 0.00028	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	N/A
S-2	9/16/2020	0	< 0.00028	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	N/A
Groundwater										
MW-7	9/16/2020	Groundwater monitoring well location gauged as dry and consequently, a sample set was not collected during the monitoring period.								
MW-8	9/16/2020	0	< 0.00032	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	N/A
MW-16	9/16/2020	0	< 0.00030	< 0.01	< 0.002	< 0.002	< 0.001	0.00452	0.0251	0.0072
MW-17	9/16/2020	Groundwater monitoring well location gauged as dry and consequently, a sample set was not collected during the monitoring period.								
MW-18	9/16/2020	0	< 0.00030	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.000278
MW-101D	9/16/2020	0	< 0.00030	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	N/A
MW-103D	9/16/2020	0	< 0.00028	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	N/A
MW-104D	9/16/2020	0	< 0.00030	< 0.01	< 0.002	< 0.002	< 0.001	0.0015	0.180	< 0.000294
Drinking Water										
55 Old Orebed Rd	9/16/2020	0	< 0.00020	< 0.01	< 0.005	< 0.005	< 0.00050	< 0.00050	< 0.00050	N/A
87 Old Orebed Rd	9/16/2020	0	< 0.00020	< 0.01	< 0.005	< 0.005	< 0.00050	< 0.00050	< 0.00050	N/A
95 Old Orebed Rd	9/16/2020	0	< 0.00020	< 0.01	< 0.005	< 0.005	< 0.00050	< 0.00050	< 0.00050	N/A
99 Old Orebed Rd	9/16/2020	0	< 0.00020	< 0.01	< 0.005	< 0.005	< 0.00050	< 0.00050	< 0.00050	N/A

Notes:

1. N/A = Not Applicable.
2. N/S no standard promulated.
3. MMCL = Massachusetts Maximum Contaminant Level (Winter 2020) Primary Drinking Water Standards.
4. Bold Red indicates an exceedance of the Primary Drinking Water Standards MMCLs.
5. ORSG = Office of Research and Standards Guidelines (2020).
6. Bold Black indicates an exceedance of the ORSGs.
7. BRL = Below Reporting Limit

Table 4
Former Town of Lanesbrough Landfill - Old Orebed Road Landfill
Old Orebed Road, Ware, MA

Historical Groundwater Monitoring Trends

Note: Analyte Not Listed = No Standard , Not Required for Notification, and/or No Historical Detection or Exceedance

1,4-Dioxane		Tetrachloroethene	Trichloroethene	Total PCBs	Arsenic	Barium	Cadmium	Copper	Iron	Manganese	Sodium	Lead	Zinc	pH	Alkalinity	Chloride	Cyanide	Nitrate	Sulfate	TDS
MMCL	0.005	0.005	0.0005	0.01	2	0.005	1.3					0.015					0.2	10		
SMCL									0.3	0.05			5	6.5-8.5		250			250	500
ORSG	0.0003									0.30	20									
MA SWQS														6.5-8.3						
NRWQC					0.15		0.00072		1			0.025	0.12	6.5-9.0	20	230	0.0052			
NRWQA					0.34		0.0018					0.065	0.12			860	0.022			
Date	MW-7																			
9/26/18	Groundwater monitoring well location observed as dry and consequently, a sample set was not collected during this monitoring event.																			
9/9/19	0.00038	< 0.001	< 0.001		< 0.0008	< 0.01	< 0.0002	< 0.001	< 0.050	0.0098	6.6	< 0.0005	< 0.010	7.78	180	12	< 0.010	0.79	15	230
9/16/20	Groundwater monitoring well location observed as dry and consequently, a sample set was not collected during this monitoring event.																			
Date	MW-8																			
9/26/18	< 0.0002	< 0.001	< 0.001		< 0.004	0.007	< 0.001	< 0.005	< 0.011	0.006	4.82	< 0.002	0.003	5.78	190	< 3.0	< 0.010	0.57	126	400
9/9/19	< 0.00022	< 0.001	< 0.001		< 0.0008	< 0.0002	< 0.0002	< 0.001	< 0.050	0.010	4.6	< 0.0005	< 0.010	7.35	170	3.9	< 0.010	2.2	100	210
9/16/20	< 0.00032	< 0.001	< 0.001		< 0.0080	< 0.0100	< 0.0050	< 0.0100	0.314	0.0480	4.46	< 0.0150	< 0.0200	7.31	200	5.5	< 0.010	0.52	110	841
Date	MW-16																			
9/26/18	0.00052	0.0018	< 0.001	0.005	< 0.004	0.008	< 0.001	< 0.005	< 0.011	< 0.001	4.29	< 0.002	0.003	6.58	201	4.8	< 0.010	0.51	23.7	260
9/9/19	< 0.00022	0.0034	0.024	0.0029	< 0.0008	< 0.01	< 0.0002	< 0.001	0.080	< 0.001	4.2	< 0.0005	< 0.010	6.94	190	4.3	< 0.010	0.84	28	210
9/16/20	< 0.00030	0.00452	0.0251	0.0072	< 0.0080	0.0117	< 0.0050	< 0.0100	< 0.100	< 0.0100	4.71	< 0.0150	< 0.0200	7.03	240	7.8	< 0.010	0.46	49	1,350
Date	MW-17																			
9/26/18	Groundwater monitoring well location observed as dry and consequently, a sample set was not collected during this monitoring event.																			
9/9/19	Groundwater monitoring well location observed as dry and consequently, a sample set was not collected during this monitoring event.																			
9/16/20	Groundwater monitoring well location observed as dry and consequently, a sample set was not collected during this monitoring event.																			
Date	MW-18																			
9/26/18	< 0.0002	< 0.001	< 0.001	< 0.0005	< 0.004	0.007	< 0.001	< 0.005	< 0.011	0.014	0.84	< 0.002	< 0.002	7.28	68	< 3.0	< 0.010	0.10	< 3.0	88
9/9/19	< 0.0002	< 0.001	< 0.001	< 0.0002	< 0.0008	< 0.01	< 0.0002	< 0.001	< 0.050	0.0056	< 2.0	< 0.0005	< 0.010	7.41	63	1.7	< 0.010	0.16	2.5	48
9/16/20	< 0.00030	< 0.001	< 0.001	< 0.000278	< 0.0080	< 0.0100	< 0.0050	< 0.0100	< 0.100	0.137	< 2.00	< 0.0150	< 0.0200	7.44	68	1.8	< 0.010	0.08	< 5.0	632
Date	MW-101D																			
9/26/18	< 0.0002	< 0.001	< 0.001		< 0.004	0.011	< 0.001	< 0.005	< 0.011	0.023	3.37	< 0.002	< 0.002	7.40	87	< 3.0	< 0.010	< 0.05	11.2	120
9/9/19	< 0.0002	< 0.001	< 0.001		< 0.0008	0.011	< 0.0002	< 0.001	0.071	0.16	3.0	< 0.0005	< 0.010	8.28	80	1.00	< 0.010	< 0.0001	13	100
9/16/20	< 0.00030	< 0.001	< 0.001		< 0.0080	0.141	< 0.0050	0.0104	1.54	0.665	2.91	< 0.0150	0.0226	7.90	85	2.2	< 0.010	< 0.05	17	703
Date	MW-103D																			
9/26/18	< 0.0002	< 0.001	< 0.001		< 0.004	0.009	< 0.001	< 0.005	< 0.011	0.017	1.88	< 0.002	< 0.002	7.52	91	< 3.0	< 0.010	0.13	4.6	88
9/9/19	< 0.0002	< 0.001	< 0.001		< 0.0008	< 0.01	< 0.0002	< 0.001	0.067	0.0081	< 2.0	< 0.0005	< 0.010	7.95	82	< 1.0	< 0.010	0.25	5.1	130
9/16/20	< 0.00028	< 0.001	< 0.001		< 0.0080	< 0.0100	< 0.0050	< 0.0100	< 0.100	0.0198	< 2.00	< 0.0150	< 0.0200	7.77	92	< 1.0	< 0.010	0.16	< 5.0	1,410
Date	MW-104D																			
9/26/18	< 0.0002	< 0.001	0.21	< 0.0005	< 0.004	0.007	< 0.001	< 0.005	< 0.011	0.008	2.14	< 0.002	< 0.002	7.47	89	8.4	< 0.010	0.45	18.8	160
9/9/19	< 0.0002	< 0.004	0.26	< 0.0002	< 0.0008	< 0.01	< 0.0002	< 0.001	< 0.050	0.0028	2.1	< 0.0005	< 0.010	8.03	93	7.2	< 0.010	0.89	20	78
9/16/20	< 0.00030	0.0015	0.180	< 0.000294	< 0.0080	0.452	< 0.0050	0.0195	1.49	1.18	2.03	0.0178	0.0378	7.72	91	10	< 0.010	0.51	28	1,290

Date	55 Old Orebed Road																			
9/26/18	< 0.0002	< 0.0005	< 0.0005		< 0.0005	0.003	< 0.001	0.010	0.133	0.026	5.0	< 0.0010	0.019	8.02	103	< 3.0	< 0.005	0.13	10.6	120
9/9/19	< 0.0002	< 0.0005	< 0.0005		< 0.0008	< 0.01	< 0.0002	0.0094	< 0.050	0.0046	4.1	0.001	0.019	8.08	100	1.2	< 0.010	0.28	12	110
9/16/20	< 0.00020	< 0.00050	< 0.00050		< 0.00100	0.00253	< 0.00500	< 0.00500	0.222	0.0247	3.55	< 0.00100	0.0113	8.05	100	1.6	< 0.005	0.07	13	210
Date	87 Old Orebed Road																			
9/26/18	< 0.0002	< 0.0005	< 0.0005		< 0.0005	0.002	< 0.001	0.008	0.078	0.001	1.6	< 0.0010	0.063	8.53	73	< 3.0	< 0.005	0.20	5.0	87
9/9/19	< 0.00019	< 0.0005	< 0.0005		< 0.0008	< 0.01	< 0.0002	0.059	< 0.050	< 0.001	< 0.002	0.0026	0.1	8.53	76	< 1.0	< 0.010	0.31	5.8	82
9/16/20	< 0.00020	< 0.00050	< 0.00050		< 0.00100	0.00205	< 0.00050	< 0.00500	< 0.100	< 0.00500	< 2.00	< 0.00100	< 0.0100	7.98	77	0.50	< 0.005	0.19	5.9	220
Date	95 Old Orebed Road																			
9/26/18	< 0.0002	< 0.0005	< 0.0005		< 0.0005	0.001	< 0.001	0.027	0.021	< 0.001	49.2	0.0060	0.045	8.14	89	5.3	< 0.005	0.94	5.9	130
9/9/19	< 0.0002	< 0.0005	< 0.0005		< 0.0008	< 0.01	< 0.0002	0.18	< 0.050	< 0.001	58	0.0022	0.09	8.20	140	6.3	< 0.010	0.94	6.5	130
9/16/20	< 0.00020	< 0.00050	< 0.00050		< 0.00100	< 0.00100	< 0.00050	< 0.00500	< 0.100	< 0.00500	45.6	< 0.00100	< 0.0100	7.71	86	6.9	< 0.005	0.81	6.8	250
Date	99 Old Orebed Road																			
9/26/18	< 0.0002	< 0.0005	< 0.0005		< 0.0005	0.003	< 0.001	0.062	0.051	0.002	0.9	0.0027	0.017	8.20	81	< 3.0	< 0.005	0.12	3.3	92
9/9/19	< 0.0002	< 0.0005	< 0.0005		< 0.0008	< 0.01	< 0.0002	0.074	< 0.050	< 0.001	< 0.002	0.00069	< 0.010	8.48	87	< 1.0	< 0.010	0.20	3.8	78
9/16/20	< 0.00020	< 0.00050	< 0.00050		< 0.00100	0.00187	< 0.00050	0.0197	< 0.100	< 0.00500	< 2.00	< 0.00100	< 0.0100	7.74	79	0.65	< 0.005	0.10	3.9	< 10
Date	S-1 Upstream																			
9/26/18	< 0.0002	< 0.001	< 0.001		< 0.004	0.003	< 0.001	< 0.005	0.052	0.022	3.25	< 0.002	< 0.002	7.73	87	4.4	< 0.010	0.10	< 3.0	110
9/9/19	< 0.0002	< 0.001	< 0.001		< 0.0008	< 0.01	< 0.0002	0.0027	0.10	0.082	4.2	0.0042	0.016	8.05	99	8.4	<i>0.11</i>	0.17	3.7	100
9/16/20	< 0.00028	< 0.001	< 0.001		< 0.0080	< 0.0100	< 0.0050	< 0.0100	0.314	0.101	4.09	< 0.0150	< 0.0200	6.99	110	11	< 0.010	< 0.05	< 5.0	160
Date	S-2 Downstream																			
9/26/18	< 0.0002	< 0.001	< 0.001		< 0.004	0.003	< 0.001	< 0.005	0.051	0.023	3.14	< 0.002	< 0.002	7.52	87	4.4	< 0.010	0.10	< 3.0	120
9/9/19	< 0.0002	< 0.001	< 0.001		< 0.0008	< 0.01	< 0.0002	< 0.001	< 0.050	0.090	4.4	< 0.0005	< 0.010	7.86	93	8.3	< 0.010	0.17	3.7	120
9/16/20	< 0.00028	< 0.001	< 0.001		< 0.0080	< 0.0100	< 0.0050	< 0.0100	< 0.100	0.0366	3.98	< 0.0150	< 0.0200	8.05	110	10	< 0.010	< 0.05	< 5.0	145

VOCs indicated as ug/l.
Metals and indicator parameters indicated as mg/l.
Blank indicates analyte not sampled.

TABLE - 5
Landfill Gas Monitoring Survey
Former Old Orebed Road Landfill
September 2020

Date:	9/16/2020	Barometric Pressure:	29.68
Reported by:	Keven Brown	End:	29.68
Weather Conditions:	Partly Cloudy	Temperature:	63.0°
Wind & Direction:	2 mph Northeast	End:	61.0°
Ground Cover:	Vegetation or Snow		

LOCATION	TIME	% CH ₄	% LEL	% O ₂	% CO ₂	H ₂ S ppm	VOCs ppm
Ambient	4:20	0	0	20.9	0	0	0
GW-1	5:09	0	0	19.7	2.8	0	0
GW-2	4:22	0	0	20.7	0.2	0	0
V-1	4:21	17.9	358	13.4	8.3	0	0
V-2	4:39	0	0	20.3	0.4	0	0
V-3	4:37	5.1	102	16.2	3.5	0	0
V-4	4:35	2.7	54	15.6	5.0	0	0
V-5	4:24	0	0	19.9	1.3	0	0
V-6	4:26	2.6	52	17.6	3.4	0	0
V-7	4:28	0	0	20.8	0	0	0
V-8	4:30	0.7	14	18.8	0.8	0	0
V-9	4:51	4.9	98	0.4	12.9	2.0	0
V-10	4:49	0.1	2	17.9	0.8	0	0
V-11	4:47	34.0	680	0.9	22.9	2.0	0
V-12	4:57	0	0	18.9	1.9	0	0
V-13	4:45	0.1	2	20.6	0.4	0	0
V-14	5:16	0	0	20.8	0	0	0
V-15	4:43	0	0	20.8	0.2	0	0
V-16	4:59	0	0	20.7	0.3	0	0
V-17	4:55	0	0	20.7	0	0	0
V-18	4:53	0.2	4	18.8	1.0	0	0
V-19	4:51	1.4	28	17.8	1.5	0	0
V-20	4:32	0	0	18.4	3.4	0	0
V-21	5:10	0.2	4	20.2	1.0	0	0
V-22	5:05	26.4	528	8.4	18.8	0	0
V-23	5:03	21.8	436	5.7	18.5	0	0
V-24	5:01	0	0	20.6	0.4	0	0

Analyzed using Geotechnical Instruments Landtec GEM-5000.

% CH₄: Percent methane.

% LEL: Percent of the Lower Explosive Limit.

% O₂: Percent oxygen.

% CO₂: Percent carbon dioxide.

H₂S: Hydrogen sulfide result recorded in parts per million by volume (ppmv) of total organic vapors (TOVs).

VOCs: Volatile Organic Compounds result recorded in ppmv of TOVs.

APPENDIX C

CHARTS

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APPENDIX D

LABORATORY ANALYTICAL REPORTS

Report Date:
30-Sep-20 11:12

Laboratory Report
SC59356

ATC Group Services, LLC
73 William Franks Drive
West Springfield, MA 01089
Attn: Todd Donze

Project: Old Orebed Rd Landfill - Lanesborough, MA
Project #: 183TD20066

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Connecticut # PH-0722
Massachusetts # RI907
New Hampshire # 2240
New York # 11393
Rhode Island # LAI00368
USDA # P330-20-00109

Authorized by:

Agnes Huntley
Project Manager



Analyses are performed in accordance with MA DEP certification standards. Massachusetts DEP does not offer certification for all analytes. For those that are offered, Eurofins Environment Testing New England holds certification for the analytes as indicated with an X in the "Cert." column within this report.

Please note that this report contains 28 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Environment Testing New England.

Eurofins Environment Testing New England is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Environment Testing New England is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.eurofinsus.com/Spectrum for a full listing of our current certifications and fields of accreditation.

Please contact the Laboratory or Technical Director at 413-789-9018 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC59356
Project: Old Orebed Rd Landfill - Lanesborough, MA
Project Number: 183TD20066

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC59356-01	55 Old Orebed Rd	Drinking Water	16-Sep-20 14:00	17-Sep-20 09:50
SC59356-02	87 Old Orebed Rd	Drinking Water	16-Sep-20 12:30	17-Sep-20 09:50
SC59356-03	95 Old Orebed Rd	Drinking Water	16-Sep-20 13:00	17-Sep-20 09:50
SC59356-04	99 Old Orebed Rd	Drinking Water	16-Sep-20 13:30	17-Sep-20 09:50
SC59356-05	Trip	Trip Blank	16-Sep-20 00:00	17-Sep-20 09:50

CASE NARRATIVE:**GC/MS VOA**

Method 524.2_Preserved: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container(s): SC59356-05 (410-14391-5). The sample container was received with headspace.

Sample Acceptance Check Form

Client: ATC Group Services, LLC - West Springfield, MA
Project: Old Orebed Rd Landfill - Lanesborough, MA / 183TD20066
Work Order: SC59356
Sample(s) received on: 9/17/2020

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Summary of Hits

Lab ID: SC59356-01

Client ID: 55 Old Orebed Rd

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Nitrate as Nitrogen	0.07		0.01	mg/l	E300.0
Calcium	29.9		0.500	mg/l	EPA 200.7
Iron	0.222		0.100	mg/l	EPA 200.7
Sodium	3.55		2.00	mg/l	EPA 200.7
Barium	0.00253		0.00100	mg/l	EPA 200.8
Manganese	0.0247		0.00500	mg/l	EPA 200.8
Zinc	0.0113		0.0100	mg/l	EPA 200.8
Chloride	1.6		0.50	mg/l	MCAWW 300.0_28D
Sulfate	13		2.0	mg/l	MCAWW 300.0_28D
Alkalinity, Total	100		5.0	mg/l	SM 2320B
Total Dissolved Solids	210		10	mg/l	SM 2540C_Calcd

Lab ID: SC59356-02

Client ID: 87 Old Orebed Rd

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Nitrate as Nitrogen	0.19		0.01	mg/l	E300.0
Calcium	22.3		0.500	mg/l	EPA 200.7
Barium	0.00205		0.00100	mg/l	EPA 200.8
Chloride	0.50		0.50	mg/l	MCAWW 300.0_28D
Sulfate	5.9		2.0	mg/l	MCAWW 300.0_28D
Alkalinity, Total	77		5.0	mg/l	SM 2320B
Total Dissolved Solids	220		10	mg/l	SM 2540C_Calcd

Lab ID: SC59356-03

Client ID: 95 Old Orebed Rd

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Nitrate as Nitrogen	0.81		0.01	mg/l	E300.0
Sodium	45.6		2.00	mg/l	EPA 200.7
Chloride	6.9		0.50	mg/l	MCAWW 300.0_28D
Sulfate	6.8		2.0	mg/l	MCAWW 300.0_28D
Alkalinity, Total	86		5.0	mg/l	SM 2320B
Total Dissolved Solids	250		10	mg/l	SM 2540C_Calcd

Lab ID: SC59356-04

Client ID: 99 Old Orebed Rd

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Nitrate as Nitrogen	0.10		0.01	mg/l	E300.0
Calcium	27.9		0.500	mg/l	EPA 200.7
Barium	0.00187		0.00100	mg/l	EPA 200.8
Copper	0.0197		0.00500	mg/l	EPA 200.8
Chloride	0.65		0.50	mg/l	MCAWW 300.0_28D
Sulfate	3.9		2.0	mg/l	MCAWW 300.0_28D
Alkalinity, Total	79		5.0	mg/l	SM 2320B

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification

55 Old Orebed Rd

SC59356-01

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 14:00

Received

17-Sep-20

Analyte(s)	Result	Flag	Units	*RDL	Dilution	MCL	SMCL	ORSG	Method Ref.	Prepared	Analyzed	Analyst	Cert.
Total Metals by EPA 200 Series Methods													
Arsenic	< 0.00100		mg/l	0.00100	1	0.01			EPA 200.8	21-Sep-20	24-Sep-20	pmh/edt	X
Barium	0.00253		mg/l	0.00100	1	2			"	"	"	"	X
Calcium	29.9		mg/l	0.500	1				EPA 200.7	"	24-Sep-20	EDT	X
Cadmium	< 0.00050		mg/l	0.00050	1	0.005			EPA 200.8	"	24-Sep-20	pmh/edt	X
Chromium	< 0.00200		mg/l	0.00200	1	0.1			"	"	"	"	X
Copper	< 0.00500		mg/l	0.00500	1	1.3	1		"	"	"	"	X
Iron	0.222		mg/l	0.100	1		0.3		EPA 200.7	"	22-Sep-20	edt	X
Mercury	< 0.00030	R06	mg/l	0.00030	1	0.002			EPA 245.1	21-Sep-20	23-Sep-20	edt	X
Manganese	0.0247		mg/l	0.00500	1		0.05		EPA 200.8	21-Sep-20	24-Sep-20	pmh/edt	X
Sodium	3.55		mg/l	2.00	1			20	EPA 200.7	"	22-Sep-20	edt	X
Lead	< 0.00100		mg/l	0.00100	1	0.015			EPA 200.8	"	24-Sep-20	pmh/edt	X
Selenium	< 0.00200		mg/l	0.00200	1	0.05			"	"	"	"	X
Zinc	0.0113		mg/l	0.0100	1		5		"	"	"	"	X

Subcontracted Analyses*Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044*

Silver	< 0.50		ug/l	0.50	1		100		EPA 200.8	22-Sep-20 10:00	22-Sep-20 16:27	M-NY044	
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Subcontracted AnalysesPrepared by method NONE*Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044*

Chloride	1.6		mg/l	0.50	1		250		MCAWW 300.0_28D	21-Sep-20 21:52	21-Sep-20 21:52	M-NY044	
Sulfate	13		mg/l	2.0	1		250		"	"	"	"	

Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

Chemical Oxygen Demand	< 10		mg/l	10	1				MCAWW 410.4	19-Sep-20 19:00	19-Sep-20 19:00	M-NY044	
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Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

Alkalinity, Total	100		mg/l	5.0	1				SM 2320B	23-Sep-20 14:53	23-Sep-20 14:53	M-NY044	
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Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

Total Dissolved Solids	210		mg/l	10	1				SM 2540C_Calcd	18-Sep-20 19:31	18-Sep-20 19:31	M-NY044	
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009*

Bromomethane	< 0.50		ug/l	0.50	1			10	EPA-DW 524.2_Preserved	28-Sep-20 23:11	28-Sep-20 23:11	M-PA009	
N-Propylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1-Dichloroethene	< 0.50		ug/l	0.50	1	7			"	"	"	"	
2-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
trans-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
1,2,3-Trichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
Isopropylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethylbenzene	< 0.50		ug/l	0.50	1	700			"	"	"	"	
di-Isopropyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromo-3-Chloropropane	< 1.0		ug/l	1.0	1	0.2			"	"	"	"	
Toluene	< 0.50		ug/l	0.50	1	1000			"	"	"	"	
p-Isopropyltoluene	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample Identification

55 Old Orebed Rd

SC59356-01

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 14:00

Received

17-Sep-20

Analyte(s)	Result	Flag	Units	*RDL	Dilution	MCL	SMCL	ORSG	Method Ref.	Prepared	Analyzed	Analyst	Cert.
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009*

Acrylonitrile	< 10		ug/l	10	1				EPA-DW 524.2_Preserved	28-Sep-20 23:11	28-Sep-20 23:11	M-PA009	
1,2-Dichloropropane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
trans-1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1,1-Trichloroethane	< 0.50		ug/l	0.50	1	200			"	"	"	"	
Chloroform	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Freon 113	< 0.50		ug/l	0.50	1			210000	"	"	"	"	
tert-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
m&p-Xylene	< 1.0		ug/l	1.0	1				"	"	"	"	
1,2-Dichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
Hexachlorobutadiene	< 0.50		ug/l	0.50	1				"	"	"	"	
Benzene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1-Dichloroethane	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Methyl tertiary butyl ether	< 0.50		ug/l	0.50	1		40	70	"	"	"	"	
Carbon tetrachloride	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Dibromomethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Methylene Chloride	< 1.0		ug/l	1.0	1	5			"	"	"	"	
o-Xylene	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethyl t-butyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromodichloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Chloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2,2-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
Styrene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
1,3,5-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Vinyl chloride	< 0.50		ug/l	0.50	1	2			"	"	"	"	
1,1,2-Trichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
n-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tentatively Identified Compound	None		ug/l		1				"	"	"	"	
Trichlorofluoromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrachloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Dibromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Butanone	< 5.0		ug/l	5.0	1			4000	"	"	"	"	
1,2,3-Trichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrahydrofuran	< 7.0		ug/l	7.0	1			1300	"	"	"	"	
Chloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Hexanone	< 5.0		ug/l	5.0	1				"	"	"	"	
Carbon disulfide	< 2.0		ug/l	2.0	1				"	"	"	"	
Chlorobenzene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
Ethyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample Identification

55 Old Orebed Rd
SC59356-01

Client Project #
183TD20066

Matrix
Drinking Water

Collection Date/Time
16-Sep-20 14:00

Received
17-Sep-20

Analyte(s)	Result	Flag	Units	*RDL	Dilution	MCL	SMCL	ORSG	Method Ref.	Prepared	Analyzed	Analyst	Cert.
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Subcontracted AnalysesSubcontracted Analyses

Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009

Analyte(s)	Result	Flag	Units	*RDL	Dilution	MCL	SMCL	ORSG	Method Ref.	Prepared	Analyzed	Analyst	Cert.
1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				EPA-DW 524.2_Preserved	28-Sep-20 23:11	28-Sep-20 23:11	M-PA009	
1,4-Dichlorobenzene	< 0.50		ug/l	0.50	1	75			"	"	"	"	
sec-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2,4-Trichlorobenzene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
1,2,4-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
t-Amyl methyl ether	< 0.50		ug/l	0.50	1			90	"	"	"	"	
Dichlorodifluoromethane	< 0.50		ug/l	0.50	1			1400	"	"	"	"	
t-Butyl alcohol	< 25		ug/l	25	1			120	"	"	"	"	
1,3-Dichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dichlorobenzene	< 0.50		ug/l	0.50	1	600			"	"	"	"	
Bromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromoform	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1,1,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromoethane	< 0.50		ug/l	0.50	1	0.05			"	"	"	"	
Bromobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,3-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Methyl-2-pentanone	< 5.0		ug/l	5.0	1			350	"	"	"	"	
Acetone	< 10		ug/l	10	1			6300	"	"	"	"	
Trichloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Naphthalene	< 0.50		ug/l	0.50	1			140	"	"	"	"	

Surrogate recoveries:

1,2-Dichlorobenzene-d4 (Surr)	92			80-120 %					"	"	"	"	
4-Bromofluorobenzene (Surr)	90			80-120 %					"	"	"	"	

Subcontracted AnalysesPrepared by method E300.0

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

Nitrate as Nitrogen	0.07		mg/l	0.01	1	10			E300.0	18-Sep-20 00:23	18-Sep-20 00:23	M-PA009	
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Prepared by method E335.4

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

Total Cyanide (Drinking water)	< 0.005		mg/l	0.005	1	0.2			E335.4	21-Sep-20	22-Sep-20 11:04	M-PA009	
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Subcontracted AnalysesPrepared by method EPA522

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

1,4-dioxane	< 0.20		ug/l	0.20	1			3	EPA522	18-Sep-20	21-Sep-20 16:05	M-PA009	
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Surrogate recoveries:

% 1,4-dioxane-d8	88			70-130 %					"	"	"	"	
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Sample Identification

87 Old Orebed Rd

SC59356-02

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 12:30

Received

17-Sep-20

<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>Dilution</i>	<i>MCL</i>	<i>SMCL</i>	<i>ORSG</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Cert.</i>
Total Metals by EPA 200 Series Methods													
Arsenic	< 0.00100		mg/l	0.00100	1	0.01			EPA 200.8	21-Sep-20	24-Sep-20	pmh/edt	X
Barium	0.00205		mg/l	0.00100	1	2			"	"	"	"	X
Calcium	22.3		mg/l	0.500	1				EPA 200.7	"	24-Sep-20	EDT	X
Cadmium	< 0.00050		mg/l	0.00050	1	0.005			EPA 200.8	"	24-Sep-20	pmh/edt	X
Chromium	< 0.00200		mg/l	0.00200	1	0.1			"	"	"	"	X
Copper	< 0.00500		mg/l	0.00500	1	1.3	1		"	"	"	"	X
Iron	< 0.100		mg/l	0.100	1		0.3		EPA 200.7	"	22-Sep-20	edt	X
Mercury	< 0.00030	R06	mg/l	0.00030	1	0.002			EPA 245.1	21-Sep-20	23-Sep-20	edt	X
Manganese	< 0.00500		mg/l	0.00500	1		0.05		EPA 200.8	21-Sep-20	24-Sep-20	pmh/edt	X
Sodium	< 2.00		mg/l	2.00	1			20	EPA 200.7	"	22-Sep-20	edt	X
Lead	< 0.00100		mg/l	0.00100	1	0.015			EPA 200.8	"	24-Sep-20	pmh/edt	X
Selenium	< 0.00200		mg/l	0.00200	1	0.05			"	"	"	"	X
Zinc	< 0.0100		mg/l	0.0100	1		5		"	"	"	"	X
Subcontracted Analyses													
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Silver	< 0.50		ug/l	0.50	1		100		EPA 200.8	22-Sep-20 10:00	22-Sep-20 16:37	M-NY044	
Subcontracted Analyses													
<i>Prepared by method NONE</i>													
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Chloride	0.50		mg/l	0.50	1		250		MCAWW 300.0_28D	21-Sep-20 22:06	21-Sep-20 22:06	M-NY044	
Sulfate	5.9		mg/l	2.0	1		250		"	"	"	"	
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Chemical Oxygen Demand	< 10		mg/l	10	1				MCAWW 410.4	19-Sep-20 19:00	19-Sep-20 19:00	M-NY044	
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Alkalinity, Total	77		mg/l	5.0	1				SM 2320B	23-Sep-20 15:15	23-Sep-20 15:15	M-NY044	
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Total Dissolved Solids	220		mg/l	10	1				SM 2540C_Calcd	18-Sep-20 19:31	18-Sep-20 19:31	M-NY044	
Subcontracted Analyses													
<i>Subcontracted Analyses</i>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009</i>													
Bromomethane	< 0.50		ug/l	0.50	1			10	EPA-DW 524.2_Preserved	28-Sep-20 23:36	28-Sep-20 23:36	M-PA009	
N-Propylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1-Dichloroethene	< 0.50		ug/l	0.50	1	7			"	"	"	"	
2-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
trans-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
1,2,3-Trichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
Isopropylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethylbenzene	< 0.50		ug/l	0.50	1	700			"	"	"	"	
di-Isopropyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromo-3-Chloropropane	< 1.0		ug/l	1.0	1	0.2			"	"	"	"	
Toluene	< 0.50		ug/l	0.50	1	1000			"	"	"	"	
p-Isopropyltoluene	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample Identification

87 Old Ored Rd

SC59356-02

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 12:30

Received

17-Sep-20

<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>Dilution</i>	<i>MCL</i>	<i>SMCL</i>	<i>ORSG</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Cert.</i>
Subcontracted Analyses													
<u>Subcontracted Analyses</u>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009</i>													
Acrylonitrile	< 10		ug/l	10	1				EPA-DW 524.2_Preserved	28-Sep-20 23:36	28-Sep-20 23:36	M-PA009	
1,2-Dichloropropane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
trans-1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1,1-Trichloroethane	< 0.50		ug/l	0.50	1	200			"	"	"	"	
Chloroform	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Freon 113	< 0.50		ug/l	0.50	1			210000	"	"	"	"	
tert-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
m&p-Xylene	< 1.0		ug/l	1.0	1				"	"	"	"	
1,2-Dichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
Hexachlorobutadiene	< 0.50		ug/l	0.50	1				"	"	"	"	
Benzene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1-Dichloroethane	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Methyl tertiary butyl ether	< 0.50		ug/l	0.50	1		40	70	"	"	"	"	
Carbon tetrachloride	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Dibromomethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Methylene Chloride	< 1.0		ug/l	1.0	1	5			"	"	"	"	
o-Xylene	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethyl t-butyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromodichloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Chloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2,2-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
Styrene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
1,3,5-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Vinyl chloride	< 0.50		ug/l	0.50	1	2			"	"	"	"	
1,1,2-Trichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
n-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tentatively Identified Compound	None		ug/l		1				"	"	"	"	
Trichlorofluoromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrachloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Dibromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Butanone	< 5.0		ug/l	5.0	1			4000	"	"	"	"	
1,2,3-Trichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrahydrofuran	< 7.0		ug/l	7.0	1			1300	"	"	"	"	
Chloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Hexanone	< 5.0		ug/l	5.0	1				"	"	"	"	
Carbon disulfide	< 2.0		ug/l	2.0	1				"	"	"	"	
Chlorobenzene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
Ethyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample Identification

87 Old Ored Rd

SC59356-02

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 12:30

Received

17-Sep-20

Analyte(s)	Result	Flag	Units	*RDL	Dilution	MCL	SMCL	ORSG	Method Ref.	Prepared	Analyzed	Analyst	Cert.
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009*

1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				EPA-DW 524.2_Preserved	28-Sep-20 23:36	28-Sep-20 23:36	M-PA009	
1,4-Dichlorobenzene	< 0.50		ug/l	0.50	1	75			"	"	"	"	
sec-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2,4-Trichlorobenzene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
1,2,4-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
t-Amyl methyl ether	< 0.50		ug/l	0.50	1			90	"	"	"	"	
Dichlorodifluoromethane	< 0.50		ug/l	0.50	1			1400	"	"	"	"	
t-Butyl alcohol	< 25		ug/l	25	1			120	"	"	"	"	
1,3-Dichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dichlorobenzene	< 0.50		ug/l	0.50	1	600			"	"	"	"	
Bromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromoform	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1,1,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromoethane	< 0.50		ug/l	0.50	1	0.05			"	"	"	"	
Bromobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,3-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Methyl-2-pentanone	< 5.0		ug/l	5.0	1			350	"	"	"	"	
Acetone	< 10		ug/l	10	1			6300	"	"	"	"	
Trichloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Naphthalene	< 0.50		ug/l	0.50	1			140	"	"	"	"	

Surrogate recoveries:

1,2-Dichlorobenzene-d4 (Surr)	92			80-120 %					"	"	"	"	
4-Bromofluorobenzene (Surr)	87			80-120 %					"	"	"	"	

Subcontracted AnalysesPrepared by method E300.0*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

Nitrate as Nitrogen	0.19		mg/l	0.01	1	10			E300.0	18-Sep-20 00:28	18-Sep-20 00:28	M-PA009	
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Prepared by method E335.4*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

Total Cyanide (Drinking water)	< 0.005		mg/l	0.005	1	0.2			E335.4	21-Sep-20	22-Sep-20 11:05	M-PA009	
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Subcontracted AnalysesPrepared by method EPA522*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

1,4-dioxane	< 0.20		ug/l	0.20	1			3	EPA522	18-Sep-20	21-Sep-20 16:21	M-PA009	
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Surrogate recoveries:

% 1,4-dioxane-d8	91			70-130 %					"	"	"	"	
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Sample Identification

95 Old Ored Rd

SC59356-03

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 13:00

Received

17-Sep-20

<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>Dilution</i>	<i>MCL</i>	<i>SMCL</i>	<i>ORSG</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Cert.</i>
Total Metals by EPA 200 Series Methods													
Arsenic	< 0.00100		mg/l	0.00100	1	0.01			EPA 200.8	21-Sep-20	24-Sep-20	pmh/edt	X
Barium	< 0.00100		mg/l	0.00100	1	2			"	"	"	"	X
Calcium	< 0.500		mg/l	0.500	1				EPA 200.7	"	24-Sep-20	EDT	X
Cadmium	< 0.00050		mg/l	0.00050	1	0.005			EPA 200.8	"	24-Sep-20	pmh/edt	X
Chromium	< 0.00200		mg/l	0.00200	1	0.1			"	"	"	"	X
Copper	< 0.00500		mg/l	0.00500	1	1.3	1		"	"	"	"	X
Iron	< 0.100		mg/l	0.100	1		0.3		EPA 200.7	"	22-Sep-20	edt	X
Mercury	< 0.00030	R06	mg/l	0.00030	1	0.002			EPA 245.1	21-Sep-20	23-Sep-20	edt	X
Manganese	< 0.00500		mg/l	0.00500	1		0.05		EPA 200.8	21-Sep-20	24-Sep-20	pmh/edt	X
Sodium	45.6		mg/l	2.00	1			20	EPA 200.7	"	22-Sep-20	edt	X
Lead	< 0.00100		mg/l	0.00100	1	0.015			EPA 200.8	"	24-Sep-20	pmh/edt	X
Selenium	< 0.00200		mg/l	0.00200	1	0.05			"	"	"	"	X
Zinc	< 0.0100		mg/l	0.0100	1		5		"	"	"	"	X
Subcontracted Analyses													
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Silver	< 0.50		ug/l	0.50	1		100		EPA 200.8	22-Sep-20 10:00	22-Sep-20 16:39	M-NY044	
Subcontracted Analyses													
<i>Prepared by method NONE</i>													
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Chloride	6.9		mg/l	0.50	1		250		MCAWW 300.0_28D	21-Sep-20 22:21	21-Sep-20 22:21	M-NY044	
Sulfate	6.8		mg/l	2.0	1		250		"	"	"	"	
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Chemical Oxygen Demand	< 10		mg/l	10	1				MCAWW 410.4	19-Sep-20 19:00	19-Sep-20 19:00	M-NY044	
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Alkalinity, Total	86		mg/l	5.0	1				SM 2320B	23-Sep-20 15:21	23-Sep-20 15:21	M-NY044	
<i>Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044</i>													
Total Dissolved Solids	250		mg/l	10	1				SM 2540C_Calcd	18-Sep-20 19:31	18-Sep-20 19:31	M-NY044	
Subcontracted Analyses													
Subcontracted Analyses													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009</i>													
Bromomethane	< 0.50		ug/l	0.50	1			10	EPA-DW 524.2_Preserved	29-Sep-20 00:02	29-Sep-20 00:02	M-PA009	
N-Propylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1-Dichloroethene	< 0.50		ug/l	0.50	1	7			"	"	"	"	
2-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
trans-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
1,2,3-Trichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
Isopropylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethylbenzene	< 0.50		ug/l	0.50	1	700			"	"	"	"	
di-Isopropyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromo-3-Chloropropane	< 1.0		ug/l	1.0	1	0.2			"	"	"	"	
Toluene	< 0.50		ug/l	0.50	1	1000			"	"	"	"	
p-Isopropyltoluene	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample Identification

95 Old Ored Rd

SC59356-03

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 13:00

Received

17-Sep-20

<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>Dilution</i>	<i>MCL</i>	<i>SMCL</i>	<i>ORSG</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Cert.</i>
Subcontracted Analyses													
<u>Subcontracted Analyses</u>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009</i>													
Acrylonitrile	< 10		ug/l	10	1				EPA-DW 524.2_Preserved	29-Sep-20 00:02	29-Sep-20 00:02	M-PA009	
1,2-Dichloropropane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
trans-1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1,1-Trichloroethane	< 0.50		ug/l	0.50	1	200			"	"	"	"	
Chloroform	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Freon 113	< 0.50		ug/l	0.50	1			210000	"	"	"	"	
tert-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
m&p-Xylene	< 1.0		ug/l	1.0	1				"	"	"	"	
1,2-Dichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
Hexachlorobutadiene	< 0.50		ug/l	0.50	1				"	"	"	"	
Benzene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1-Dichloroethane	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Methyl tertiary butyl ether	< 0.50		ug/l	0.50	1		40	70	"	"	"	"	
Carbon tetrachloride	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Dibromomethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Methylene Chloride	< 1.0		ug/l	1.0	1	5			"	"	"	"	
o-Xylene	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethyl t-butyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromodichloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Chloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2,2-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
Styrene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
1,3,5-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Vinyl chloride	< 0.50		ug/l	0.50	1	2			"	"	"	"	
1,1,2-Trichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
n-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tentatively Identified Compound	None		ug/l		1				"	"	"	"	
Trichlorofluoromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrachloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Dibromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Butanone	< 5.0		ug/l	5.0	1			4000	"	"	"	"	
1,2,3-Trichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrahydrofuran	< 7.0		ug/l	7.0	1			1300	"	"	"	"	
Chloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Hexanone	< 5.0		ug/l	5.0	1				"	"	"	"	
Carbon disulfide	< 2.0		ug/l	2.0	1				"	"	"	"	
Chlorobenzene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
Ethyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample Identification

95 Old Ored Rd
SC59356-03

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 13:00

Received

17-Sep-20

Analyte(s)	Result	Flag	Units	*RDL	Dilution	MCL	SMCL	ORSG	Method Ref.	Prepared	Analyzed	Analyst	Cert.
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Subcontracted AnalysesSubcontracted Analyses

Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009

1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				EPA-DW 524.2_Preserved	29-Sep-20 00:02	29-Sep-20 00:02	M-PA009	
1,4-Dichlorobenzene	< 0.50		ug/l	0.50	1	75			"	"	"	"	
sec-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2,4-Trichlorobenzene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
1,2,4-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
t-Amyl methyl ether	< 0.50		ug/l	0.50	1			90	"	"	"	"	
Dichlorodifluoromethane	< 0.50		ug/l	0.50	1			1400	"	"	"	"	
t-Butyl alcohol	< 25		ug/l	25	1			120	"	"	"	"	
1,3-Dichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dichlorobenzene	< 0.50		ug/l	0.50	1	600			"	"	"	"	
Bromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromoform	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1,1,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromoethane	< 0.50		ug/l	0.50	1	0.05			"	"	"	"	
Bromobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,3-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Methyl-2-pentanone	< 5.0		ug/l	5.0	1			350	"	"	"	"	
Acetone	< 10		ug/l	10	1			6300	"	"	"	"	
Trichloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Naphthalene	< 0.50		ug/l	0.50	1			140	"	"	"	"	

Surrogate recoveries:

4-Bromofluorobenzene (Surr)	86			80-120 %					"	"	"	"	
1,2-Dichlorobenzene-d4 (Surr)	92			80-120 %					"	"	"	"	

Subcontracted AnalysesPrepared by method E300.0

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

Nitrate as Nitrogen	0.81		mg/l	0.01	1	10			E300.0	18-Sep-20 00:33	18-Sep-20 00:33	M-PA009	
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Prepared by method E335.4

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

Total Cyanide (Drinking water)	< 0.005		mg/l	0.005	1	0.2			E335.4	21-Sep-20	22-Sep-20 11:06	M-PA009	
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Subcontracted AnalysesPrepared by method EPA522

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

1,4-dioxane	< 0.20		ug/l	0.20	1			3	EPA522	18-Sep-20	21-Sep-20 16:37	M-PA009	
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Surrogate recoveries:

% 1,4-dioxane-d8	83			70-130 %					"	"	"	"	
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Sample Identification

99 Old Ored Rd

SC59356-04

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 13:30

Received

17-Sep-20

<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>Dilution</i>	<i>MCL</i>	<i>SMCL</i>	<i>ORSG</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Cert.</i>
Total Metals by EPA 200 Series Methods													
Arsenic	< 0.00100		mg/l	0.00100	1	0.01			EPA 200.8	21-Sep-20	24-Sep-20	pmh/edt	X
Barium	0.00187		mg/l	0.00100	1	2			"	"	"	"	X
Calcium	27.9		mg/l	0.500	1				EPA 200.7	"	24-Sep-20	EDT	X
Cadmium	< 0.00050		mg/l	0.00050	1	0.005			EPA 200.8	"	24-Sep-20	pmh/edt	X
Chromium	< 0.00200		mg/l	0.00200	1	0.1			"	"	"	"	X
Copper	0.0197		mg/l	0.00500	1	1.3	1		"	"	"	"	X
Iron	< 0.100		mg/l	0.100	1		0.3		EPA 200.7	"	22-Sep-20	edt	X
Mercury	< 0.00030	R06	mg/l	0.00030	1	0.002			EPA 245.1	21-Sep-20	23-Sep-20	edt	X
Manganese	< 0.00500		mg/l	0.00500	1		0.05		EPA 200.8	21-Sep-20	24-Sep-20	pmh/edt	X
Sodium	< 2.00		mg/l	2.00	1			20	EPA 200.7	"	22-Sep-20	edt	X
Lead	< 0.00100		mg/l	0.00100	1	0.015			EPA 200.8	"	24-Sep-20	pmh/edt	X
Selenium	< 0.00200		mg/l	0.00200	1	0.05			"	"	"	"	X
Zinc	< 0.0100		mg/l	0.0100	1		5		"	"	"	"	X

Subcontracted Analyses*Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044*

Silver	< 0.50		ug/l	0.50	1		100		EPA 200.8	22-Sep-20 10:00	22-Sep-20 16:41	M-NY044	
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Subcontracted AnalysesPrepared by method NONE*Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044*

Chloride	0.65		mg/l	0.50	1		250		MCAWW 300.0_28D	21-Sep-20 22:36	21-Sep-20 22:36	M-NY044	
Sulfate	3.9		mg/l	2.0	1		250		"	"	"	"	

Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

Chemical Oxygen Demand	< 10		mg/l	10	1				MCAWW 410.4	19-Sep-20 19:00	19-Sep-20 19:00	M-NY044	
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Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

Alkalinity, Total	79		mg/l	5.0	1				SM 2320B	23-Sep-20 15:27	23-Sep-20 15:27	M-NY044	
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Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

Total Dissolved Solids	< 10		mg/l	10	1				SM 2540C_Calcd	18-Sep-20 19:42	18-Sep-20 19:42	M-NY044	
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009*

Bromomethane	< 0.50		ug/l	0.50	1			10	EPA-DW 524.2_Preserved	29-Sep-20 00:27	29-Sep-20 00:27	M-PA009	
N-Propylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1-Dichloroethene	< 0.50		ug/l	0.50	1	7			"	"	"	"	
2-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
trans-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
1,2,3-Trichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
Isopropylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethylbenzene	< 0.50		ug/l	0.50	1	700			"	"	"	"	
di-Isopropyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromo-3-Chloropropane	< 1.0		ug/l	1.0	1	0.2			"	"	"	"	
Toluene	< 0.50		ug/l	0.50	1	1000			"	"	"	"	
p-Isopropyltoluene	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample Identification

99 Old Ored Rd

SC59356-04

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 13:30

Received

17-Sep-20

<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>Dilution</i>	<i>MCL</i>	<i>SMCL</i>	<i>ORSG</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Cert.</i>
Subcontracted Analyses													
<u>Subcontracted Analyses</u>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009</i>													
Acrylonitrile	< 10		ug/l	10	1				EPA-DW 524.2_Preserved	29-Sep-20 00:27	29-Sep-20 00:27	M-PA009	
1,2-Dichloropropane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
trans-1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1,1-Trichloroethane	< 0.50		ug/l	0.50	1	200			"	"	"	"	
Chloroform	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Freon 113	< 0.50		ug/l	0.50	1			210000	"	"	"	"	
tert-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
m&p-Xylene	< 1.0		ug/l	1.0	1				"	"	"	"	
1,2-Dichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
Hexachlorobutadiene	< 0.50		ug/l	0.50	1				"	"	"	"	
Benzene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1-Dichloroethane	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Methyl tertiary butyl ether	< 0.50		ug/l	0.50	1		40	70	"	"	"	"	
Carbon tetrachloride	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Dibromomethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Methylene Chloride	< 1.0		ug/l	1.0	1	5			"	"	"	"	
o-Xylene	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethyl t-butyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromodichloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Chloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2,2-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
Styrene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
1,3,5-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Vinyl chloride	< 0.50		ug/l	0.50	1	2			"	"	"	"	
1,1,2-Trichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
n-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tentatively Identified Compound	None		ug/l		1				"	"	"	"	
Trichlorofluoromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrachloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Dibromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Butanone	< 5.0		ug/l	5.0	1			4000	"	"	"	"	
1,2,3-Trichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrahydrofuran	< 7.0		ug/l	7.0	1			1300	"	"	"	"	
Chloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Hexanone	< 5.0		ug/l	5.0	1				"	"	"	"	
Carbon disulfide	< 2.0		ug/l	2.0	1				"	"	"	"	
Chlorobenzene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
Ethyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample Identification

99 Old Ored Rd

SC59356-04

Client Project #

183TD20066

Matrix

Drinking Water

Collection Date/Time

16-Sep-20 13:30

Received

17-Sep-20

Analyte(s)	Result	Flag	Units	*RDL	Dilution	MCL	SMCL	ORSG	Method Ref.	Prepared	Analyzed	Analyst	Cert.
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009*

1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				EPA-DW 524.2_Preserved	29-Sep-20 00:27	29-Sep-20 00:27	M-PA009	
1,4-Dichlorobenzene	< 0.50		ug/l	0.50	1	75			"	"	"	"	
sec-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2,4-Trichlorobenzene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
1,2,4-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
t-Amyl methyl ether	< 0.50		ug/l	0.50	1			90	"	"	"	"	
Dichlorodifluoromethane	< 0.50		ug/l	0.50	1			1400	"	"	"	"	
t-Butyl alcohol	< 25		ug/l	25	1			120	"	"	"	"	
1,3-Dichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dichlorobenzene	< 0.50		ug/l	0.50	1	600			"	"	"	"	
Bromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromoform	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1,1,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromoethane	< 0.50		ug/l	0.50	1	0.05			"	"	"	"	
Bromobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,3-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Methyl-2-pentanone	< 5.0		ug/l	5.0	1			350	"	"	"	"	
Acetone	< 10		ug/l	10	1			6300	"	"	"	"	
Trichloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Naphthalene	< 0.50		ug/l	0.50	1			140	"	"	"	"	

Surrogate recoveries:

4-Bromofluorobenzene (Surr)	91			80-120 %					"	"	"	"	
1,2-Dichlorobenzene-d4 (Surr)	95			80-120 %					"	"	"	"	

Subcontracted AnalysesPrepared by method E300.0*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

Nitrate as Nitrogen	0.10		mg/l	0.01	1	10			E300.0	18-Sep-20 00:38	18-Sep-20 00:38	M-PA009	
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Prepared by method E335.4*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

Total Cyanide (Drinking water)	< 0.005		mg/l	0.005	1	0.2			E335.4	21-Sep-20	22-Sep-20 11:07	M-PA009	
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Subcontracted AnalysesPrepared by method EPA522*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

1,4-dioxane	< 0.20		ug/l	0.20	1			3	EPA522	18-Sep-20	21-Sep-20 16:53	M-PA009	
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Surrogate recoveries:

% 1,4-dioxane-d8	89			70-130 %					"	"	"	"	
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Sample IdentificationTrip

SC59356-05

Client Project #

183TD20066

Matrix

Trip Blank

Collection Date/Time

16-Sep-20 00:00

Received

17-Sep-20

<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>Dilution</i>	<i>MCL</i>	<i>SMCL</i>	<i>ORSG</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009*

1,1-Dichloroethane	< 0.50		ug/l	0.50	1			70	EPA-DW 524.2_Preserved	28-Sep-20 18:09	28-Sep-20 18:09	M-PA009	
1,1,1,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,1-Dichloroethene	< 0.50		ug/l	0.50	1	7			"	"	"	"	
1,1,1-Trichloroethane	< 0.50		ug/l	0.50	1	200			"	"	"	"	
1,1,2-Trichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2,4-Trichlorobenzene	< 0.50		ug/l	0.50	1	70			"	"	"	"	
1,2-Dibromoethane	< 0.50		ug/l	0.50	1	0.05			"	"	"	"	
1,2-Dichlorobenzene	< 0.50		ug/l	0.50	1	600			"	"	"	"	
1,2-Dichloropropane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,2,4-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2,3-Trichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dibromo-3-Chloropropane	< 1.0		ug/l	1.0	1	0.2			"	"	"	"	
1,2,3-Trichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
1,2-Dichloroethane	< 0.50		ug/l	0.50	1	5			"	"	"	"	
1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
1,3-Dichlorobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,3,5-Trimethylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
1,4-Dichlorobenzene	< 0.50		ug/l	0.50	1	75			"	"	"	"	
2,2-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Butanone	< 5.0		ug/l	5.0	1			4000	"	"	"	"	
2-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
2-Hexanone	< 5.0		ug/l	5.0	1				"	"	"	"	
4-Chlorotoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
4-Methyl-2-pentanone	< 5.0		ug/l	5.0	1			350	"	"	"	"	
Acetone	< 10		ug/l	10	1			6300	"	"	"	"	
Acrylonitrile	< 10		ug/l	10	1				"	"	"	"	
Benzene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Bromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromoform	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromobenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Bromomethane	< 0.50		ug/l	0.50	1			10	"	"	"	"	
Bromodichloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Carbon disulfide	< 2.0		ug/l	2.0	1				"	"	"	"	
Carbon tetrachloride	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Chlorobenzene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
Chloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Chloroform	< 0.50		ug/l	0.50	1			70	"	"	"	"	
Chloroethane	< 0.50		ug/l	0.50	1				"	"	"	"	
cis-1,3-Dichloropropene	< 0.50		ug/l	0.50	1				"	"	"	"	

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Sample IdentificationTrip

SC59356-05

Client Project #

183TD20066

Matrix

Trip Blank

Collection Date/Time

16-Sep-20 00:00

Received

17-Sep-20

<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>Dilution</i>	<i>MCL</i>	<i>SMCL</i>	<i>ORSG</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009*

cis-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	70			EPA-DW 524.2_Preserved	28-Sep-20 18:09	28-Sep-20 18:09	M-PA009	
di-Isopropyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
Dibromochloromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Dibromomethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Dichlorodifluoromethane	< 0.50		ug/l	0.50	1			1400	"	"	"	"	
Ethyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
Ethylbenzene	< 0.50		ug/l	0.50	1	700			"	"	"	"	
Ethyl t-butyl ether	< 0.50		ug/l	0.50	1				"	"	"	"	
Freon 113	< 0.50		ug/l	0.50	1			210000	"	"	"	"	
Hexachlorobutadiene	< 0.50		ug/l	0.50	1				"	"	"	"	
Isopropylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
m&p-Xylene	< 1.0		ug/l	1.0	1				"	"	"	"	
Methyl tertiary butyl ether	< 0.50		ug/l	0.50	1		40	70	"	"	"	"	
Methylene Chloride	< 1.0		ug/l	1.0	1	5			"	"	"	"	
n-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
N-Propylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Naphthalene	< 0.50		ug/l	0.50	1			140	"	"	"	"	
o-Xylene	< 0.50		ug/l	0.50	1				"	"	"	"	
p-Isopropyltoluene	< 0.50		ug/l	0.50	1				"	"	"	"	
sec-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Styrene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
t-Amyl methyl ether	< 0.50		ug/l	0.50	1			90	"	"	"	"	
t-Butyl alcohol	< 25		ug/l	25	1			120	"	"	"	"	
Tentatively Identified Compound	None		ug/l		1				"	"	"	"	
tert-Butylbenzene	< 0.50		ug/l	0.50	1				"	"	"	"	
Tetrahydrofuran	< 7.0		ug/l	7.0	1			1300	"	"	"	"	
Tetrachloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Toluene	< 0.50		ug/l	0.50	1	1000			"	"	"	"	
trans-1,3-Dichloropropane	< 0.50		ug/l	0.50	1				"	"	"	"	
trans-1,2-Dichloroethene	< 0.50		ug/l	0.50	1	100			"	"	"	"	
Trichlorofluoromethane	< 0.50		ug/l	0.50	1				"	"	"	"	
Trichloroethene	< 0.50		ug/l	0.50	1	5			"	"	"	"	
Vinyl chloride	< 0.50		ug/l	0.50	1	2			"	"	"	"	

Surrogate recoveries:

1,2-Dichlorobenzene-d4 (Surr)	94			80-120 %					"	"	"	"	
4-Bromofluorobenzene (Surr)	91			80-120 %					"	"	"	"	

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Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA 200.7</u>										
Batch 2001769 - EPA 200 Series										
<u>Blank (2001769-BLK1)</u>					<u>Prepared: 21-Sep-20 Analyzed: 22-Sep-20</u>					
Iron	< 0.100		mg/l	0.100						
Sodium	< 2.00		mg/l	2.00						
Calcium	< 0.500		mg/l	0.500						
<u>LCS (2001769-BS1)</u>					<u>Prepared: 21-Sep-20 Analyzed: 22-Sep-20</u>					
Iron	9.89		mg/l	0.100	10.0		99	85-115		
Sodium	9.89		mg/l	2.00	10.0		99	85-115		
Calcium	10.3		mg/l	0.500	10.0		103	85-115		
<u>Duplicate (2001769-DUP1)</u>					<u>Source: SC59356-04 Prepared: 21-Sep-20 Analyzed: 22-Sep-20</u>					
Sodium	0.716	J	mg/l	2.00		0.730			2	20
Iron	< 0.100		mg/l	0.100		BRL				20
Calcium	28.5		mg/l	0.500		27.9			2	20
<u>Matrix Spike (2001769-MS1)</u>					<u>Source: SC59356-04 Prepared: 21-Sep-20 Analyzed: 22-Sep-20</u>					
Iron	2.54		mg/l	0.100	2.50	BRL	101	70-130		
Sodium	13.7		mg/l	2.00	12.5	0.730	104	70-130		
Calcium	39.3		mg/l	0.500	12.5	27.9	92	70-130		
<u>EPA 200.8</u>										
Batch 2001768 - EPA 200 Series										
<u>Blank (2001768-BLK1)</u>					<u>Prepared: 21-Sep-20 Analyzed: 24-Sep-20</u>					
Manganese	< 0.00500		mg/l	0.00500						
Zinc	< 0.0100		mg/l	0.0100						
Selenium	< 0.00200		mg/l	0.00200						
Lead	< 0.00100		mg/l	0.00100						
Chromium	< 0.00200		mg/l	0.00200						
Cadmium	< 0.00050		mg/l	0.00050						
Barium	< 0.00100		mg/l	0.00100						
Arsenic	< 0.00100		mg/l	0.00100						
Copper	< 0.00500		mg/l	0.00500						
<u>LCS (2001768-BS1)</u>					<u>Prepared: 21-Sep-20 Analyzed: 24-Sep-20</u>					
Zinc	0.0269		mg/l	0.0100	0.0250		108	85-115		
Selenium	0.0246		mg/l	0.00200	0.0250		99	85-115		
Lead	0.0255		mg/l	0.00100	0.0250		102	85-115		
Manganese	0.0258		mg/l	0.00500	0.0250		103	85-115		
Arsenic	0.0253		mg/l	0.00100	0.0250		101	85-115		
Copper	0.0250		mg/l	0.00500	0.0250		100	85-115		
Chromium	0.0248		mg/l	0.00200	0.0250		99	85-115		
Cadmium	0.0248		mg/l	0.00050	0.0250		99	85-115		
Barium	0.0247		mg/l	0.00100	0.0250		99	85-115		
<u>Duplicate (2001768-DUP1)</u>					<u>Source: SC59356-03 Prepared: 21-Sep-20 Analyzed: 24-Sep-20</u>					
Lead	< 0.00100		mg/l	0.00100		BRL				20
Selenium	< 0.00200		mg/l	0.00200		BRL				20
Manganese	< 0.00500		mg/l	0.00500		BRL				20
Zinc	0.00344	J	mg/l	0.0100		0.00337			2	20
Chromium	0.00016	J	mg/l	0.00200		0.00015			1	20
Cadmium	< 0.00050		mg/l	0.00050		BRL				20
Barium	< 0.00100		mg/l	0.00100		BRL				20
Arsenic	0.00008	J,QR8	mg/l	0.00100		0.00012			34	20
Copper	0.00488	J	mg/l	0.00500		0.00479			2	20
<u>Matrix Spike (2001768-MS1)</u>					<u>Source: SC59356-03 Prepared: 21-Sep-20 Analyzed: 24-Sep-20</u>					
Zinc	0.104	D	mg/l	0.0500	0.100	BRL	104	70-130		

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Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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EPA 200.8

Batch 2001768 - EPA 200 Series

<u>Matrix Spike (2001768-MS1)</u>	<u>Source: SC59356-03</u>				<u>Prepared: 21-Sep-20</u>		<u>Analyzed: 24-Sep-20</u>		
Selenium	0.495	D	mg/l	0.0100	0.500	BRL	99	70-130	
Lead	0.0983	D	mg/l	0.00500	0.100	BRL	98	70-130	
Manganese	0.100	D	mg/l	0.0250	0.100	BRL	100	70-130	
Cadmium	0.0969	D	mg/l	0.00250	0.100	BRL	97	75-125	
Barium	0.0987	D	mg/l	0.00500	0.100	BRL	99	70-130	
Chromium	0.0970	D	mg/l	0.0100	0.100	BRL	97	70-130	
Copper	0.104	D	mg/l	0.0250	0.100	0.00479	99	70-130	
Arsenic	0.0830	D	mg/l	0.00500	0.100	BRL	83	70-130	

EPA 245.1

Batch 2001770 - EPA 200 Series

<u>Blank (2001770-BLK1)</u>					<u>Prepared: 21-Sep-20</u>		<u>Analyzed: 23-Sep-20</u>		
Mercury	< 0.00030		mg/l	0.00030					
<u>LCS (2001770-BS1)</u>					<u>Prepared: 21-Sep-20</u>		<u>Analyzed: 23-Sep-20</u>		
Mercury	0.00512		mg/l	0.00030	0.00500		102	85-115	
<u>Matrix Spike (2001770-MS1)</u>	<u>Source: SC59356-01</u>				<u>Prepared: 21-Sep-20</u>		<u>Analyzed: 23-Sep-20</u>		
Mercury	0.00574		mg/l	0.00030	0.00500	BRL	115	80-120	
<u>Post Spike (2001770-PS1)</u>	<u>Source: SC59356-01</u>				<u>Prepared: 21-Sep-20</u>		<u>Analyzed: 23-Sep-20</u>		
Mercury	0.00587	QC2	mg/l	0.00030	0.00500	BRL	117	85-115	

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA 200.8</u>										
Batch 550554 - 200.8_P_TOT										
<u>Blank (5505541AB)</u>	<u>Prepared & Analyzed: 22-Sep-20</u>									
Silver	< 0.50		ug/l	0.50				-		
<u>LCS (5505542AQ)</u>	<u>Prepared & Analyzed: 22-Sep-20</u>									
Silver	18.0		ug/l	0.50	20.0		90	85-115		
<u>MCAWW 300.0 28D</u>										
Batch 550457 - NONE										
<u>LCS (5504573Q)</u>	<u>Prepared & Analyzed: 21-Sep-20</u>									
Sulfate	51.8		mg/l	2.0	50.0		104	90-110		
Chloride	53.7		mg/l	0.50	50.0		107	90-110		
<u>Blank (5504574B)</u>	<u>Prepared & Analyzed: 21-Sep-20</u>									
Sulfate	< 2.0		mg/l	2.0				-		
Chloride	< 0.50		mg/l	0.50				-		
<u>MCAWW 410.4</u>										
Batch 550308 - NONE										
<u>Blank (55030851B)</u>	<u>Prepared & Analyzed: 19-Sep-20</u>									
Chemical Oxygen Demand	< 10		mg/l	10				-		
<u>LCS (55030852Q)</u>	<u>Prepared & Analyzed: 19-Sep-20</u>									
Chemical Oxygen Demand	24.7		mg/l	10	25.0		99	90-110		
<u>Blank (55030875B)</u>	<u>Prepared & Analyzed: 19-Sep-20</u>									
Chemical Oxygen Demand	< 10		mg/l	10				-		
<u>LCS (55030876Q)</u>	<u>Prepared & Analyzed: 19-Sep-20</u>									
Chemical Oxygen Demand	24.7		mg/l	10	25.0		99	90-110		
<u>SM 2320B</u>										
Batch 550927 - NONE										
<u>Matrix Spike (1752891S)</u>	<u>Source: SC59356-01</u>				<u>Prepared & Analyzed: 23-Sep-20</u>					
Alkalinity, Total	183		mg/l	5.0	100	100	78	60-140		
<u>Duplicate (1752891X)</u>	<u>Source: SC59356-01</u>				<u>Prepared & Analyzed: 23-Sep-20</u>					
Alkalinity, Total	106		mg/l	5.0		100		-	0.7	20
<u>Blank (55092727B)</u>	<u>Prepared & Analyzed: 23-Sep-20</u>									
Alkalinity, Total	< 5.0		mg/l	5.0				-		
<u>LCS (55092728Q)</u>	<u>Prepared & Analyzed: 23-Sep-20</u>									
Alkalinity, Total	96.3		mg/l	5.0	100		96	90-110		
<u>SM 2540C - Calcd</u>										
Batch 550252 - NONE										
<u>Duplicate (1752891X)</u>	<u>Source: SC59356-01</u>				<u>Prepared & Analyzed: 18-Sep-20</u>					
Total Dissolved Solids	211		mg/l	10		210		-	2	10
<u>Blank (5502521B)</u>	<u>Prepared & Analyzed: 18-Sep-20</u>									
Total Dissolved Solids	< 10		mg/l	10				-		
<u>LCS (5502522Q)</u>	<u>Prepared & Analyzed: 18-Sep-20</u>									
Total Dissolved Solids	484		mg/l	10	502		96	85-115		
Batch 550253 - NONE										
<u>Duplicate (1752894X)</u>	<u>Source: SC59356-04</u>				<u>Prepared & Analyzed: 18-Sep-20</u>					
Total Dissolved Solids	< 10		mg/l	10		BRL		-	NC	10
<u>Blank (5502531B)</u>	<u>Prepared & Analyzed: 18-Sep-20</u>									
Total Dissolved Solids	< 10		mg/l	10				-		
<u>LCS (5502532Q)</u>	<u>Prepared & Analyzed: 18-Sep-20</u>									
Total Dissolved Solids	490		mg/l	10	502		98	85-115		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA-DW 524.2 Preserved</u>										
Batch 48484 - NONE										
<u>LCS (484844Q)</u>	<u>Prepared & Analyzed: 28-Sep-20</u>									
Carbon tetrachloride	4.91		ug/l	0.50	5.00		98	70-130		
Bromobenzene	4.77		ug/l	0.50	5.00		95	70-130		
4-Chlorotoluene	4.94		ug/l	0.50	5.00		99	70-130		
4-Methyl-2-pentanone	24.1		ug/l	5.0	25.0		96	70-130		
Acetone	38.3		ug/l	10	37.5		102	70-130		
2-Chlorotoluene	4.82		ug/l	0.50	5.00		96	70-130		
Acrylonitrile	110		ug/l	10	113		97	70-130		
2-Butanone	37.4		ug/l	5.0	37.5		100	70-130		
Benzene	4.76		ug/l	0.50	5.00		95	70-130		
2-Hexanone	25.1		ug/l	5.0	25.0		100	70-130		
Bromochloromethane	4.74		ug/l	0.50	5.00		95	70-130		
Bromodichloromethane	4.77		ug/l	0.50	5.00		95	70-130		
Bromoform	4.62		ug/l	0.50	5.00		92	70-130		
Carbon disulfide	4.73		ug/l	2.0	5.00		95	70-130		
Chlorobenzene	4.83		ug/l	0.50	5.00		97	70-130		
cis-1,3-Dichloropropene	4.73		ug/l	0.50	5.00		95	70-130		
Chloroethane	1.84		ug/l	0.50	2.00		92	70-130		
Chloromethane	1.76		ug/l	0.50	2.00		88	70-130		
1,2,4-Trimethylbenzene	4.84		ug/l	0.50	5.00		97	70-130		
2,2-Dichloropropane	4.83		ug/l	0.50	5.00		97	70-130		
Bromomethane	1.92		ug/l	0.50	2.00		96	70-130		
1,1,1,2-Tetrachloroethane	4.82		ug/l	0.50	5.00		96	70-130		
cis-1,2-Dichloroethene	5.00		ug/l	0.50	5.00		100	70-130		
Dibromochloromethane	4.78		ug/l	0.50	5.00		96	70-130		
1,2,4-Trichlorobenzene	5.09		ug/l	0.50	5.00		102	70-130		
1,2,3-Trichlorobenzene	5.15		ug/l	0.50	5.00		103	70-130		
1,1-Dichloropropene	4.83		ug/l	0.50	5.00		97	70-130		
1,1-Dichloroethene	4.82		ug/l	0.50	5.00		96	70-130		
1,1-Dichloroethane	4.80		ug/l	0.50	5.00		96	70-130		
1,1,2-Trichloroethane	4.79		ug/l	0.50	5.00		96	70-130		
1,2,3-Trichloropropane	5.05		ug/l	0.50	5.00		101	70-130		
1,1,1-Trichloroethane	4.82		ug/l	0.50	5.00		96	70-130		
1,4-Dichlorobenzene	4.84		ug/l	0.50	5.00		97	70-130		
1,2-Dibromo-3-Chloropropane	4.77		ug/l	1.0	5.00		95	70-130		
1,2-Dibromoethane	4.80		ug/l	0.50	5.00		96	70-130		
1,2-Dichlorobenzene	4.72		ug/l	0.50	5.00		94	70-130		
1,2-Dichloroethane	4.88		ug/l	0.50	5.00		98	70-130		
1,2-Dichloropropane	4.89		ug/l	0.50	5.00		98	70-130		
1,3,5-Trimethylbenzene	4.92		ug/l	0.50	5.00		98	70-130		
1,3-Dichlorobenzene	4.79		ug/l	0.50	5.00		96	70-130		
1,3-Dichloropropane	4.75		ug/l	0.50	5.00		95	70-130		
1,1,2,2-Tetrachloroethane	4.74		ug/l	0.50	5.00		95	70-130		
trans-1,2-Dichloroethene	4.80		ug/l	0.50	5.00		96	70-130		
p-Isopropyltoluene	5.02		ug/l	0.50	5.00		100	70-130		
sec-Butylbenzene	4.96		ug/l	0.50	5.00		99	70-130		
Styrene	4.92		ug/l	0.50	5.00		98	70-130		
t-Amyl methyl ether	4.81		ug/l	0.50	5.00		96	70-130		
t-Butyl alcohol	53.1		ug/l	25	50.0		106	70-130		
o-Xylene	4.80		ug/l	0.50	5.00		96	70-130		
Tetrahydrofuran	45.6		ug/l	7.0	46.9		97	70-130		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA-DW 524.2 Preserved</u>										
Batch 48484 - NONE										
<u>LCS (484844Q)</u>	<u>Prepared & Analyzed: 28-Sep-20</u>									
Tetrachloroethene	5.14		ug/l	0.50	5.00		103	70-130		
trans-1,3-Dichloropropene	4.70		ug/l	0.50	5.00		94	70-130		
Trichloroethene	4.79		ug/l	0.50	5.00		96	70-130		
Trichlorofluoromethane	1.92		ug/l	0.50	2.00		96	70-130		
Vinyl chloride	1.87		ug/l	0.50	2.00		93	70-130		
Chloroform	4.82		ug/l	0.50	5.00		96	70-130		
Dibromomethane	4.74		ug/l	0.50	5.00		95	70-130		
tert-Butylbenzene	4.90		ug/l	0.50	5.00		98	70-130		
Ethylbenzene	4.72		ug/l	0.50	5.00		94	70-130		
Dichlorodifluoromethane	1.61		ug/l	0.50	2.00		80	70-130		
Toluene	4.86		ug/l	0.50	5.00		97	70-130		
N-Propylbenzene	4.91		ug/l	0.50	5.00		98	70-130		
Ethyl ether	5.52		ug/l	0.50	5.00		110	70-130		
Ethyl t-butyl ether	4.77		ug/l	0.50	5.00		95	70-130		
di-Isopropyl ether	4.55		ug/l	0.50	5.00		91	70-130		
Freon 113	4.43		ug/l	0.50	5.00		89	70-130		
Isopropylbenzene	4.89		ug/l	0.50	5.00		98	70-130		
m&p-Xylene	9.69		ug/l	1.0	10.0		97	70-130		
Methyl tertiary butyl ether	4.63		ug/l	0.50	5.00		93	70-130		
Methylene Chloride	4.69		ug/l	1.0	5.00		94	70-130		
Hexachlorobutadiene	5.20		ug/l	0.50	5.00		104	70-130		
Naphthalene	4.93		ug/l	0.50	5.00		99	70-130		
n-Butylbenzene	4.85		ug/l	0.50	5.00		97	70-130		
Surrogate: 4-Bromofluorobenzene (Surr)	4.99		ug/l		5.00		100	80-120		
Surrogate: 1,2-Dichlorobenzene-d4 (Surr)	4.78		ug/l		5.00		96	80-120		
<u>Blank (484846B)</u>	<u>Prepared & Analyzed: 28-Sep-20</u>									
Bromochloromethane	< 0.50		ug/l	0.50				-		
Bromobenzene	< 0.50		ug/l	0.50				-		
cis-1,3-Dichloropropene	< 0.50		ug/l	0.50				-		
Benzene	< 0.50		ug/l	0.50				-		
Acetone	< 10		ug/l	10				-		
Bromodichloromethane	< 0.50		ug/l	0.50				-		
4-Methyl-2-pentanone	< 5.0		ug/l	5.0				-		
4-Chlorotoluene	< 0.50		ug/l	0.50				-		
Acrylonitrile	< 10		ug/l	10				-		
Bromoform	< 0.50		ug/l	0.50				-		
Bromomethane	< 0.50		ug/l	0.50				-		
Carbon disulfide	< 2.0		ug/l	2.0				-		
Carbon tetrachloride	< 0.50		ug/l	0.50				-		
Chlorobenzene	< 0.50		ug/l	0.50				-		
Chloroethane	< 0.50		ug/l	0.50				-		
Chloromethane	< 0.50		ug/l	0.50				-		
cis-1,2-Dichloroethene	< 0.50		ug/l	0.50				-		
2-Hexanone	< 5.0		ug/l	5.0				-		
1,1-Dichloropropene	< 0.50		ug/l	0.50				-		
Chloroform	< 0.50		ug/l	0.50				-		
1,2-Dibromoethane	< 0.50		ug/l	0.50				-		
1,1,1-Trichloroethane	< 0.50		ug/l	0.50				-		
1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50				-		
1,1,2-Trichloroethane	< 0.50		ug/l	0.50				-		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA-DW 524.2 Preserved</u>										
Batch 48484 - NONE										
Blank (484846B)	Prepared & Analyzed: 28-Sep-20									
1,1-Dichloroethane	< 0.50		ug/l	0.50				-		
1,1-Dichloroethene	< 0.50		ug/l	0.50				-		
p-Isopropyltoluene	< 0.50		ug/l	0.50				-		
1,2,3-Trichlorobenzene	< 0.50		ug/l	0.50				-		
Dibromochloromethane	< 0.50		ug/l	0.50				-		
1,2,4-Trichlorobenzene	< 0.50		ug/l	0.50				-		
1,2,3-Trichloropropane	< 0.50		ug/l	0.50				-		
1,2-Dibromo-3-Chloropropane	< 1.0		ug/l	1.0				-		
2-Chlorotoluene	< 0.50		ug/l	0.50				-		
1,2-Dichlorobenzene	< 0.50		ug/l	0.50				-		
1,2-Dichloroethane	< 0.50		ug/l	0.50				-		
1,2-Dichloropropane	< 0.50		ug/l	0.50				-		
1,3,5-Trimethylbenzene	< 0.50		ug/l	0.50				-		
1,3-Dichlorobenzene	< 0.50		ug/l	0.50				-		
1,3-Dichloropropane	< 0.50		ug/l	0.50				-		
1,4-Dichlorobenzene	< 0.50		ug/l	0.50				-		
2,2-Dichloropropane	< 0.50		ug/l	0.50				-		
2-Butanone	< 5.0		ug/l	5.0				-		
1,2,4-Trimethylbenzene	< 0.50		ug/l	0.50				-		
tert-Butylbenzene	< 0.50		ug/l	0.50				-		
1,1,1,2-Tetrachloroethane	< 0.50		ug/l	0.50				-		
Vinyl chloride	< 0.50		ug/l	0.50				-		
Trichlorofluoromethane	< 0.50		ug/l	0.50				-		
Trichloroethene	< 0.50		ug/l	0.50				-		
trans-1,3-Dichloropropene	< 0.50		ug/l	0.50				-		
trans-1,2-Dichloroethene	< 0.50		ug/l	0.50				-		
Toluene	< 0.50		ug/l	0.50				-		
N-Propylbenzene	< 0.50		ug/l	0.50				-		
Tetrachloroethene	< 0.50		ug/l	0.50				-		
Dibromomethane	< 0.50		ug/l	0.50				-		
Tentatively Identified Compound	None		ug/l					-		
t-Butyl alcohol	< 25		ug/l	25				-		
t-Amyl methyl ether	< 0.50		ug/l	0.50				-		
Styrene	< 0.50		ug/l	0.50				-		
m&p-Xylene	< 1.0		ug/l	1.0				-		
sec-Butylbenzene	< 0.50		ug/l	0.50				-		
Ethyl ether	< 0.50		ug/l	0.50				-		
Ethyl t-butyl ether	< 0.50		ug/l	0.50				-		
Ethylbenzene	< 0.50		ug/l	0.50				-		
Freon 113	< 0.50		ug/l	0.50				-		
Tetrahydrofuran	< 7.0		ug/l	7.0				-		
Isopropylbenzene	< 0.50		ug/l	0.50				-		
di-Isopropyl ether	< 0.50		ug/l	0.50				-		
Methyl tertiary butyl ether	< 0.50		ug/l	0.50				-		
Methylene Chloride	< 1.0		ug/l	1.0				-		
Dichlorodifluoromethane	< 0.50		ug/l	0.50				-		
Naphthalene	< 0.50		ug/l	0.50				-		
n-Butylbenzene	< 0.50		ug/l	0.50				-		
o-Xylene	< 0.50		ug/l	0.50				-		
Hexachlorobutadiene	< 0.50		ug/l	0.50				-		

This laboratory report is not valid without an authorized signature on the cover page.

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA-DW 524.2 Preserved</u>										
Batch 48484 - NONE										
<u>Blank (484846B)</u>					<u>Prepared & Analyzed: 28-Sep-20</u>					
Surrogate: 1,2-Dichlorobenzene-d4 (Surr)	4.75		ug/l		5.00		95	80-120		
Surrogate: 4-Bromofluorobenzene (Surr)	4.74		ug/l		5.00		95	80-120		

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>E300.0</u>										
Batch 546064A - E300.0										
<u>Blank (CG80254-BLK)</u>	<u>Prepared & Analyzed: 17-Sep-20</u>									
Nitrate as Nitrogen	< 0.05		mg/l	0.05		BRL	-			
<u>LCS (CG80254-LCS)</u>	<u>Prepared & Analyzed: 18-Sep-20</u>									
Nitrate as Nitrogen	1.199		mg/l	0.05	301602262		106.1	90-110		20
<u>E335.4</u>										
Batch 546272A - E335.4										
<u>Blank (CG80189-BLK)</u>	<u>Prepared: 21-Sep-20 Analyzed: 22-Sep-20</u>									
Total Cyanide (Drinking water)	< 0.005		mg/l	0.005		BRL	-			
<u>Duplicate (CG80189-DUP)</u>	<u>Prepared: 21-Sep-20 Analyzed: 22-Sep-20</u>									
Total Cyanide (Drinking water)	< 0.005		mg/l	0.005		BRL	-		NC	20
<u>LCS (CG80189-LCS)</u>	<u>Prepared: 21-Sep-20 Analyzed: 22-Sep-20</u>									
Total Cyanide (Drinking water)	0.3860		mg/l	0.005	0.405		95.3	90-110		20
<u>Matrix Spike (CG80189-MS)</u>	<u>Prepared: 21-Sep-20 Analyzed: 22-Sep-20</u>									
Total Cyanide (Drinking water)	0.2200		mg/l	0.005	100000298	BRL	110	90-110		20
<u>EPA522</u>										
Batch 546030A - EPA522										
<u>Blank (CG77263-BLK)</u>	<u>Prepared: 18-Sep-20 Analyzed: 21-Sep-20</u>									
1,4-dioxane	ND		ug/l	0.20			ND	-		
Surrogate: % 1,4-dioxane-d8	93		ug/l		5		93	70-130		
<u>LCS (CG77263-LCS)</u>	<u>Prepared: 18-Sep-20 Analyzed: 21-Sep-20</u>									
1,4-dioxane	4.273		ug/l	0.20	5		85	70-130		20
Surrogate: % 1,4-dioxane-d8	4.402		ug/l		5		88	70-130		
<u>LCS Dup (CG77263-LCSD)</u>	<u>Prepared: 18-Sep-20 Analyzed: 21-Sep-20</u>									
1,4-dioxane	4.215		ug/l	0.20	5		84	70-130	1.2	20
Surrogate: % 1,4-dioxane-d8	4.267		ug/l		5		85	70-130		

Notes and Definitions

D	Data reported from a dilution
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QR8	Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.
R06	MRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
MCL	EPA Maximum Contaminant Level, represents the maximum permissible level of a contaminant in drinking water.
SMCL	EPA Secondary Maximum Contaminant Level, representing reasonable goals for drinking water. These standards are developed to protect the aesthetic qualities of drinking water and are not health based. EPA recommends secondary standards to water systems but does not require systems to comply. However, states may choose to adopt them as enforceable standards.
ORSG	Office of Research and Standards Guideline. This is the concentration of a chemical in drinking water, at or below which, adverse, non-cancer health effects are unlikely to occur after chronic (lifetime) exposure.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.



Spectrum Analytical

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- ☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed: _____
All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed

Report To: <u>Todd Dozer</u>		Invoice To: <u>Same</u>		Project No: <u>1837D20066</u>	
Telephone #: <u>(437) 781-0070</u>		Site Name: <u>Old Orchard Road Landfill</u>		Location: <u>Longborough</u>	
Project Mgr: <u>Todd Dozer</u>		Quote #: <u>extreme</u>		State: <u>MA</u>	
F=Field Filtered 1=Na ₂ S ₂ O ₃ 2=HCl 3=H ₂ SO ₄ 4=HNO ₃ 5=NaOH 6=Ascorbic Acid 7=CH ₃ OH 8=NaHSO ₄ 9=Deionized Water 10=H ₂ PO ₄ 11= <u>ice</u> 12=_____		List Preservative Code below:		QA/QC Reporting Notes: * additional charges may apply	
DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas X1= <u>DH2O</u> X2=_____ X3=_____		Containers		Analysis	
G=Grab C=Composite		Type		Matrix	
Lab ID: Sample ID: Date: Time:		# of VOA Vials		# of Amber Glass	
		# of Clear Glass		# of Plastic	
SCS9356A		9/16/20 1400		G DM 3 2 5	
CL		9/16/20 1230		G DM 3 2 5	
C3		9/16/20 1300		G DM 3 2 5	
C4		9/16/20 1330		G DM 3 2 5	
AS		9/16/20 1330		G DM 3 2 5	
TIP		9/16/20 1330		G DM 3 2 5	
Reinquished by: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Date: <u>9/17/20</u> Time: <u>9:50</u>	
Temp °C		Observed		Corrected	
2.0		2.0		0	
E-mail to: <u>Todd Dozer @ eurofins.com</u>		Condition upon receipt:		Custody Seals:	
<input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Iced <input type="checkbox"/> Refrigerated <input type="checkbox"/> DI VOA Frozen <input type="checkbox"/> Soil Jar Frozen		<input type="checkbox"/> Present <input type="checkbox"/> Intact <input type="checkbox"/> Broken			

Batch Summary

2001768

Total Metals by EPA 200 Series Methods

2001768-BLK1
2001768-BS1
2001768-DUP1
2001768-MS1
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)
SC59356-04 (99 Old Orebed Rd)

2001769

Total Metals by EPA 200 Series Methods

2001769-BLK1
2001769-BS1
2001769-DUP1
2001769-MS1
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)
SC59356-04 (99 Old Orebed Rd)

2001770

Total Metals by EPA 200 Series Methods

2001770-BLK1
2001770-BS1
2001770-MS1
2001770-PS1
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)
SC59356-04 (99 Old Orebed Rd)

48484

Subcontracted Analyses

484844Q
484846B
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)
SC59356-04 (99 Old Orebed Rd)
SC59356-05 (Trip)

546030A

Subcontracted Analyses

CG77263-BLK
CG77263-LCS
CG77263-LCSD
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)
SC59356-04 (99 Old Orebed Rd)

546064A

Subcontracted Analyses

CG80254-BLK
CG80254-LCS
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)
SC59356-04 (99 Old Orebed Rd)

546272A

Subcontracted Analyses

CG80189-BLK
CG80189-DUP
CG80189-LCS
CG80189-MS
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)
SC59356-04 (99 Old Orebed Rd)

550252

Subcontracted Analyses

1752891X
5502521B
5502522Q
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)

550253

Subcontracted Analyses

1752894X
5502531B
5502532Q
SC59356-04 (99 Old Orebed Rd)

550308

Subcontracted Analyses

55030851B
55030852Q
55030875B
55030876Q
SC59356-01 (55 Old Orebed Rd)
SC59356-02 (87 Old Orebed Rd)
SC59356-03 (95 Old Orebed Rd)
SC59356-04 (99 Old Orebed Rd)

550457**Subcontracted Analyses**

5504573Q

5504574B

SC59356-01 (55 Old Orebed Rd)

SC59356-02 (87 Old Orebed Rd)

SC59356-03 (95 Old Orebed Rd)

SC59356-04 (99 Old Orebed Rd)

550554**Subcontracted Analyses**

5505541AB

5505542AQ

SC59356-01 (55 Old Orebed Rd)

SC59356-02 (87 Old Orebed Rd)

SC59356-03 (95 Old Orebed Rd)

SC59356-04 (99 Old Orebed Rd)

550927**Subcontracted Analyses**

1752891S

1752891X

55092727B

55092728Q

SC59356-01 (55 Old Orebed Rd)

SC59356-02 (87 Old Orebed Rd)

SC59356-03 (95 Old Orebed Rd)

SC59356-04 (99 Old Orebed Rd)

Laboratory Report
SC59418

ATC Group Services, LLC
73 William Franks Drive
West Springfield, MA 01089
Attn: Todd Donze

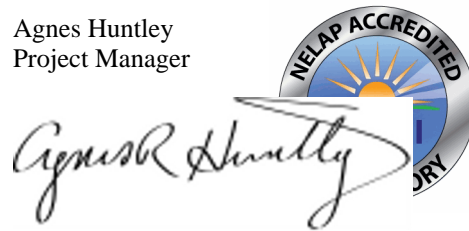
Project: Old Orebed Rd Landfill - Lanesborough, MA
Project #: 183TD20066

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Connecticut # PH-0722
Massachusetts # RI907
New Hampshire # 2240
New York # 11393
Rhode Island # LAI00368
USDA # P330-20-00109

Authorized by:

Agnes Huntley
Project Manager



Eurofins Environment Testing New England holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 23 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Environment Testing New England.

Eurofins Environment Testing New England is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Environment Testing New England is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.eurofinsus.com/Spectrum for a full listing of our current certifications and fields of accreditation.

Please contact the Laboratory or Technical Director at 413-789-9018 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC59418
Project: Old Orebed Rd Landfill - Lanesborough, MA
Project Number: 183TD20066

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC59418-01	S-1	Surface Water	23-Sep-20 15:14	24-Sep-20 08:30
SC59418-02	Trip	Trip Blank	23-Sep-20 00:00	24-Sep-20 08:30

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received 0.8 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

Due to possible microbial action or loss or gain of gases when the sample is exposed to air, the sampling recommendation for alkalinity or acidity suggests a separate bottle filled completely and capped tightly. When possible, testing for alkalinity or acidity is performed as soon as possible from the designated unopened, full container.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 245.1/7470A

Laboratory Control Samples:

2001835 BS

Mercury percent recovery 116 (85-115) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

S-1

SW846 8260C

Laboratory Control Samples:

2001837 BS/BSD

Dichlorodifluoromethane (Freon12) percent recoveries (121/134) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

S-1

Trip

2001837-BS1

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Ethanol

2001837-BSD1

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Dichlorodifluoromethane (Freon12)

Ethanol

Sample Acceptance Check Form

Client: ATC Group Services, LLC - West Springfield, MA
Project: Old Orebed Rd Landfill - Lanesborough, MA / 183TD20066
Work Order: SC59418
Sample(s) received on: 9/24/2020

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Summary of Hits

Lab ID: SC59418-01

Client ID: S-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Calcium (dissolved)	37.8		0.500	mg/l	EPA 200.7
Iron (dissolved)	0.314		0.100	mg/l	EPA 200.7
Manganese (dissolved)	0.101		0.0100	mg/l	EPA 200.7
Sodium (dissolved)	4.09		2.00	mg/l	EPA 200.7
Alkalinity, Total	110		5.0	mg/l	SM 2320B
Total Dissolved Solids	160		5	mg/l	SM18-22 2540C
Chloride	11		1.0	mg/l	SW846 9251

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification

S-1

SC59418-01

Client Project #

183TD20066

Matrix

Surface Water

Collection Date/Time

23-Sep-20 15:14

Received

24-Sep-20

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.20	1	SW846 8260C	25-Sep-20	25-Sep-20	MED	2001837	X
67-64-1	Acetone	< 10.0		µg/l	10.0	0.90	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.25	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.39	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.45	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	0.63	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00		µg/l	2.00	0.58	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.45	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	0.44	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.25	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	0.48	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	0.51	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.48	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.50	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.39	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.34	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.19	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.30	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.37	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 1.00		µg/l	1.00	0.24	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00		µg/l	2.00	0.69	1	"	"	"	"	"	X

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Sample Identification

S-1

SC59418-01

Client Project #

183TD20066

Matrix

Surface Water

Collection Date/Time

23-Sep-20 15:14

Received

24-Sep-20

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.38	1	SW846 8260C	25-Sep-20	25-Sep-20	MED	2001837	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00		µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.54	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00		µg/l	2.00	0.70	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.37	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.46	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.70	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.54	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.35	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.23	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.51	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.46	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.45	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	0.78	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	0.70	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.52	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 50.0		µg/l	50.0	7.43	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.81	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200		µg/l	200	9.08	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	99			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	98			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	100			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	105			70-130 %			"	"	"	"	"	

Tentatively Identified Compounds by GC/MS

	Tentatively Identified Compounds	0.0		µg/l			1	SW846 8260C TICs	"	"	MED	"	
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Soluble Metals by EPA 200 Series Methods

7440-38-2	Arsenic	< 0.0080		mg/l	0.0080	0.0055	1	EPA 200.7	29-Sep-20	29-Sep-20	edt	2001834	X
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Sample Identification

S-1

SC59418-01

Client Project #

183TD20066

Matrix

Surface Water

Collection Date/Time

23-Sep-20 15:14

Received

24-Sep-20

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Soluble Metals by EPA 200 Series Methods													
7440-39-3	Barium	< 0.0100		mg/l	0.0100	0.0036	1	EPA 200.7	29-Sep-20	29-Sep-20	edt	2001834	X
7440-70-2	Calcium	37.8		mg/l	0.500	0.0679	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0008	1	"	"	30-Sep-20	"	"	X
7440-47-3	Chromium	< 0.0100		mg/l	0.0100	0.0038	1	"	"	29-Sep-20	"	"	X
7440-50-8	Copper	< 0.0100		mg/l	0.0100	0.0058	1	"	"	30-Sep-20	"	"	X
7439-89-6	Iron	0.314		mg/l	0.100	0.0201	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00010	1	EPA 245.1/7470A	29-Sep-20	29-Sep-20	edt	2001835	X
7439-96-5	Manganese	0.101		mg/l	0.0100	0.0006	1	EPA 200.7	29-Sep-20	29-Sep-20	edt	2001834	X
7440-23-5	Sodium	4.09		mg/l	2.00	0.248	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0068	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.0300		mg/l	0.0300	0.0145	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0200		mg/l	0.0200	0.0054	1	"	"	"	"	"	X

General Chemistry Parameters

Total Dissolved Solids	160		mg/l	5	3	1	SM18-22 2540C	28-Sep-20	30-Sep-20	PN	2001857	X
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Subcontracted AnalysesPrepared by method E300.0

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

14797-55-8	Nitrate as Nitrogen	< 0.05		mg/l	0.05	0.05	1	E300.0	25-Sep-20 00:37	25-Sep-20 00:37	M-CT007	546995A
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Subcontracted AnalysesSubcontracted AnalysesPrepared by method 3510C_LVI

Analysis performed by Eurofins Lancaster Laboratories Environmental - M-PA009

123-91-1	1,4-Dioxane	< 0.28		ug/l	0.28	0.14	1	SW846 8270D_SIM	26-Sep-20 08:30	30-Sep-20 16:52	M-PA009	48041
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Surrogate recoveries:

38072-94-5	1-Methylnaphthalene-d10 (Surr)	94			15-121 %			"	"	"	"	"
63466-71-7	Benzo(a)pyrene-d12 (Surr)	67			10-138 %			"	"	"	"	"
93951-69-0	Fluoranthene-d10 (Surr)	109			34-125 %			"	"	"	"	"

Subcontracted Analyses

Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

7440-22-4	Silver, Dissolved	< 0.50		ug/l	0.50	0.036	1	EPA 200.8	29-Sep-20 09:20	30-Sep-20 19:45	M-NY044	551595
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Prepared by method NONE

Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

Chemical Oxygen Demand	< 10		mg/l	10	5.0	1	MCAWW 410.4	25-Sep-20 17:49	25-Sep-20 17:49	M-NY044	551410
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Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

Alkalinity, Total	110		mg/l	5.0	0.79	1	SM 2320B	30-Sep-20 17:08	30-Sep-20 17:08	M-NY044	551957
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Prepared by method METHOD

Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

57-12-5	Cyanide, Total	< 0.010		mg/l	0.010	0.0050	1	SW846 9012B	28-Sep-20 21:11	30-Sep-20 21:36	M-NY044	551565
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Prepared by method NONE

Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044

14808-79-8	Sulfate	< 5.0		mg/l	5.0	1.5	1	SW846 9038	29-Sep-20 02:10	29-Sep-20 02:10	M-NY044	551570
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<u>Sample Identification</u>				<u>Client Project #</u>			<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>			
S-1				183TD20066			Surface Water	23-Sep-20 15:14		24-Sep-20			
SC59418-01													
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.

Subcontracted Analyses

Analysis performed by Eurofins TestAmerica - Buffalo - M-NY044													
16887-00-6	Chloride	11		mg/l	1.0	0.34	1	SW846 9251	29-Sep-20 03:23	29-Sep-20 03:23	M-NY044	551568	

Sample IdentificationTrip

SC59418-02

Client Project #

183TD20066

Matrix

Trip Blank

Collection Date/Time

23-Sep-20 00:00

Received

24-Sep-20

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.20	1	SW846 8260C	25-Sep-20	25-Sep-20	MED	2001837	X
67-64-1	Acetone	< 10.0		µg/l	10.0	0.90	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.25	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.39	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.45	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	0.63	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00		µg/l	2.00	0.58	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.45	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	0.44	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.25	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	0.48	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	0.51	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.48	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.50	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.39	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.34	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.19	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.30	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.37	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 1.00		µg/l	1.00	0.24	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00		µg/l	2.00	0.69	1	"	"	"	"	"	X

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Sample IdentificationTrip

SC59418-02

Client Project #

183TD20066

Matrix

Trip Blank

Collection Date/Time

23-Sep-20 00:00

Received

24-Sep-20

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.38	1	SW846 8260C	25-Sep-20	25-Sep-20	MED	2001837	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00		µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.54	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00		µg/l	2.00	0.70	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.37	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.46	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.70	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.54	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.35	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.23	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.51	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.46	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.45	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	0.78	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	0.70	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.26	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.52	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 50.0		µg/l	50.0	7.43	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.81	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200		µg/l	200	9.08	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	99			70-130 %		"	"	"	"	"	"	
2037-26-5	Toluene-d8	99			70-130 %		"	"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	98			70-130 %		"	"	"	"	"	"	
1868-53-7	Dibromofluoromethane	104			70-130 %		"	"	"	"	"	"	

Tentatively Identified Compounds by GC/MS

Tentatively Identified Compounds	0.0			µg/l			1	SW846 8260C TICs	"	"	MED	"	
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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW846 8260C</u>										
Batch 2001837 - SW846 5030 Water MS										
<u>Blank (2001837-BLK1)</u>					<u>Prepared & Analyzed: 25-Sep-20</u>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromochloromethane	< 1.00		µg/l	1.00						
Bromodichloromethane	< 0.50		µg/l	0.50						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 2.00		µg/l	2.00						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 1.00		µg/l	1.00						
2-Hexanone (MBK)	< 2.00		µg/l	2.00						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 2.00		µg/l	2.00						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 2.00		µg/l	2.00						
n-Propylbenzene	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW846 8260C</u>										
Batch 2001837 - SW846 5030 Water MS										
<u>Blank (2001837-BLK1)</u>					<u>Prepared & Analyzed: 25-Sep-20</u>					
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 50.0		µg/l	50.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 200		µg/l	200						
<i>Surrogate: 4-Bromofluorobenzene</i>	48.5		µg/l		50.0		97	70-130		
<i>Surrogate: Toluene-d8</i>	50.2		µg/l		50.0		100	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.1		µg/l		50.0		100	70-130		
<i>Surrogate: Dibromofluoromethane</i>	52.3		µg/l		50.0		105	70-130		
<u>LCS (2001837-BS1)</u>					<u>Prepared & Analyzed: 25-Sep-20</u>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.8		µg/l		20.0		119	70-130		
Acetone	16.4		µg/l		20.0		82	70-130		
Acrylonitrile	19.1		µg/l		20.0		95	70-130		
Benzene	19.4		µg/l		20.0		97	70-130		
Bromobenzene	21.7		µg/l		20.0		108	70-130		
Bromochloromethane	21.5		µg/l		20.0		108	70-130		
Bromodichloromethane	19.6		µg/l		20.0		98	70-130		
Bromoform	22.0		µg/l		20.0		110	70-130		
Bromomethane	16.6		µg/l		20.0		83	70-130		
2-Butanone (MEK)	18.0		µg/l		20.0		90	70-130		
n-Butylbenzene	20.9		µg/l		20.0		105	70-130		
sec-Butylbenzene	16.8		µg/l		20.0		84	70-130		
tert-Butylbenzene	23.0		µg/l		20.0		115	70-130		
Carbon disulfide	23.9		µg/l		20.0		119	70-130		
Carbon tetrachloride	21.7		µg/l		20.0		108	70-130		
Chlorobenzene	22.1		µg/l		20.0		111	70-130		
Chloroethane	18.8		µg/l		20.0		94	70-130		
Chloroform	19.6		µg/l		20.0		98	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW846 8260C</u>										
Batch 2001837 - SW846 5030 Water MS										
<u>LCS (2001837-BS1)</u>	<u>Prepared & Analyzed: 25-Sep-20</u>									
Chloromethane	16.9		µg/l		20.0		84	70-130		
2-Chlorotoluene	21.6		µg/l		20.0		108	70-130		
4-Chlorotoluene	21.4		µg/l		20.0		107	70-130		
1,2-Dibromo-3-chloropropane	18.6		µg/l		20.0		93	70-130		
Dibromochloromethane	19.8		µg/l		20.0		99	70-130		
1,2-Dibromoethane (EDB)	21.6		µg/l		20.0		108	70-130		
Dibromomethane	20.6		µg/l		20.0		103	70-130		
1,2-Dichlorobenzene	22.1		µg/l		20.0		111	70-130		
1,3-Dichlorobenzene	22.0		µg/l		20.0		110	70-130		
1,4-Dichlorobenzene	20.8		µg/l		20.0		104	70-130		
Dichlorodifluoromethane (Freon12)	24.3		µg/l		20.0		121	70-130		
1,1-Dichloroethane	19.9		µg/l		20.0		100	70-130		
1,2-Dichloroethane	19.5		µg/l		20.0		98	70-130		
1,1-Dichloroethene	22.0		µg/l		20.0		110	70-130		
cis-1,2-Dichloroethene	21.2		µg/l		20.0		106	70-130		
trans-1,2-Dichloroethene	21.3		µg/l		20.0		107	70-130		
1,2-Dichloropropane	18.4		µg/l		20.0		92	70-130		
1,3-Dichloropropane	19.0		µg/l		20.0		95	70-130		
2,2-Dichloropropane	20.2		µg/l		20.0		101	70-130		
1,1-Dichloropropene	20.5		µg/l		20.0		102	70-130		
cis-1,3-Dichloropropene	19.3		µg/l		20.0		97	70-130		
trans-1,3-Dichloropropene	20.8		µg/l		20.0		104	70-130		
Ethylbenzene	21.2		µg/l		20.0		106	70-130		
Hexachlorobutadiene	21.2		µg/l		20.0		106	70-130		
2-Hexanone (MBK)	17.5		µg/l		20.0		87	70-130		
Isopropylbenzene	20.6		µg/l		20.0		103	70-130		
4-Isopropyltoluene	21.5		µg/l		20.0		108	70-130		
Methyl tert-butyl ether	17.9		µg/l		20.0		90	70-130		
4-Methyl-2-pentanone (MIBK)	17.5		µg/l		20.0		87	70-130		
Methylene chloride	20.2		µg/l		20.0		101	70-130		
Naphthalene	17.3		µg/l		20.0		87	70-130		
n-Propylbenzene	21.6		µg/l		20.0		108	70-130		
Styrene	22.2		µg/l		20.0		111	70-130		
1,1,1,2-Tetrachloroethane	22.3		µg/l		20.0		111	70-130		
1,1,2,2-Tetrachloroethane	22.2		µg/l		20.0		111	70-130		
Tetrachloroethene	23.9		µg/l		20.0		119	70-130		
Toluene	20.0		µg/l		20.0		100	70-130		
1,2,3-Trichlorobenzene	21.6		µg/l		20.0		108	70-130		
1,2,4-Trichlorobenzene	21.8		µg/l		20.0		109	70-130		
1,3,5-Trichlorobenzene	21.9		µg/l		20.0		110	70-130		
1,1,1-Trichloroethane	20.9		µg/l		20.0		104	70-130		
1,1,2-Trichloroethane	20.2		µg/l		20.0		101	70-130		
Trichloroethene	17.9		µg/l		20.0		89	70-130		
Trichlorofluoromethane (Freon 11)	23.0		µg/l		20.0		115	70-130		
1,2,3-Trichloropropane	19.8		µg/l		20.0		99	70-130		
1,2,4-Trimethylbenzene	22.0		µg/l		20.0		110	70-130		
1,3,5-Trimethylbenzene	21.9		µg/l		20.0		110	70-130		
Vinyl chloride	19.7		µg/l		20.0		98	70-130		
m,p-Xylene	46.3		µg/l		40.0		116	70-130		
o-Xylene	22.2		µg/l		20.0		111	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 2001837 - SW846 5030 Water MS										
<u>LCS (2001837-BS1)</u>					<u>Prepared & Analyzed: 25-Sep-20</u>					
Tetrahydrofuran	17.4		µg/l		20.0		87	70-130		
Ethyl ether	18.7		µg/l		20.0		94	70-130		
Tert-amyl methyl ether	18.3		µg/l		20.0		91	70-130		
Ethyl tert-butyl ether	18.7		µg/l		20.0		93	70-130		
Di-isopropyl ether	18.0		µg/l		20.0		90	70-130		
Tert-Butanol / butyl alcohol	189		µg/l		200		94	70-130		
1,4-Dioxane	219		µg/l		200		109	70-130		
trans-1,4-Dichloro-2-butene	15.2		µg/l		20.0		76	70-130		
Ethanol	362	QC6	µg/l		400		91	70-130		
Surrogate: 4-Bromofluorobenzene	50.4		µg/l		50.0		101	70-130		
Surrogate: Toluene-d8	50.0		µg/l		50.0		100	70-130		
Surrogate: 1,2-Dichloroethane-d4	48.7		µg/l		50.0		97	70-130		
Surrogate: Dibromofluoromethane	51.3		µg/l		50.0		103	70-130		
<u>LCS Dup (2001837-BSD1)</u>					<u>Prepared & Analyzed: 25-Sep-20</u>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	24.8		µg/l		20.0		124	70-130	4	20
Acetone	20.0		µg/l		20.0		100	70-130	20	20
Acrylonitrile	20.6		µg/l		20.0		103	70-130	8	20
Benzene	20.2		µg/l		20.0		101	70-130	4	20
Bromobenzene	22.5		µg/l		20.0		112	70-130	4	20
Bromochloromethane	22.6		µg/l		20.0		113	70-130	5	20
Bromodichloromethane	20.4		µg/l		20.0		102	70-130	4	20
Bromoform	22.5		µg/l		20.0		112	70-130	2	20
Bromomethane	17.3		µg/l		20.0		87	70-130	4	20
2-Butanone (MEK)	18.4		µg/l		20.0		92	70-130	2	20
n-Butylbenzene	21.8		µg/l		20.0		109	70-130	4	20
sec-Butylbenzene	17.3		µg/l		20.0		87	70-130	3	20
tert-Butylbenzene	24.2		µg/l		20.0		121	70-130	5	20
Carbon disulfide	24.9		µg/l		20.0		125	70-130	4	20
Carbon tetrachloride	22.5		µg/l		20.0		113	70-130	4	20
Chlorobenzene	22.8		µg/l		20.0		114	70-130	3	20
Chloroethane	20.1		µg/l		20.0		100	70-130	7	20
Chloroform	20.1		µg/l		20.0		101	70-130	3	20
Chloromethane	17.9		µg/l		20.0		89	70-130	6	20
2-Chlorotoluene	22.2		µg/l		20.0		111	70-130	3	20
4-Chlorotoluene	22.0		µg/l		20.0		110	70-130	3	20
1,2-Dibromo-3-chloropropane	19.2		µg/l		20.0		96	70-130	3	20
Dibromochloromethane	20.5		µg/l		20.0		103	70-130	4	20
1,2-Dibromoethane (EDB)	22.4		µg/l		20.0		112	70-130	4	20
Dibromomethane	21.3		µg/l		20.0		106	70-130	3	20
1,2-Dichlorobenzene	23.0		µg/l		20.0		115	70-130	4	20
1,3-Dichlorobenzene	22.7		µg/l		20.0		113	70-130	3	20
1,4-Dichlorobenzene	21.6		µg/l		20.0		108	70-130	4	20
Dichlorodifluoromethane (Freon12)	26.7	QC6	µg/l		20.0		134	70-130	10	20
1,1-Dichloroethane	21.0		µg/l		20.0		105	70-130	5	20
1,2-Dichloroethane	20.4		µg/l		20.0		102	70-130	4	20
1,1-Dichloroethene	22.4		µg/l		20.0		112	70-130	2	20
cis-1,2-Dichloroethene	21.8		µg/l		20.0		109	70-130	3	20
trans-1,2-Dichloroethene	22.7		µg/l		20.0		113	70-130	6	20
1,2-Dichloropropane	19.4		µg/l		20.0		97	70-130	5	20
1,3-Dichloropropane	20.1		µg/l		20.0		101	70-130	6	20

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 2001837 - SW846 5030 Water MS										
LCS Dup (2001837-BSD1)					<u>Prepared & Analyzed: 25-Sep-20</u>					
2,2-Dichloropropane	20.5		µg/l		20.0		103	70-130	1	20
1,1-Dichloropropene	21.1		µg/l		20.0		105	70-130	3	20
cis-1,3-Dichloropropene	20.1		µg/l		20.0		101	70-130	4	20
trans-1,3-Dichloropropene	21.4		µg/l		20.0		107	70-130	3	20
Ethylbenzene	21.9		µg/l		20.0		109	70-130	3	20
Hexachlorobutadiene	22.8		µg/l		20.0		114	70-130	7	20
2-Hexanone (MBK)	18.1		µg/l		20.0		90	70-130	3	20
Isopropylbenzene	21.6		µg/l		20.0		108	70-130	5	20
4-Isopropyltoluene	23.0		µg/l		20.0		115	70-130	7	20
Methyl tert-butyl ether	18.8		µg/l		20.0		94	70-130	5	20
4-Methyl-2-pentanone (MIBK)	18.5		µg/l		20.0		93	70-130	6	20
Methylene chloride	20.6		µg/l		20.0		103	70-130	2	20
Naphthalene	17.7		µg/l		20.0		89	70-130	2	20
n-Propylbenzene	22.2		µg/l		20.0		111	70-130	3	20
Styrene	23.4		µg/l		20.0		117	70-130	5	20
1,1,1,2-Tetrachloroethane	23.0		µg/l		20.0		115	70-130	3	20
1,1,2,2-Tetrachloroethane	22.8		µg/l		20.0		114	70-130	3	20
Tetrachloroethene	24.8		µg/l		20.0		124	70-130	4	20
Toluene	20.9		µg/l		20.0		104	70-130	4	20
1,2,3-Trichlorobenzene	22.7		µg/l		20.0		113	70-130	5	20
1,2,4-Trichlorobenzene	22.3		µg/l		20.0		112	70-130	2	20
1,3,5-Trichlorobenzene	23.3		µg/l		20.0		116	70-130	6	20
1,1,1-Trichloroethane	21.4		µg/l		20.0		107	70-130	3	20
1,1,2-Trichloroethane	21.2		µg/l		20.0		106	70-130	5	20
Trichloroethene	19.0		µg/l		20.0		95	70-130	6	20
Trichlorofluoromethane (Freon 11)	23.9		µg/l		20.0		120	70-130	4	20
1,2,3-Trichloropropane	20.4		µg/l		20.0		102	70-130	3	20
1,2,4-Trimethylbenzene	22.5		µg/l		20.0		112	70-130	2	20
1,3,5-Trimethylbenzene	22.9		µg/l		20.0		114	70-130	4	20
Vinyl chloride	21.4		µg/l		20.0		107	70-130	8	20
m,p-Xylene	47.8		µg/l		40.0		120	70-130	3	20
o-Xylene	22.6		µg/l		20.0		113	70-130	2	20
Tetrahydrofuran	17.8		µg/l		20.0		89	70-130	2	20
Ethyl ether	19.7		µg/l		20.0		98	70-130	5	20
Tert-amyl methyl ether	19.1		µg/l		20.0		95	70-130	4	20
Ethyl tert-butyl ether	19.1		µg/l		20.0		96	70-130	2	20
Di-isopropyl ether	18.7		µg/l		20.0		94	70-130	4	20
Tert-Butanol / butyl alcohol	176		µg/l		200		88	70-130	7	20
1,4-Dioxane	229		µg/l		200		114	70-130	5	20
trans-1,4-Dichloro-2-butene	15.9		µg/l		20.0		79	70-130	5	20
Ethanol	411	QC6	µg/l		400		103	70-130	12	20
Surrogate: 4-Bromofluorobenzene	50.5		µg/l		50.0		101	70-130		
Surrogate: Toluene-d8	49.4		µg/l		50.0		99	70-130		
Surrogate: 1,2-Dichloroethane-d4	48.8		µg/l		50.0		98	70-130		
Surrogate: Dibromofluoromethane	51.8		µg/l		50.0		104	70-130		

SW846 8260C TICs

Batch 2001837 - SW846 5030 Water MS

Blank (2001837-BLK1)

Prepared & Analyzed: 25-Sep-20

Tentatively Identified Compounds	0.0	µg/l
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Soluble Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA 200.7</u>										
Batch 2001834 - EPA 200 Series										
<u>Blank (2001834-BLK1)</u>					<u>Prepared & Analyzed: 29-Sep-20</u>					
Selenium	< 0.0300		mg/l	0.0300						
Iron	< 0.100		mg/l	0.100						
Manganese	< 0.0100		mg/l	0.0100						
Sodium	< 2.00		mg/l	2.00						
Arsenic	< 0.0080		mg/l	0.0080						
Barium	< 0.0100		mg/l	0.0100						
Cadmium	< 0.0050		mg/l	0.0050						
Calcium	< 0.500		mg/l	0.500						
Chromium	< 0.0100		mg/l	0.0100						
Copper	< 0.0100		mg/l	0.0100						
Lead	< 0.0150		mg/l	0.0150						
Zinc	< 0.0200		mg/l	0.0200						
<u>LCS (2001834-BS1)</u>					<u>Prepared & Analyzed: 29-Sep-20</u>					
Selenium	4.80		mg/l	0.0300	5.00		96	85-115		
Iron	10.3		mg/l	0.100	10.0		103	85-115		
Manganese	4.94		mg/l	0.0100	5.00		99	85-115		
Sodium	10.0		mg/l	2.00	10.0		100	85-115		
Arsenic	4.80		mg/l	0.0080	5.00		96	85-115		
Barium	5.02		mg/l	0.0100	5.00		100	85-115		
Cadmium	4.83		mg/l	0.0050	5.00		97	85-115		
Calcium	10.3		mg/l	0.500	10.0		103	85-115		
Chromium	4.80		mg/l	0.0100	5.00		96	85-115		
Copper	4.78		mg/l	0.0100	5.00		96	85-115		
Lead	4.85		mg/l	0.0150	5.00		97	85-115		
Zinc	4.84		mg/l	0.0200	5.00		97	85-115		
<u>Duplicate (2001834-DUP1)</u>				<u>Source: SC59418-01</u>		<u>Prepared & Analyzed: 29-Sep-20</u>				
Selenium	< 0.0300		mg/l	0.0300		BRL				20
Iron	0.317		mg/l	0.100		0.314			1	20
Manganese	0.101		mg/l	0.0100		0.101			0.1	20
Sodium	4.06		mg/l	2.00		4.09			0.7	20
Arsenic	0.0055	J	mg/l	0.0080		0.0061				20
Barium	0.0051	J	mg/l	0.0100		0.0048			6	20
Cadmium	< 0.0050		mg/l	0.0050		BRL				20
Calcium	37.6		mg/l	0.500		37.8			0.5	20
Chromium	< 0.0100		mg/l	0.0100		BRL				20
Copper	< 0.0100		mg/l	0.0100		BRL				20
Lead	< 0.0150		mg/l	0.0150		BRL				20
Zinc	< 0.0200		mg/l	0.0200		BRL				20
<u>Matrix Spike (2001834-MS1)</u>				<u>Source: SC59418-01</u>		<u>Prepared & Analyzed: 29-Sep-20</u>				
Selenium	2.81		mg/l	0.0300	2.50	BRL	113	70-130		
Iron	3.08		mg/l	0.100	2.50	0.314	111	70-130		
Manganese	2.80		mg/l	0.0100	2.50	0.101	108	70-130		
Sodium	16.9		mg/l	2.00	12.5	4.09	102	70-130		
Arsenic	2.71		mg/l	0.0080	2.50	0.0061	108	70-130		
Barium	2.62		mg/l	0.0100	2.50	0.0048	105	70-130		
Cadmium	2.62		mg/l	0.0050	2.50	BRL	105	70-130		
Calcium	47.7		mg/l	0.500	12.5	37.8	79	70-130		
Chromium	2.62		mg/l	0.0100	2.50	BRL	105	70-130		
Copper	2.59		mg/l	0.0100	2.50	BRL	103	70-130		
Lead	2.65		mg/l	0.0150	2.50	BRL	106	70-130		

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Soluble Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA 200.7</u>										
Batch 2001834 - EPA 200 Series										
<u>Matrix Spike (2001834-MS1)</u>			<u>Source: SC59418-01</u>			<u>Prepared & Analyzed: 29-Sep-20</u>				
Zinc	2.68		mg/l	0.0200	2.50	BRL	107	70-130		
<u>EPA 245.1/7470A</u>										
Batch 2001835 - EPA200/SW7000 Series										
<u>Blank (2001835-BLK1)</u>			<u>Prepared & Analyzed: 29-Sep-20</u>							
Mercury	< 0.00020		mg/l	0.00020						
<u>LCS (2001835-BS1)</u>			<u>Prepared & Analyzed: 29-Sep-20</u>							
Mercury	0.00579	QC2	mg/l	0.00020	0.00500		116	85-115		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SM18-22 2540C</u>										
Batch 2001857 - General Preparation										
<u>Blank (2001857-BLK1)</u>					<u>Prepared: 28-Sep-20 Analyzed: 30-Sep-20</u>					
Total Dissolved Solids	< 5		mg/l	5						
<u>LCS (2001857-BS1)</u>					<u>Prepared: 28-Sep-20 Analyzed: 30-Sep-20</u>					
Total Dissolved Solids	930		mg/l	10	1000		93	90-110		
<u>Duplicate (2001857-DUP1)</u>					<u>Source: SC59418-01 Prepared: 28-Sep-20 Analyzed: 30-Sep-20</u>					
Total Dissolved Solids	166		mg/l	5		160			4	5

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>E300.0</u>										
Batch 546995A - E300.0										
<u>Blank (CG85127-BLK)</u>					<u>Prepared & Analyzed: 24-Sep-20</u>					
Nitrate as Nitrogen	< 0.05		mg/l	0.05		BRL	-			
<u>LCS (CG85127-LCS)</u>					<u>Prepared & Analyzed: 25-Sep-20</u>					
Nitrate as Nitrogen	1.057		mg/l	0.05	01604278C		93.5	90-110		20

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW846 8270D SIM</u>										
Batch 48041 - 3510C_LVI										
<u>Blank (480411AB)</u>					<u>Prepared: 26-Sep-20 Analyzed: 30-Sep-20</u>					
1,4-Dioxane	< 0.20		ug/l	0.20				-		
Surrogate: 1-Methylnaphthalene-d10 (Surr)	0.808		ug/l		1.00		81	15-121		
Surrogate: Benzo(a)pyrene-d12 (Surr)	0.662		ug/l		1.00		66	10-138		
Surrogate: Fluoranthene-d10 (Surr)	0.910		ug/l		1.00		91	34-125		
<u>LCS (480412AQ)</u>					<u>Prepared: 26-Sep-20 Analyzed: 30-Sep-20</u>					
1,4-Dioxane	0.450		ug/l	0.20	1.00		45	18-91		
Surrogate: 1-Methylnaphthalene-d10 (Surr)	0.795		ug/l		1.00		79	15-121		
Surrogate: Benzo(a)pyrene-d12 (Surr)	0.823		ug/l		1.00		82	10-138		
Surrogate: Fluoranthene-d10 (Surr)	0.933		ug/l		1.00		93	34-125		
<u>LCS Dup (480413AY)</u>					<u>Source: 480412AQ</u>		<u>Prepared: 26-Sep-20 Analyzed: 30-Sep-20</u>			
1,4-Dioxane	0.500		ug/l	0.20	1.00	0.450	50	18-91	11	30
Surrogate: 1-Methylnaphthalene-d10 (Surr)	0.791		ug/l		1.00		79	15-121		
Surrogate: Benzo(a)pyrene-d12 (Surr)	0.855		ug/l		1.00		86	10-138		
Surrogate: Fluoranthene-d10 (Surr)	0.972		ug/l		1.00		97	34-125		

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA 200.8</u>										
Batch 551595 - 200.8_P_TOT										
<u>Blank (5515951AB)</u>						<u>Prepared: 29-Sep-20 Analyzed: 30-Sep-20</u>				
Silver	< 0.50		ug/l	0.50				-		
<u>LCS (5515952AQ)</u>						<u>Prepared: 29-Sep-20 Analyzed: 30-Sep-20</u>				
Silver	20.7		ug/l	0.50	20.0		103	85-115		
<u>LCS Dup (5515953AY)</u>	<u>Source: 5515952AQ</u>					<u>Prepared: 29-Sep-20 Analyzed: 30-Sep-20</u>				
Silver	21.1		ug/l	0.50	20.0	20.7	105	85-115	2	20
<u>MCAWW 410.4</u>										
Batch 551410 - NONE										
<u>Blank (55141076B)</u>						<u>Prepared & Analyzed: 25-Sep-20</u>				
Chemical Oxygen Demand	< 10		mg/l	10				-		
<u>LCS (55141077Q)</u>						<u>Prepared & Analyzed: 25-Sep-20</u>				
Chemical Oxygen Demand	26.2		mg/l	10	25.0		105	90-110		
<u>SM 2320B</u>										
Batch 551957 - NONE										
<u>Blank (55195728B)</u>						<u>Prepared & Analyzed: 30-Sep-20</u>				
Alkalinity, Total	< 5.0		mg/l	5.0				-		
<u>LCS (55195729Q)</u>						<u>Prepared & Analyzed: 30-Sep-20</u>				
Alkalinity, Total	98.2		mg/l	5.0	100		98	90-110		
<u>SW846 9012B</u>										
Batch 551565 - METHOD										
<u>Matrix Spike (1755831S)</u>	<u>Source: SC59418-01</u>					<u>Prepared: 28-Sep-20 Analyzed: 30-Sep-20</u>				
Cyanide, Total	0.106		mg/l	0.010	0.100	BRL	100	90-110		
<u>Blank (5515651AB)</u>						<u>Prepared: 28-Sep-20 Analyzed: 30-Sep-20</u>				
Cyanide, Total	< 0.010		mg/l	0.010				-		
<u>LCS (5515652AQ)</u>						<u>Prepared: 28-Sep-20 Analyzed: 30-Sep-20</u>				
Cyanide, Total	0.248		mg/l	0.010	0.250		99	90-110		
<u>SW846 9038</u>										
Batch 551570 - NONE										
<u>Blank (551570121B)</u>						<u>Prepared & Analyzed: 29-Sep-20</u>				
Sulfate	< 5.0		mg/l	5.0				-		
<u>LCS (551570122Q)</u>						<u>Prepared & Analyzed: 29-Sep-20</u>				
Sulfate	30.7		mg/l	5.0	30.0		102	90-110		
<u>SW846 9251</u>										
Batch 551568 - NONE										
<u>LCS (551568114Q)</u>						<u>Prepared & Analyzed: 29-Sep-20</u>				
Chloride	27.2		mg/l	1.0	25.0		109	90-110		
<u>Blank (551568115B)</u>						<u>Prepared & Analyzed: 29-Sep-20</u>				
Chloride	< 1.0		mg/l	1.0				-		
<u>LCS (551568125Q)</u>						<u>Prepared & Analyzed: 29-Sep-20</u>				
Chloride	27.3		mg/l	1.0	25.0		109	90-110		
<u>Blank (551568126B)</u>						<u>Prepared & Analyzed: 29-Sep-20</u>				
Chloride	< 1.0		mg/l	1.0				-		

Notes and Definitions

QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QC6	Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

This preceding chain of custody has been amended to include the client requested additional analyses as noted below:

<i>Laboratory ID</i>	<i>Client ID</i>	<i>Analysis</i>	<i>Added</i>
SC59418-02	Trip	Tentatively Identified Compounds by GC/MS	9/25/2020

Batch Summary

2001834

Soluble Metals by EPA 200 Series Methods

2001834-BLK1
2001834-BS1
2001834-DUP1
2001834-MS1
SC59418-01 (S-1)

2001835

Soluble Metals by EPA 200 Series Methods

2001835-BLK1
2001835-BS1
SC59418-01 (S-1)

2001837

Volatile Organic Compounds

2001837-BLK1
2001837-BS1
2001837-BSD1
SC59418-01 (S-1)
SC59418-02 (Trip)

2001857

General Chemistry Parameters

2001857-BLK1
2001857-BS1
2001857-DUP1
SC59418-01 (S-1)

48041

Subcontracted Analyses

480411AB
480412AQ
480413AY
SC59418-01 (S-1)

546995A

Subcontracted Analyses

CG85127-BLK
CG85127-LCS
SC59418-01 (S-1)

551410

Subcontracted Analyses

55141076B
55141077Q
SC59418-01 (S-1)

551565

Subcontracted Analyses

1755831S

5515651AB
5515652AQ
SC59418-01 (S-1)

551568

Subcontracted Analyses

551568114Q
551568115B
551568125Q
551568126B
SC59418-01 (S-1)

551570

Subcontracted Analyses

551570121B
551570122Q
SC59418-01 (S-1)

551595

Subcontracted Analyses

5515951AB
5515952AQ
5515953AY
SC59418-01 (S-1)

551957

Subcontracted Analyses

55195728B
55195729Q
SC59418-01 (S-1)

APPENDIX E

WELL GAUGING AND FIELD PARAMETER LOG

ATC Group Services, LLC

73 William Franks Drive, West Springfield, Massachusetts 01089
MA: (413) 781-0070 FAX: (413) 781-3734

WELL GAUGING AND SAMPLING LOG

Client:	Town of Lanesborough	Job Number:	183TD20066	Sheet 1 of 1
Location:	Former Old Orebed Road Landfill	Date:	9/16/2020	
Personnel:	Keven Brown - Environmental Field Technician	Weather Conditions:	Partly Cloudy, 60°, NE @ 2 mph	

Well ID	D	Point of Reference (PVC/Rim)	Total Depth of Well (feet)	Depth to Water (feet)	Standing Water (feet)	Static Volume (gallons)	Water Volume Purged (gallons)	Odors (Y/N)	Color (Y/N)	Dissolved Oxygen (mg/L)	pH (S.U.)	Specific Conductivity (us/cm)	Temperature (°C)	Sample Time	Comments
MW-7	2	PVC	34.51	Groundwater monitoring well location gauged as dry and consequently, a sample set was not collected during the monitoring period.											Locked, labeled, covered
MW-8	2	PVC	33.73	23.16	10.57	0.97	5.25	N	Y	5.37	7.31	3,745	13.13	5:30	Locked, labeled, covered
MW-16	2	PVC	46.28	27.43	18.85	1.73	9.25	N	Y	1.38	7.03	1,164	15.78	3:30	Locked, labeled, covered
MW-17	2	PVC	44.14	Groundwater monitoring well location gauged as dry and consequently, a sample set was not collected during the monitoring period.											Locked, labeled, covered
MW-18	2	PVC	52.90	29.11	23.79	3.88	11.75	N	Y	4.07	7.44	677	14.68	3:00	Locked, labeled, covered
MW-101D	2	PVC	84.24	39.97	44.27	7.22	21.75	N	Y	2.24	7.90	1,525	15.73	10:50	Locked, labeled, covered
MW-103D	2	PVC	101.70	50.88	50.82	8.28	24.75	N	Y	1.44	7.77	1,789	16.38	11:45	Locked, labeled, covered
MW-104D	2	PVC	99.50	36.89	62.61	10.21	31.75	N	Y	0.88	7.72	1,743	18.99	10:00	Locked, labeled, covered
S-1*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N	N	6.01	6.99	250	18.50	3:14	Surface Water
S-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N	N	5.46	8.05	750	17.51	2:30	Surface Water
55 Old Orebed Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N	N	1.17	8.05	788	16.96	2:00	Private Well
87 Old Orebed Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N	N	2.41	7.98	3,192	17.30	12:30	Private Well
95 Old Orebed Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N	N	2.43	7.71	2,448	19.77	1:00	Private Well
99 Old Orebed Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N	N	4.19	7.74	699	19.35	1:30	Private Well
Instrumentation & Equipment				Manufacturer/Model			I.D.		Calibration		Decon			Notes	
Heron Water Level Indicator				Heron			5		N/A		Yes				
pH/ °C Meter				YSI Model 650					Yes		Yes				
Specific Conductivity Meter				YSI Model 650					Yes		Yes				
Dissolved Oxygen Meter				YSI Model 650					Yes		Yes				

D = Well diameter in inches.

* ATC inadvertently did not collect a sample at this location on September 16, 2020. On September 23, 2020, ATC returned to the site and collected the required sample.

Instruments Calibration

Project Number: 183TD20066

Date: September 16, 2020

Site: Old Orebed Road Landfill

Task: 2

Instrument: CES Landtec GEM-5000 (Serial # G 502321) Pine Environmental Equipment, Inc. Rental # 36248

Calibration Gas: Geotech
Lot Number: 16 - 5792

Component	Concentration
Hydrogen Sulfide	25 ppm
Nitrogen	Balance

Calibration Gas: Geotech
Lot Number: 16 - 5710

Component	Concentration
Carbon Dioxide	15.0%
Methane	15.0%
Nitrogen	Balance

OVM Calibrated: Yes

By signing below employee is certifying the instrument(s) indicated above has/have been calibrated and is/are functioning properly.

Personnel Calibrating Instrument(s): Keven Brown – Environmental Technician

Instrument Calibration Log

Project Number: 183TD20066

Date: September 16, 2020

Site: Old Orebed Road Landfill

Task: 1

Instrument: YSI pH/Temp/Specific Conductivity/Dissolved Oxygen Meter with Automatic Temperature Compensation (ATC) Model # 650 MDS

pH Calibration Buffers: (7&10) check in odd buffer:

Aqua Phoenix	pH Buffer	Lot No.	Exp Date	Reading
Pine	7.00	9GB719	Feb 2021	<u>7.00</u>
Pine	10.00	9GB956	Feb 2021	<u>10.00</u>

Conductivity Calibration Solution:

LabChem	Solution	Lot No.	Exp Date	Reading
LC187792	12.856 us/cm	H269-04	Sept 2020	<u>12.88</u>

Dissolved Oxygen Calibration:

Instrument Calibrated: Yes

By signing below employee is certifying the instrument(s) indicated above has/have been calibrated and is/are functioning properly.

Personnel Calibrating Instrument(s): Keven Brown – Environmental Technician

APPENDIX F

LANDFILL CAP INSPECTION PHOTOGRAPHS

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