Sterling Environmental Engineering, P.C.

May 14, 2021

Mr. Daniel R. Lanners, P.E. via email: daniel.lanners@dec.ny.gov
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau C
625 Broadway, 12th Floor
Albany, New York 12233-7014

Subject: Former M. Argueso and Company, Inc.
441 & 442 Waverly Avenue, Mamaroneck, NY
Site #C360108
Revised 2nd Semiannual 2020 Groundwater Monitoring Report
STERLING File #28012 (Task 995)

Dear Mr. Lanners,

In response to your April 19, 2021 comment letter regarding the subject report, Sterling Environmental Engineering P.C. (STERLING) has revised the 2nd Semiannual 2020 Groundwater Monitoring Report for the subject site. Groundwater monitoring was conducted on November 18, 2020 in accordance with the approved Site Management Plan (SMP) dated October 2013, and the modifications approved by the New York State Department of Environmental Conservation (NYSDEC) dated March 7, 2014 and April 29, 2015.

Scope & Background

In June 2013, Hydrogen Release Compound (HRC) was injected into the subsurface surrounding wells GZ-22D and GZ-23D. Quarterly groundwater monitoring was conducted for one (1) year after the injection was completed. Semiannual monitoring was approved by the NYSDEC starting in 2015. This report presents the results of the second semiannual groundwater monitoring event for 2020, which included: groundwater gauging of eight (8) groundwater monitoring wells, calculation of groundwater flow direction, and sampling of six (6) groundwater monitoring wells for analysis of volatile organic compounds (VOC) by United States Environmental Protection Agency (USEPA) Method 8260C. Additionally, three (3) groundwater monitoring wells were sampled for emerging contaminants 1,4-dioxane and per-and polyfluoroalkyl substances (PFAS), as requested by the NYSDEC by letter dated September 17, 2020. Sampling for emerging contaminants was in accordance with the site-specific emerging contaminant sampling plan dated October 1, 2020 and NYSDEC's approval with modifications dated November 3, 2020.

Groundwater Flow Direction

The estimated groundwater flow in the deep overburden hydrogeologic unit is to the north (Figure 1), which is consistent with historical conditions. The deep overburden groundwater elevation increased an average of 0.01 feet compared to groundwater elevation measurements collected in March 2020.

Groundwater Monitoring

Groundwater samples were collected from four (4) onsite monitoring wells (GZ-21D, GZ-22D, GZ-23D, and B6-OWD) and two (2) offsite monitoring wells (OSMW-3 and OSMW-4). The locations of the groundwater monitoring wells are presented in Figure 1. All groundwater samples were analyzed for TCL VOCs via USEPA Method 8260C. Two (2) onsite monitoring wells (GZ-22D and GZ-23D) and one (1) offsite monitoring well (OSMW-3) were additionally analyzed for 1,4-Dioxane and PFAS via methods SW 846 Method 8270D SIM and USEPA Part 537, respectively. Groundwater samples were collected in accordance with the SMP and submitted to Alpha Analytical, Inc. of Westborough, Massachusetts under chain-of-custody protocol for analysis. Samples were shipped in a cooler with ice and analyzed within applicable holding times. The Daily Field Report and Sampling Data Sheets are attached.

Results of the laboratory analysis for chlorinated VOCs (cVOC) and comparison to Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Water Quality Standards and Guidance Values are summarized in Table 1 and a summary of select cVOC concentrations for the most recent two sample events are shown on Figure 2. The results of the laboratory analysis for emerging contaminants 1,4-Dioxane and PFAS are summarized in Table 1-A. PFAS results are compared to the regulatory guidance for groundwater quality available in the NYSDEC issued document "Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substance (PFAS)", dated October 2020 and 1-4 Dioxane results are compared to the NYSDEC screening level of 1.0 micrograms per liter (µg/L). The laboratory analytical report is attached.

1,4-Dioxane

Groundwater samples were collected for 1,4-Dioxane analysis from three (3) monitoring wells (GZ-22D, GZ-23D, and OSMW-3) and the results are provided in Table 1-A. The NYSDEC emerging contaminant screening level for 1,4-Dioxane in groundwater is 1.0 µg/L. 1,4-Dioxane was detected above the screening level of 1.0 µg/L in GZ-22D (3.18 µg/L) and the off-site well OSMW-3 (2.59 µg/L).

Per and Polyfluoroalkyl Substances (PFAS)

Groundwater samples were collected for PFAS compound analysis from three (3) monitoring wells (GZ-22D, GZ-23D, and OSMW-3). The NYSDEC screening level is 10 nanograms per liter (ng/L) for PFOA and PFOS, 100 ng/L for any other individual PFAS compound, and 500 ng/L for the total concentration of all PFAS compounds. PFAS compounds were detected above the laboratory reporting limit in all groundwater samples analyzed. No exceedance of any of the NYSDEC screening levels occurred in the samples collected from monitoring wells GZ-22D and OSMW-3. The concentration of perfluoroctanesulfonic acid (PFOS) (29.7 ng/L) from GZ-23D exceeded the NYSDEC screening level of 10 ng/L. Results for PFAS in groundwater are provided in Table 1-A.

Chlorinated Volatile Organic Compounds (cVOC)

Since the HRC injections in June 2013, groundwater quality has significantly improved. Concentrations of tetrachloroethylene (PCE) and trichloroethylene (TCE) have decreased and are remaining stable in monitoring wells GZ-21D, GZ-22D, GZ-23D, and OSMW-4. Degradation compounds initially increased following injection and subsequently decreased with the majority of cVOCs below groundwater standards. The treatment has been successful in reducing volatile compounds in groundwater, and groundwater quality improvement over time is expected to continue.

Other VOCs

Benzene was detected above the groundwater standard of 1.0 ug/L in GZ-22D (2.7 ug/L) and GZ-23D (5.3 ug/L). Methyl-tert-butyl ether (MTBE) was detected in GZ-22D at 1.8 ug/L and GZ-21D at 0.74 ug/L, below the Guidance Value of 10 ug/L. O-xylene was detected at GZ-23D at 1.2 ug/L, below the groundwater standard of 5 ug/L.

The following sections detail data trends in each deep zone monitoring well compared to the applicable ambient water quality standards based on data summarized in Table 1. Well data trend graphs are attached for each well that show select constituents over time compared to the groundwater quality standards.

Onsite Wells

GZ-21D

Since 2014, concentrations of all VOCs steadily decreased through November 2017 to below standards with the exception of 1,2-Dichloroethane (1,2-DCA). Beginning in 2018, concentrations of the following cVOCs have increased to levels above standards: 1,2-DCA, cis-1,2-Dichloroethene (cis-1,2-DCE), and vinyl chloride (VC). Concentrations of PCE and TCE remain below standards.

GZ-22D

PCE and TCE concentrations have decreased below standards for the last twelve (12) sampling events. All other cVOCs have decreased to levels below standards with the exception of 1,2-DCA, cis-1,2-DCE, trans-1,2-Dichloroethene (trans-1,2-DCE), and VC.

GZ-23D

PCE and TCE concentrations in this well have consistently been detected above the groundwater standard of 5 µg/L, from a high of 9,700 µg/L for PCE in 2009 and 1,600 µg/L for TCE in 2012 to the lowest levels yet in the most recent sampling event (19 and 15 µg/L for PCE and TCE, respectively). VC, a degradation product of PCE and TCE, increased to levels above groundwater standards following the 2013 injections and has consistently decreased or remained stable since late 2015, remaining above standards. The most recent VC concentration of 5.6 µg/L is approaching the groundwater standard of 2.0 µg/L. Cis-1,2-DCE concentrations are consistently detected above standards. Trans-1,2-DCE was detected below standards in this sampling event, and 1,2-DCA was detected at 1.1 µg/L, just above the 0.6 µg/L standard.

B6-OWD

Following an initial increase in cVOC concentrations immediately after the injections, all cVOCs decreased to below standards from November 2014 through June 2017. Since November 2017, PCE, TCE, 1,2-DCA, cis-1,2-DCE, and trans-1,2-DCE concentrations have increased above standards.

Offsite Wells

Offsite wells OSMW-3 and OSMW-4 are located upgradient of the treatment zone to determine upgradient groundwater quality.

OSMW-3

PCE, TCE, 1,2-DCA, and cis-1,2-DCE concentrations in this well have consistently remained above groundwater standards while trans-1,2-DCE and VC are below groundwater standards.

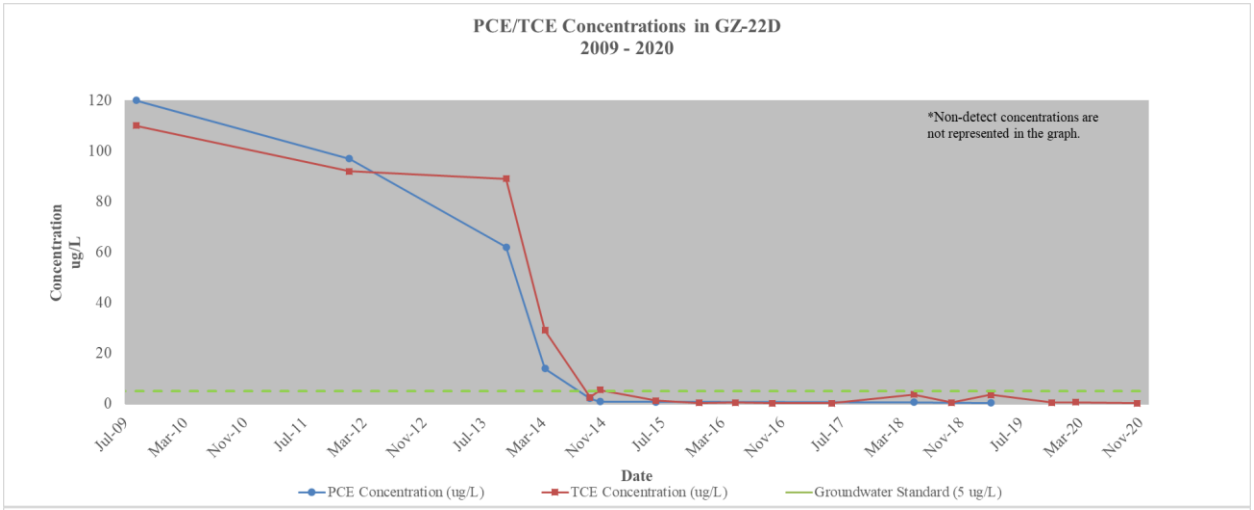
OSMW-4

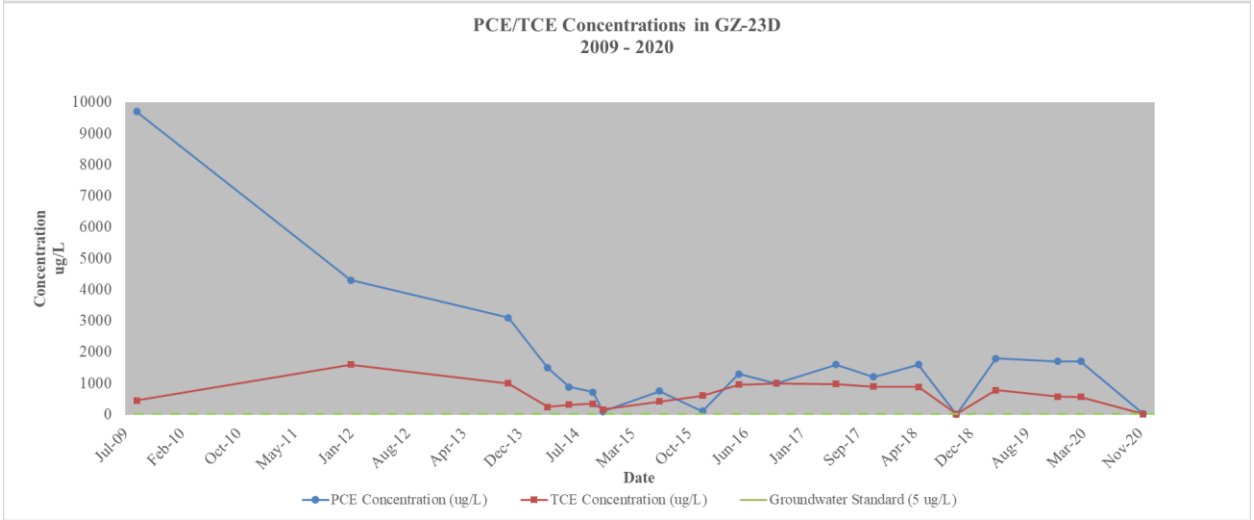
All cVOCs have been below groundwater standards since 2014.

Monitoring Well Data Trends

The graphs below depict PCE and TCE concentrations in monitoring wells GZ-22D and GZ-23D over time (2009 - 2020). Initially, monitoring wells GZ-22D and GZ-23D contained the highest concentrations of PCE and TCE in onsite groundwater and were therefore selected for remediation.

Additional data trend graphs for all monitoring wells sampled are attached, showing concentration levels over time for the cVOCs that have been consistently detected in these wells.





Conclusions and Recommendations

- Overall groundwater quality has improved over time, and groundwater quality improvement is expected to continue. Based on the long history of groundwater monitoring and stabilizing conditions, STERLING recommends the frequency of sampling be reduced to annual.
- Emerging Contaminants (PFAS and 1,4-Dioxane) concentrations were detected in all groundwater samples analyzed. PFOS in GZ-23D and 1,4-Dioxane in GZ-22D and OSMW-3 exceeded NYSDEC screening levels.
- OSMW-4 has consistently been reported at levels below groundwater standards; therefore, STERLING recommends sampling of this well be discontinued.
- Groundwater monitoring data collected subsequent to the 2013 injections indicate an overall decrease in the concentration of cVOCs. Therefore, the remedy continues to be effective at this site.
- Assuming the request to proceed with annual sampling is granted, the next annual sampling event is scheduled for the fall of 2021.

Please contact me should you have any questions.

Very truly yours,

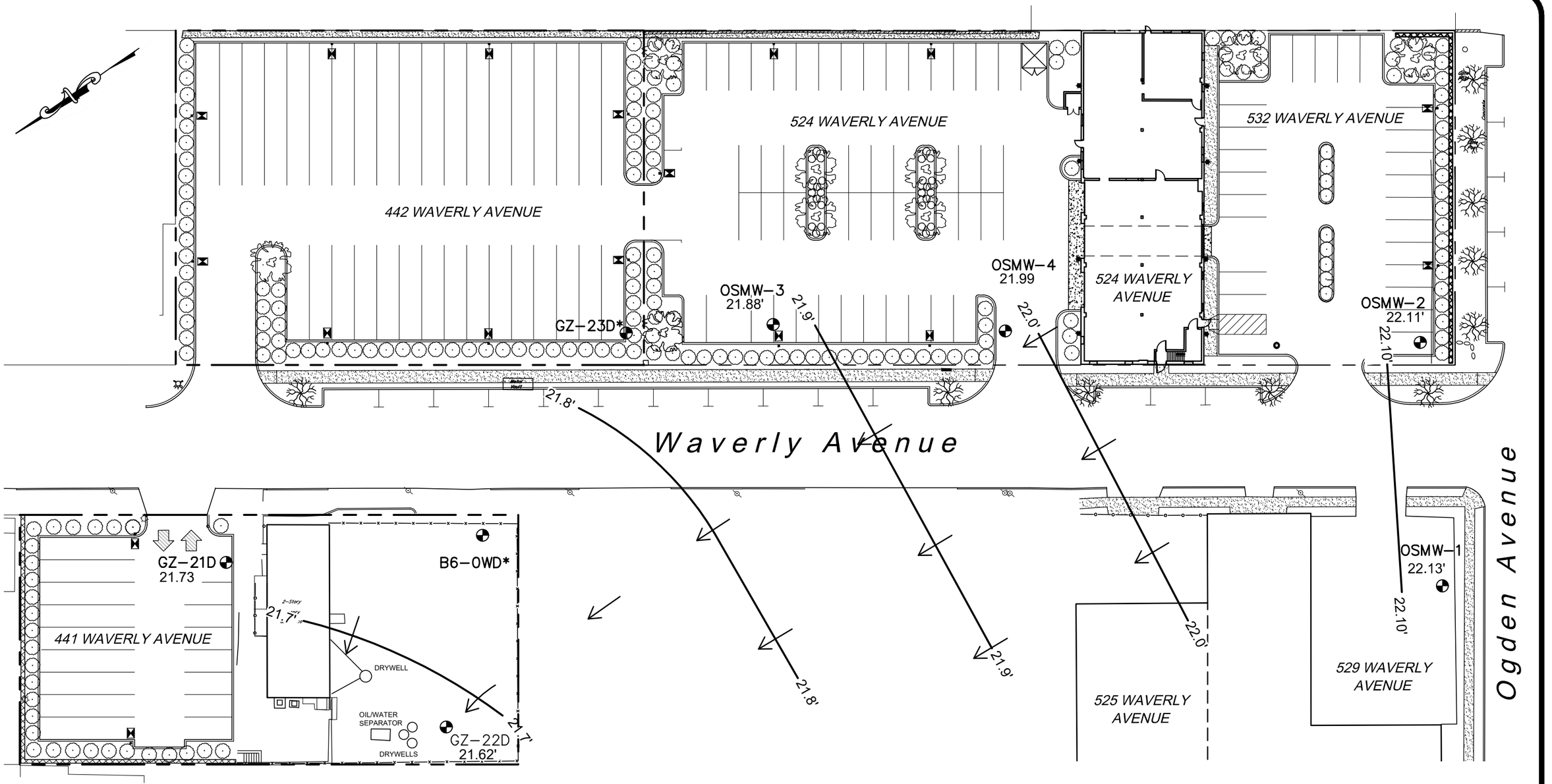
STERLING ENVIRONMENTAL ENGINEERING, P.C.

Andrew M. Millspaugh, P.E.
Vice President
andrew.millspaugh@sterlingenvironmental.com

Email
Attachments

cc: T.J. Milo, New Waverly Avenue Associates, LLC
Kevin Young, Young Sommer, LLC
Amen Omorogbe, P.E., NYSDEC

FIGURES



LEGEND:

GZ-22D 21.62'	MONITORING WELL WITH CORRESPONDING GROUNDWATER ELEVATION
21.8'	GROUNDWATER CONTOUR NOVEMBER 18, 2020
	GROUNDWATER FLOW DIRECTION (DASHED WHERE INFERRED)
	SITE BOUNDARY (441 & 442 WAVERLY AVENUE)
	LIGHT POLE
	CONCRETE SIDEWALK
	FENCE

TOTAL cVOCs (µg/L)

WELL ID	HIGHEST CONCENTRATION PRIOR TO 2013	NOVEMBER 2020
B6-OWD	615.70	2,775.7
GZ-21D	524.60	254.0
GZ-22D	260.40	111.8
GZ-23D	10,178.5	63.9
OSMW-3	900.10	2,536.7
OSMW-4	1,057.00	0.39

* DEPTH TO GROUNDWATER MEASUREMENT NOT CONSIDERED REPRESENTATIVE OF THE GROUNDWATER FLOW DIRECTION.

0 20' 40' 80

1 inch = 40' ft.

BASE MAP PROVIDED BY SITE DESIGN CONSULTANTS, DATED FEBRUARY 22, 2010.

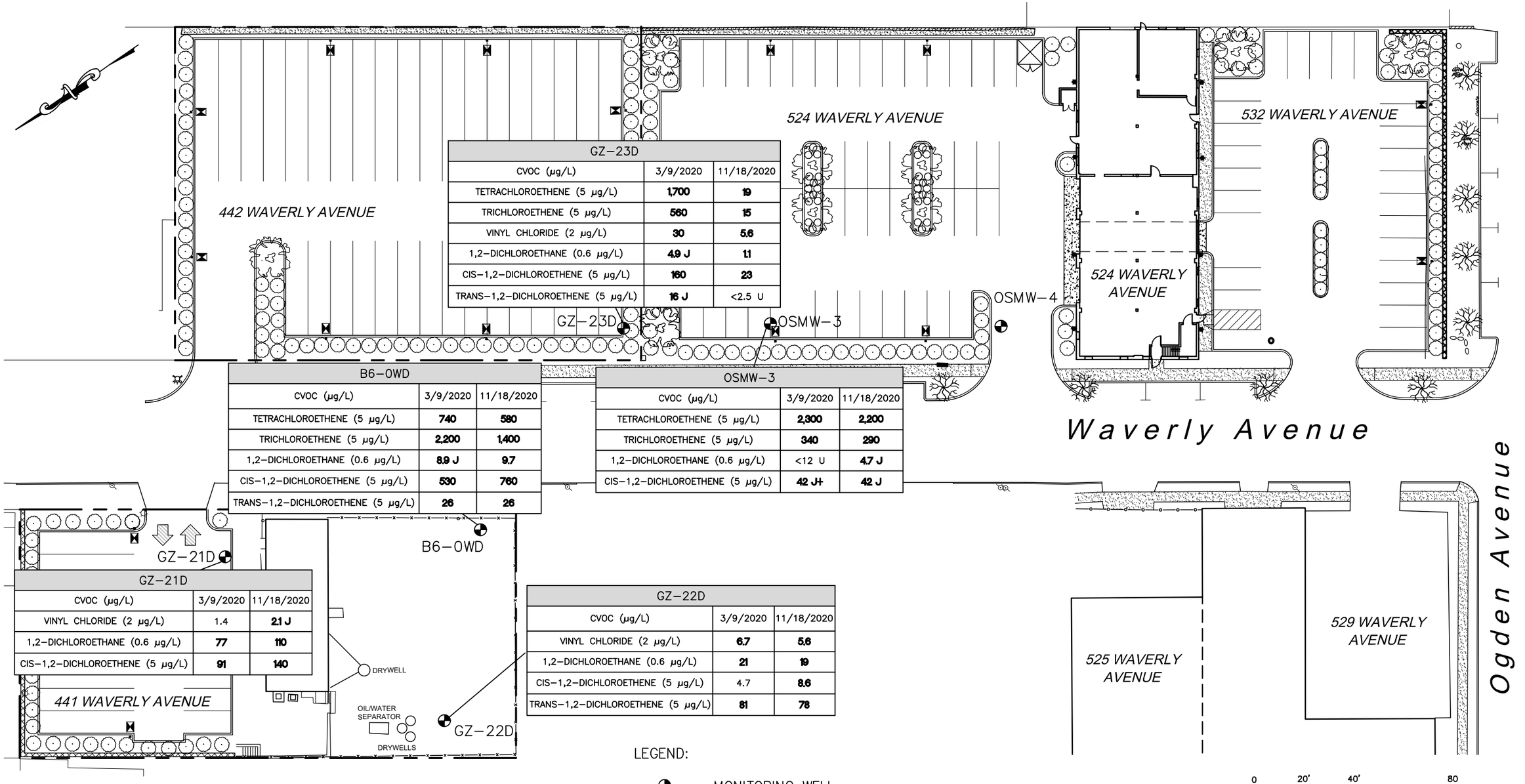
FIGURE 1

S:\Drawings\28012 - 441 & 442 Waverly Avenue\28012110_F-1 - GW Elev 11-18-2020.dwg CAD 12/22/2020 11:15 AM

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

GROUNDWATER CONTOUR MAP
NOVEMBER 18, 2020
SITE# C360108
NEW WAVERLY AVENUE ASSOCIATES, LLC
V/T OF MAMARONECK WESTCHESTER CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
28012	12/15/2020	1" = 40'	28012110	1



GZ-23D		
CVOC (µg/L)	3/9/2020	11/18/2020
TETRACHLOROETHENE (5 µg/L)	**1,700**	**19**
TRICHLOROETHENE (5 µg/L)	**560**	**15**
VINYL CHLORIDE (2 µg/L)	**30**	**5.6**
1,2-DICHLOROETHANE (0.6 µg/L)	**4.9 J**	**1.1**
CIS-1,2-DICHLOROETHENE (5 µg/L)	**160**	**23**
TRANS-1,2-DICHLOROETHENE (5 µg/L)	**16 J**	<2.5 U

B6-0WD		
CVOC (µg/L)	3/9/2020	11/18/2020
TETRACHLOROETHENE (5 µg/L)	**740**	**580**
TRICHLOROETHENE (5 µg/L)	**2,200**	**1,400**
1,2-DICHLOROETHANE (0.6 µg/L)	**8.9 J**	**9.7**
CIS-1,2-DICHLOROETHENE (5 µg/L)	**530**	**760**
TRANS-1,2-DICHLOROETHENE (5 µg/L)	**26**	**26**

OSMW-3		
CVOC (µg/L)	3/9/2020	11/18/2020
TETRACHLOROETHENE (5 µg/L)	**2,300**	**2,200**
TRICHLOROETHENE (5 µg/L)	**340**	**290**
1,2-DICHLOROETHANE (0.6 µg/L)	<12 U	**4.7 J**
CIS-1,2-DICHLOROETHENE (5 µg/L)	**42 J+**	**42 J**

GZ-21D		
CVOC (µg/L)	3/9/2020	11/18/2020
VINYL CHLORIDE (2 µg/L)	1.4	**2.1 J**
1,2-DICHLOROETHANE (0.6 µg/L)	**77**	**110**
CIS-1,2-DICHLOROETHENE (5 µg/L)	**91**	**140**

GZ-22D		
CVOC (µg/L)	3/9/2020	11/18/2020
VINYL CHLORIDE (2 µg/L)	**6.7**	**5.6**
1,2-DICHLOROETHANE (0.6 µg/L)	**21**	**19**
CIS-1,2-DICHLOROETHENE (5 µg/L)	4.7	**8.6**
TRANS-1,2-DICHLOROETHENE (5 µg/L)	**81**	**78**

LEGEND:

- MONITORING WELL
- SITE BOUNDARY (441 & 442 WAVERLY AVENUE)
- LIGHT POLE
- CONCRETE SIDEWALK
- FENCE

0 20' 40' 80

1 inch = 40' ft.

NOTES:

Groundwater Standards in parentheses ( ) are obtained from Title 6 Part 703.5 and *Guidance Values* (GV) are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

BOLD = Indicates exceedance of groundwater standard.

< = Indicates the parameter was not detected at or above laboratory's reporting limit shown.

U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

J = Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

J+ = The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

BASE MAP PROVIDED BY SITE DESIGN CONSULTANTS, DATED FEBRUARY 22, 2010.

FIGURE 2

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

MONITORING LOCATION MAP WITH EXCEEDANCES
NOVEMBER 18, 2020
SITE# C360108
NEW WAVERLY AVENUE ASSOCIATES, LLC
V/T OF MAMARONECK WESTCHESTER CO., N.Y.

PROJ. No.:	28012	DATE:	5/11/2021	SCALE:	1" = 40'	DWG. NO.	28012112	FIGURE	2

S:\Drawings\28012 - 441 & 442 Waverly Avenue\28012112_EXCEEDANCES 11-2020.dwg CAD 5/12/2021 1:40 PM

TABLES

Table 1
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Chlorinated Volatile Organic Compounds
Site #C360108

Sample ID	Water Quality Standard*	GZ-21D																		DUP-1	DUP-1	DUP-1
Unit	µg/L	µg/L																		µg/L	µg/L	µg/L
Sample Date		08/20/09	01/11/12	10/15/13	03/24/14	06/18/14	09/24/14	11/05/14	06/23/15	12/16/15	05/12/16	10/12/16	06/13/17	11/14/17	05/16/18	10/18/18	03/27/19	12/04/19	03/09/20	11/18/20	06/18/14	10/12/16	12/04/19
Chlorinated Volatile Organic Compounds:																							
1,1,1-Tricholoroethane	5.0	---	---	<5.0	<5.0	<5.0	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<6.2	<2.5	<2.5	<2.5	<4.0	<2.5	<2.5
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.2	<0.5	<0.5	<0.5	---	<0.5	<0.5
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	---	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<6.0	<1.5	<3.8	<1.5	<1.5	<1.5	---	<1.5	<1.5
1,1-Dichloroethane	5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<6.2	<2.5	<2.5	<2.5	<4.0	<2.5	<2.5
1,1-Dichloroethene	5.0	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.5	<1.2	<0.5	<0.5	<0.5	<4.0	<0.50	<0.5
. 1,2-Dichloroethane	0.6	**170** D	**5.3**	<5.0	**190** D	**190**	**4.1**	0.4 J	**54**	**55**	**28**	**48**	**11**	**11**	**140**	**52**	**110**	**74**	**77**	**110**	**190**	**56**	**74**
cis-1,2-Dichloroethene	5.0	**270** D	**10**	**7.6**	**310** D	**290**	**5.6**	<1.0	**100**	<2.5	0.83 J	3.5	<2.5	1.7 J	**270**	**120**	**230**	**110**	**91**	**140**	**350**	2.9	**110**
trans-1,2-Dichloroethene	5.0	**6.6**	<5.0	<5.0	3.8	<5.0	<1.0	<1.0	0.99 J	0.86 J	<2.5	0.81 J	<2.5	<2.5	3.4 J	2.4 J	2.6 J	1.9 J	1.6 J	1.9 J	<4.0	0.75 J	1.7 J
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<2.5	<1.0	<1.0	<1.0	---	<1.0	<1.0
Bromochloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	**10**	<6.2	<2.5	<2.5	<2.5	---	<2.5	<2.5
Bromodichloromethane	*50.0*	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.2	<0.5	<0.5	<0.5	---	<0.5	<0.5
Carbon Tetrachloride	5.0	---	---	<5.0	<5.0	<5.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.2	<0.5	<0.5	<0.5	<4.0	<0.5	<0.5
Chloroethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<6.2	<2.5	<2.5	<2.5	---	<2.5	<2.5
Chloroform	7.0	---	---	<5.0	<5.0	<5.0	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<6.2	<2.5	<2.5	<2.5	<4.0	<2.5	<2.5
Chloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<6.2	<2.5	<2.5	<2.5	---	<2.5	<2.5
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<1.2	<0.5	<0.5	<0.5	---	<0.5	<0.5
Dibromochloromethane	*50.0*	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	1.7 J	<1.2	<0.5	<0.5	<0.5	---	<0.5	<0.5
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<12	<5	<5	<5	---	<5.0	<5
Freon-113	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<6.2	<2.5	<2.5	<2.5	---	<2.5	<2.5
Methylene Chloride	5.0	---	---	<5.0	<5.0	**5.4**	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<6.2	<2.5	<2.5	<2.5	<4.0	<2.5	<2.5
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<6.2	<2.5	<2.5	<2.5	---	<2.5	<2.5
Tetrachloroethene	5.0	**41**	1.7 J	<5.0	**9.8**	3.4 J	0.89 J	1.0	0.18 J	<0.50	<0.50	<0.50	<0.50	0.19 J	<2.0	<0.5	<1.2	<0.5	<0.5	<0.5	2.9 J	<0.50	<0.5
Trichloroethene	5.0	**33**	0.58 J	<5.0	**7.8**	**15**	0.82 J	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.5	<1.2	<0.5	<0.5	<0.5	**13**	<0.50	<0.5
Vinyl chloride	2.0	**4** J	<5.0	<5.0	**4.3**	<5.0	<1.0	<1.0	1.7	<1.0	0.43 J	<2.3	<1.0	0.59 J	**19**	**12**	**16**	**5**	1.4	**2.1** J	<4.0	**2.8**	**4.8**
TOTAL CVOCs		524.6	17.58	7.6	525.7	503.8	11.41	3.7	156.87	55.9	29.26	52.31	11	13.48	432.4	198.1	358.6	190.9	171.0	254.0	555.9	62.45	190.5

Notes:

BOLD Indicates exceedance of groundwater standard

* Groundwater Standards are obtained from Title 6 Part 703.5 and *Guidance Values* (GV) are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at or above laboratory's reporting limit shown.

NA Not Analyzed.

--- No standard or not applicable.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Data Usability Summary Report (DUSR) Qualifiers:

j Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

U Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

J+ The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

J- The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

UJ The analyte was analzyed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

Table 1, Cont.
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Chlorinated Volatile Organic Compounds
Site #C360108

Sample ID	**Water Quality Standard***	**GZ-22D**																		**DUP-1**	**DUP-1**	**DUP-1**
Unit	**µg/L**	**µg/L**																		**ug/L**	**ug/L**	**ug/L**
Sample Date		**08/19/09**	**01/11/12**	**10/15/13**	**03/24/14**	**06/18/14**	**09/24/14**	**11/05/14**	**06/23/15**	**12/16/15**	**05/12/16**	**10/12/16**	**06/13/17**	**11/14/17**	**05/16/18**	**10/18/18**	**03/27/19**	**12/04/19**	**03/09/20**	**11/18/20**	**11/18/20**	**03/24/14**	**03/09/20**
Chlorinated Volatile Organic Compounds:																							
1,1,1-Tricholoroethane	5.0	---	---	<5.0	<25	<25	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	2.5 U
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	0.5 U
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	---	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	---	<1.5 U
1,1-Dichloroethane	5.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	2.5 U
1,1-Dichloroethene	5.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	<25	0.5 U
. 1,2-Dichloroethane	0.6	**22**	**17**	**16**	**24** J	<25	**1.3**	**0.64** J	**5.4**	**14**	**15**	**18**	**18**	**16**	**21**	**9.6**	**20**	**18**	**21**	**19**	**19**	**22** J	**20**
cis-1,2-Dichloroethene	5.0	**8.4**	**6.5**	**12**	**110**	<25	1.9	1.7	4.5	**6.8**	**5.2**	3.5	4.2	2.4 J	**12**	**7**	**17**	**5.7**	4.7	**8.6**	**7.9**	**100**	4.3
trans-1,2-Dichloroethene	5.0	<5.0	1.3 J	4.2 J	<25	<25	**5.8**	**5.5**	**9.4**	**21**	**28**	**40**	**50**	**54**	**66**	**11**	**75**	**82**	**81**	**78**	**78**	<25	**77**
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<1	<1	<1	---	<1 U
Bromochloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	2.5 U
Bromodichloromethane	*50.0*	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	0.5 U
Carbon Tetrachloride	5.0	---	---	<5.0	<25	<25	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<25	0.5 U
Chloroethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	2.5 U
Chloroform	7.0	---	---	<5.0	<25	<25	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	2.5 U
Chloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	2.5 U
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<0.5 U
Dibromochloromethane	*50.0*	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	0.5 U
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<5.0	<5	<5	<5	<5	<5	---	<5 U
Freon-113	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	2.5 U
Methylene Chloride	5.0	---	---	<5.0	<25	**19** J	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<25	2.5 U
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	2.5 U
Tetrachloroethene	5.0	**120**	**97**	**62**	**14** J	<25	2.1	0.88 J	0.69	<0.50	<0.50	<0.50	<0.50	<0.50	0.62 J-	<0.50	0.4 J	<0.5	<0.5	<0.5	<0.5	**21** J	0.5 U
Trichloroethene	5.0	**110**	**92**	**89**	**29**	<25	2.5	**5.5**	1.2	0.33 J	0.46 J	0.29 J	0.2 J	<0.50	3.7	0.52	3.6	0.5	0.23 J	0.56	0.48 J	**34**	0.32 J
Vinyl chloride	2.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<1.0	1.8	**6.5**	**5.7**	**3.1**	**3.8** j	**2.9**	**5.9**	<1.0	**8.3**	**5.8**	**6.7**	**5.6**	**5.7**	<25	**7.1**
TOTAL CVOCs		260.4	213.8	183.2	177	19	13.6	14.22	22.99	48.6	54.36	64.89	76.2	75.3	109.22	28.12	124.3	112.0	113.63	111.76	111.08	177.0	108.72

Notes:

BOLD Indicates exceedance of groundwater standard

* Groundwater Standards are obtained from Title 6 Part 703.5 and *Guidance Values* (GV) are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at or above laboratory's reporting limit shown.

NA Not Analyzed.

--- No standard or not applicable.

i

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Data Usability Summary Report (DUSR) Qualifiers:

j Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

U Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

J+ The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

J- The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

UJ The analyte was analzyed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

Table 1, Cont.
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Chlorinated Volatile Organic Compounds
Site #C360108

Well ID	**Water Quality Standard***	**GZ-23D**																			**DUP-1**
Unit	**µg/L**	**µg/L**																			**µg/L**
Sample Date		**08/20/09**	**01/11/12**	**10/15/13**	**03/25/14**	**06/19/14**	**09/25/14**	**11/05/14**	**06/24/15**	**12/17/15**	**05/12/16**	**10/12/16**	**06/13/17**	**11/14/17**	**05/16/18**	**10/18/18**	**03/28/19**	**12/04/19**	**03/09/20**	**11/18/20**	**06/13/17**
Chlorinated Volatile Organic Compounds:																					
1,1,1-Tricholoroethane	5.0	---	---	<100	<40	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10	<10	<10	<0.5	<10
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	---	<15	<30	<15	<38	<30	<30	<15	<7.5	<30	<30	<30	<1.5	<30
1,1-Dichloroethane	5.0	<5.0	<5.0	<100	<1.0	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
1,1-Dichloroethene	5.0	**5.5**	1.6 J	<100	1.7	<20	<20	<20	1.9 J	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10	<10	<10	0.18 J	<10
1,2-Dichloroethane	0.6	**13**	**9**	<100	**7.8**	**6.6** J	**7.6** J	<20	**3.6** J	<10	**4.3** J	**4.2** J	**3.9** J	**3.3** D,J	**1.8** J	**1.6** J	**3.8** J	**6.8** J	**4.9** J	**1.1**	**4.1** D,J
cis-1,2-Dichloroethene	5.0	**10**	**780** D	**380**	**2,200** D	**930**	**1,100**	**1,100**	**780**	**1,000** j	**400**	**320**	**280**	**220** D	**240**	**660**	**150**	**240**	**160**	**23**	**290** D
trans-1,2-Dichloroethene	5.0	<5.0	**9.1**	<100	**41**	<20	<20	**18** J	**22** J	**37** J,j	**32**	**36** J	**22** J	**18** D,J	**19** J	**10** J	**15** J	**47** J	**16** J	<2.5	**21** D,J
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<10	<20	<10	<25	<20	<20	<10	<5.0	<20	<20	<20	<1.0	<20
Bromochloromethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
Bromodichloromethane	*50.0*	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10	<10	<10	<0.5	<10
Carbon Tetrachloride	5.0	---	---	<100	<40	<20	<20	<20	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10	<10	<10	<0.5	<10
Chloroethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
Chloroform	7.0	---	---	<100	<40	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
Chloromethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10	<10	<10	<0.5	<10
Dibromochloromethane	*50.0*	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10	<10	<10	<0.5	<10
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<50	<100	<50	<120	<100	<100	<50	<25	<100	<100	<100	<5.0	<100
Freon-113	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
Methylene Chloride	5.0	---	---	<100	<40	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<50
Tetrachloroethene	5.0	**9,700** D	**4,300** D	**3,100**	**1,500** D	**880**	**720**	**94**	**750**	**110** j	**1,300**	**1,000**	**1,600**	**1,200** D	**1,600**	**7.6**	**1,800**	**1,700**	**1,700**	**19**	**1,500** D
Trichloroethene	5.0	**450** DJ	**1,600** D	**1,000**	**240** D	**310**	**350**	**160**	**420**	**600** j	**960**	**1,000**	**980**	**890** D	**880**	**16**	**780**	**570**	**560**	**15**	**950** D
Vinyl chloride	2.0	<5.0	1.2 J	**28** J	**200** D	**250**	**390**	**320**	**230** j	<20	**200**	**82**	**72**	**58** D	**40**	**96**	**32**	**57**	**30**	**5.6**	**71** D
TOTAL CVOCs		10,178.5	6,700.9	4,508	4,191	2,376.6	2,567.6	1,692	2,207.5	1,747	2,896.3	2,442.2	2,957.9	2,389.3	2,780.8	791.2	2,780.8	2,620.8	2,470.9	63.88	2,836.1

Notes:

BOLD Indicates exceedance of groundwater standard

* Groundwater Standards are obtained from Title 6 Part 703.5 and *Guidance Values* (GV) are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at or above laboratory's reporting limit shown.

NA Not Analyzed.

--- No standard or not applicable.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Data Usability Summary Report (DUSR) Qualifiers:

j Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

U Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

J+ The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

J- The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

UJ The analyte was analzyed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

Table 1, Cont.
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Chlorinated Volatile Organic Compounds
Site #C360108

Well ID	Water Quality Standard*	B6-OWD																			DUP-1	DUP-1	DUP-1
Unit	µg/L	µg/L																			µg/L	µg/L	µg/L
Sample Date		08/21/09	01/11/12	10/15/13	03/24/14	06/18/14	09/24/14	11/05/14	06/23/15	12/16/15	05/12/16	10/12/16	06/13/17	11/14/17	05/16/18	10/18/18	03/27/19	12/04/19	03/09/20	11/18/20	12/16/15	05/16/18	10/18/18
Chlorinated Volatile Organic Compounds:																							
1,1,1-Tricholoroethane	5.0	---	---	<5.0	---	<20	<4.0	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<10	<5.0	<10	<5.0	<0.5	<10	<5.0
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	---	<1.5	<1.5	<1.5	<1.5	<3.0	<7.5	<30	<15	<30	<15	<30	<15	<1.5	<30	<15
1,1-Dichloroethane	5.0	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
1,1-Dichloroethene	5.0	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<8.0	<0.50	<0.50	<0.50	<0.50	<1.0	<2.5	<10	<5.0	<10	<5.0	<10	<5.0	<0.50	<10	<5.0
1,2-Dichloroethane	0.6	**9.7**	<5.0	**1.9** J	**2.8**	**8.0**	**9.1**	<8.0	0.36 J	<0.50	0.31 J	0.32 J	0.29 J	**3.7** D	**11**	**8.5**	**15**	**12** J+	**8.9** J	**9.7**	<0.50	**9.1** J	**9.4**
cis-1,2-Dichloroethene	5.0	**390** D	1.5 J	**76**	**180** D	**330**	**430** D	<8.0	1.3 J	1.1 J	2.4 J	2.1 J	1.8 J	**150** D	**390**	**360**	**700**	**620**	**530**	**760**	1.2 J	**330**	**380**
trans-1,2-Dichloroethene	5.0	**150**	<5.0	**6.8**	**7.2**	**8.4**	**14**	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	**6.0** J,D	**22** J	**16** J	**41** J	**24** J+	**26** J	**26**	<2.5	**20** J	**17** J
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<2.0	<5.0	<20	<10	<20	<10	<20	<10	<1.0	<20	<10
Bromochloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
Bromodichloromethane	*50.0*	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<10	<5.0	<10	<5.0	<0.5	<10	<5.0
Carbon Tetrachloride	5.0	---	---	<5.0	---	<20	<4.0	<8.0	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<10	<5.0	<10	<5.0	<0.5	<10	<5.0
Chloroethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
Chloroform	7.0	---	---	<5.0	---	<20	4	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
Chloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<10	<5.0	<10	<5.0	<0.5	<10	<5.0
Dibromochloromethane	*50.0*	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<10	<5.0	<10	<5.0	<0.5	<10	<5.0
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<5.0	<5.0	<5.0	<5.0	<10	<25	<100	<50	<100	<50	<100	<50	<5.0	<100	<50
Freon-113	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
Methylene Chloride	5.0	---	---	<5.0	---	<20	<4.0	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<2.5	<50	<25
Tetrachloroethene	5.0	**23**	**6.2**	**18**	**59**	**47**	**110**	<8.0	2.4	2.1	2.4	2.6	2.6	**190** D	**1,200** J-	**860**	**1400**	**520**	**740**	**580**	2.2	**1,100** J-	**950**
Trichloroethene	5.0	**43**	2.1 J	**41**	**170** D	**180**	**330**	<8.0	1.3	1.4	1.7	1.7	1.4	**470** D	**1,400**	**1,300**	**2000**	**1,200**	**2,200**	**1,400**	1.4	**1,400**	**1,400**
Vinyl chloride	2.0	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<8.0	<1.0	<1.0	0.27 J	0.28 J	0.2 j	<5.0	1.8 J	<10	**3.6** J	<10	<20	<10	<1.0	1.8 J	2.1 J
TOTAL CVOCs		615.7	9.8	143.7	419	573.4	893.1	ND	5.36	4.6	7.08	7	6.29	819.7	3,024.8	2,544.5	4,159.6	2,376.0	3,504.9	2,775.7	4.8	2,860.9	2,758.5

Notes:

BOLD Indicates exceedance of groundwater standard

* Groundwater Standards are obtained from Title 6 Part 703.5 and *Guidance Values* (GV) are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at or above laboratory's reporting limit shown.

NA Not Analyzed.

--- No standard or not applicable.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Data Usability Summary Report (DUSR) Qualifiers:

j Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

U Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

J+ The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

J- The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

UJ The analyte was analzyed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

Table 1, Cont.
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Chlorinated Volatile Organic Compounds
Site #C360108

Well ID	**Water Quality Standard***	**OSMW-3**																		**DUP-1**	**DUP-1**
Unit	**µg/L**	**µg/L**																		**µg/L**	**µg/L**
Sample Date		**01/10/12**	**10/16/13**	**03/24/14**	**06/19/14**	**09/24/14**	**11/05/14**	**06/24/15**	**12/17/15**	**05/12/16**	**10/12/16**	**06/13/17**	**11/14/17**	**05/16/18**	**10/18/18**	**03/28/19**	**12/04/19**	**03/09/20**	**11/18/20**	**11/05/14**	**11/14/17**
Chlorinated Volatile Organic Compounds:																					
1,1,1-Tricholoroethane	5.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<1.0	---
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	---	---
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	<30	<60	<7.5	<15	<1.5	<15	<3.0	<38	<38	<75	<38	<30	---	---
1,1-Dichloroethane	5.0	<5.0	<80	<1.0	<20	<20	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<1.0	<25
1,1-Dichloroethene	5.0	<5.0	<80	<1.0	<20	<20	<50	<10	<20	<2.5	<5.0	0.46 J	<5.0	<1.0	<12	<12	<25	<12	<10	1.4	<5.0
1,2-Dichloroethane	0.6	**4.4** J	<80	**4.7**	<20	<20	<50	<10	<20	**3.8**	**4.2** J	**5.2**	**4.5** J,D	**1.7**	<12	**3.9** J	<25	<12	**4.7** J	**3.5**	**4.3** J,D
cis-1,2-Dichloroethene	5.0	**14**	**31** J	**46**	**100**	**220**	**210**	**180**	**120** j	**92**	**63**	**40**	**39** D	**17**	**200**	**85**	**75** J	**42** J+	**42** J	**210** D	**39** D
trans-1,2-Dichloroethene	5.0	1.7 J	<80	3.7	<20	**28**	<50	**25** J	<100	**21**	**14** J	**7.4**	<25	<5.0	<62	<62	<120	<62	<50	**26**	**7.1** J,D
1,2-Dichloropropane	1.0	---	---	---	---	---	---	<20	<40	<5.0	<10	<1.0	<10	<2.0	<25	<25	<50	<25	<20	---	---
Bromochloromethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	---	---
Bromodichloromethane	*50.0*	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	---	---
Carbon Tetrachloride	5.0	---	<80	---	<20	---	<50	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	<1.0	---
Chloroethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	---	---
Chloroform	7.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<1.0	---
Chloromethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	---	---
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	---	---
Dibromochloromethane	*50.0*	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	---	---
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	<100	<200	<25	<50	<5.0	<50	<10	<120	<120	<250	<120	<100	---	---
Freon-113	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	---	---
Methylene Chloride	5.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<1.0	---
Trichlorofluoromethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	---	---
Tetrachloroethene	5.0	**760** D	**1,900**	**2,400** D	**1,300**	**2,600** D	**3,400**	**1,500**	**1,200** j	**670**	**470**	**620** D	**750** D	**220** J-	**3,600**	**2,900**	**4,900**	**2,300**	**2,200**	**2,900** D	**760** D
Trichloroethene	5.0	**120**	**280**	**330** D	**440**	**1,000**	**1,000**	**610**	**480** j	**290**	**230**	**170** D	**220** D	**110**	**500**	**450**	**440**	**340**	**290**	**900** D	**220** D
Vinyl chloride	2.0	<5.0	<80	<1.0	<20	<20	<50	<1.4 j	<40	0.44 J	<10	0.14 J	<10	<2.0	**8.1** J	<25	<50	<25	<20	<1.0	<10
TOTAL CVOCs		900.1	2,211	2,784	1,840	3,848	4,610	2,315	1,800	1,077	781.2	843.2	1,014	348.7	4,308.1	3,438.9	5,415.0	2,682.0	2,536.7	4,041	1,030

Notes:

BOLD Indicates exceedance of groundwater standard

* Groundwater Standards are obtained from Title 6 Part 703.5 and *Guidance Values* (GV) are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at or above laboratory's reporting limit shown.

NA Not Analyzed.

--- No standard or not applicable.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Data Usability Summary Report (DUSR) Qualifiers:

j Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

U Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

J+ The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

J- The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

UJ The analyte was analzyed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

Table 1, Cont.
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Chlorinated Volatile Organic Compounds
Site #C360108

Well ID	Water Quality Standard*	OSMW-4																		DUP-1	DUP-1	DUP-1	DUP-1
Unit	µg/L	µg/L																		µg/L	µg/L	µg/L	µg/L
Sample Date		01/10/12	10/16/13	03/25/14	06/18/14	09/24/14	11/05/14	06/24/15	12/17/15	05/12/16	10/12/16	06/13/17	11/14/17	05/16/18	10/18/18	03/27/19	12/04/19	03/09/20	11/18/20	01/10/12	09/24/14	06/24/15	05/12/16
Chlorinated Volatile Organic Compounds:																							
1,1,1-Tricholoroethane	5.0	---	<5.0	<25	<25	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	---	<1.0	<2.5	<2.5
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.5 U	---	---	<0.5	<0.5
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<3.0	<1.5	<1.5	<1.5	<1.5	1.5 U	---	---	<1.5	<1.5
1,1-Dichloroethane	5.0	<5.0	<5.0	<25	<25	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	<5.0	<1.0	<2.5	<2.5
1,1-Dichloroethene	5.0	<5.0	<5.0	<25	<25	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.5	<0.5	<0.5	<0.5	0.5 U	<5.0	<1.0	<0.50	<0.50
1,2-Dichloroethane	0.6	**1.1** J	<5.0	<25	<25	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.5	<0.5	<0.5	<0.5	0.5 U	**1.1** J	<1.0	<0.50	<0.50
cis-1,2-Dichloroethene	5.0	**29**	3.8 J	<25	<25	**6.2**	**6.0**	1.2 J	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	4.5	0.72 J	<2.5	<2.5	2.5 U	**29**	**5.2**	1.2 J	<2.5
trans-1,2-Dichloroethene	5.0	**6.9**	1 J	<25	<25	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	1.3 J	<2.5	<2.5	<2.5	2.5 U	**7.2**	<1.0	<2.5	<2.5
1,2-Dichloropropane	1.0	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1	<1	<1	1 U	---	---	<1.0	<1.0
Bromochloromethane	5.0	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	---	---	<2.5	<2.5
Bromodichloromethane	*50.0*	---	---	---	---	---	---	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.5 U	---	---	<0.5	<0.5
Carbon Tetrachloride	5.0	---	<5.0	<25	<25	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.5 U	---	<1.0	<0.5	<0.5
Chloroethane	5.0	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	---	---	<2.5	<2.5
Chloroform	7.0	---	<5.0	<25	<25	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	---	<1.0	<2.5	<2.5
Chloromethane	5.0	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	---	---	<2.5	<2.5
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.5 U	---	---	<0.5	<0.5
Dibromochloromethane	*50.0*	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.5 U	---	---	<0.5	<0.5
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5	<5	<5	5 U	---	---	<5.0	<5.0
Freon-113	5.0	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	---	---	<2.5	<2.5
Methylene Chloride	5.0	---	<5.0	<25	**33**	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	---	<1.0	<2.5	<2.5
Trichlorofluoromethane	5.0	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	2.5 U	---	---	<2.5	<2.5
Tetrachloroethene	5.0	**790** D	**11**	<25	<25	3.4	3.2	0.44 J	<0.50	0.2 J,j	2.0	1.1	0.25 J	<1.0 J	0.25 J	<0.5	<0.5	<0.5	0.5 U	**730** D	3.4	0.48 J	0.19 J,j
Trichloroethene	5.0	**230** D	**15**	<25	<25	**6.0**	4.5	1.0	0.56	0.53	1.1	0.57	<0.50	<1.0	0.48 J	<0.5	<0.5	<0.5	0.39 J	**220** D	**5.5**	1.1	0.58
Vinyl chloride	2.0	<5.0	<5.0	<25	<25	<1.0	<1.0	<0.07 j	<1.0	<1.0	<1.0	<1.0 j	<1.0	<2.0	0.54 J	<1	<1	<1	1 U	<5.0	<1.0	<1.0 j	<1.0
TOTAL CVOCs		1,057	30.8	ND	33	15.6	13.7	2.6	0.56	0.73	3.1	1.67	0.25	ND	7.07	0.72	ND	ND	0.39	987	14.1	2.78	0.77

Notes:

BOLD Indicates exceedance of groundwater standard

* Groundwater Standards are obtained from Title 6 Part 703.5 and *Guidance Values* (GV) are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at or above laboratory's reporting limit shown.

ND Not Detected.

--- No standard or not applicable.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Data Usability Summary Report (DUSR) Qualifiers:

j Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

U Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

J+ The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

J- The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

UJ The analyte was analzyed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

Table 1, Cont.
Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values
441 and 442 Waverly Avenue
Chlorinated Volatile Organic Compounds
Site #C360108

Well ID	Water Quality Standard*	OSMW-1		OSMW-2		DUP-1
Unit	**µg/L**	**µg/L**		**µg/L**		
Sample Date		**01/10/12**	**03/28/19**	**01/10/12**	**03/28/19**	**03/28/19**
Chlorinated Volatile Organic Compounds:						
1,1,1-Tricholoroethane	5.0	<5	<2.5	<5	<2.5	<2.5
1,1,2,2-Tetrachloroethane	5.0	NA	<0.5	NA	<0.5	<0.5
1,1,2-Trichloroethane	1.0	NA	<1.5	NA	<1.5	<1.5
1,1-Dichloroethane	5.0	<5	<2.5	<5	<2.5	<2.5
1,1-Dichloroethene	5.0	<5	<0.5	<5	<0.5	<0.5
1,2-Dichloroethane	0.6	<5	<0.5	<5	<0.5	<0.5
cis-1,2-Dichloroethene	5.0	<5	<2.5	1.1 J	<2.5	<2.5
trans-1,2-Dichloroethene	5.0	<5	<2.5	<5	<2.5	<2.5
1,2-Dichloropropane	1.0	NA	0.27 J	NA	<1	<1
Bromochloromethane	5.0	NA	<2.5	NA	<2.5	<2.5
Bromodichloromethane	*50.0*	NA	<0.5	NA	<0.5	<0.5
Carbon Tetrachloride	5.0	<5	<0.5	<5	<0.5	<0.5
Chloroethane	5.0	NA	<2.5	NA	<2.5	<2.5
Chloroform	7.0	<5	<2.5	<5	<2.5	<2.5
Chloromethane	5.0	NA	<2.5	NA	<2.5	<2.5
cis-1,3-Dichloropropene	0.4	NA	<0.5	NA	<0.5	<0.5
Dibromochloromethane	*50.0*	NA	<0.5	NA	<0.5	<0.5
Dichlorodifluoromethane	5.0	NA	<5	NA	<5	<5
Freon-113	5.0	NA	<2.5	NA	<2.5	<2.5
Methylene Chloride	5.0	<5	<2.5	<5	<2.5	<2.5
Trichlorofluoromethane	5.0	NA	<2.5	NA	<2.5	<2.5
Tetrachloroethene	5.0	<5	<0.5	<5	<0.5	<0.5
Trichloroethene	5.0	<5	<0.5	<5	<0.5	<0.5
Vinyl chloride	2.0	<5	<1	<5	<1	<1
TOTAL CVOCs		0	0.27	1.1 J	0	0

Notes:

BOLD Indicates exceedance of groundwater standard

* Groundwater Standards are obtained from Title 6 Part 703.5 and *Guidance Values* (GV) are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".

< Indicates the parameter was not detected at or above laboratory's reporting limit shown.

NA Not Analyzed.

--- No standard or not applicable.

Laboratory Qualifiers:

D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Data Usability Summary Report (DUSR) Qualifiers:

j Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

U Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

J+ The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

J- The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

UJ The analyte was analzyed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

TABLE 1-A

Summary of Groundwater Analytical Results (11/18/2020)
441 and 442 Waverly Avenue
Emerging Contaminants - Per and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane

ANALYTE	NYSDEC-PFAS	GZ-21D	GZ-22D	DUP1182020	GZ-23D	B6-OWD	OSMW-3	OSMW-4	EB11182020
1,4 Dioxane, µg/L									
1,4-Dioxane	1.0*	NS	**3.18**	**3.27**	0.407	NS	**2.59**	NS	NS
Per and Polyfluoroalkyl Substances (PFAS), ng/L									
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	100	NS	<1.9 UJ	<1.8 UJ	<1.84 UJ	NS	<1.88 UJ	NS	<1.8
Perfluorobutanesulfonic Acid (PFBS)	100	NS	1.89 J	1.77 J	3.09	NS	1.97	NS	<1.8
Perfluorobutanoic Acid (PFBA)	100	NS	3.8	3.65	10	NS	5.32	NS	<1.8
Perfluorodecanesulfonic Acid (PFDS)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
Perfluorodecanoic Acid (PFDA)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
Perfluorododecanoic Acid (PFDoA)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
Perfluoroheptanesulfonic Acid (PFHpS)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
Perfluoroheptanoic Acid (PFHpA)	100	NS	1.78 J	1.7 J	6.82	NS	2.72	NS	<1.8
Perfluorohexanesulfonic Acid (PFHxS)	100	NS	9.63	9.42	2.86	NS	3.54	NS	<1.8
Perfluorohexanoic Acid (PFHxA)	100	NS	2.57 F	2.46	18.2	NS	4.04	NS	<1.8
Perfluorononanoic Acid (PFNA)	100	NS	0.57 J	0.479 J	1.63 J	NS	0.747 J	NS	<1.8
Perfluorooctanesulfonamide (FOSA)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
Perfluorooctanesulfonic Acid (PFOS)	10	NS	8.68 F	8.93 F	**29.7 F**	NS	6.9 F	NS	<1.8
Perfluorooctanoic Acid (PFOA)	10	NS	6.26 F	6.31 F	8.18 F	NS	8.3 F	NS	<1.8
Perfluoropentanoic Acid (PFPeA)	100	NS	4.33	3.9	33	NS	7.57	NS	<1.8
Perfluorotetradecanoic Acid (PFTA)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
Perfluorotridecanoic Acid (PFTrDA)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
Perfluoroundecanoic Acid (PFUnA)	100	NS	<1.9	<1.8	<1.84	NS	<1.88	NS	<1.8
PFAS, Total	500	NS	39.51	38.619	113.48	NS	41.107	NS	ND

Notes:

NYSDEC-PFAS : NYSDEC: Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), October 2020 .

* = USEPA Maximum Contaminant Level (MCL) for 1,4 Dioxane in drinking water (1.0 µg/L).

Bold = Value indicates reported concentration exceeds applicable water quality standards.

< = Analyte was not detected at or above the laboratory reporting limit.

J = Result is less than the reporting limit but greater than or equal to the laboratory reporting limit and the concentration is approximate.

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

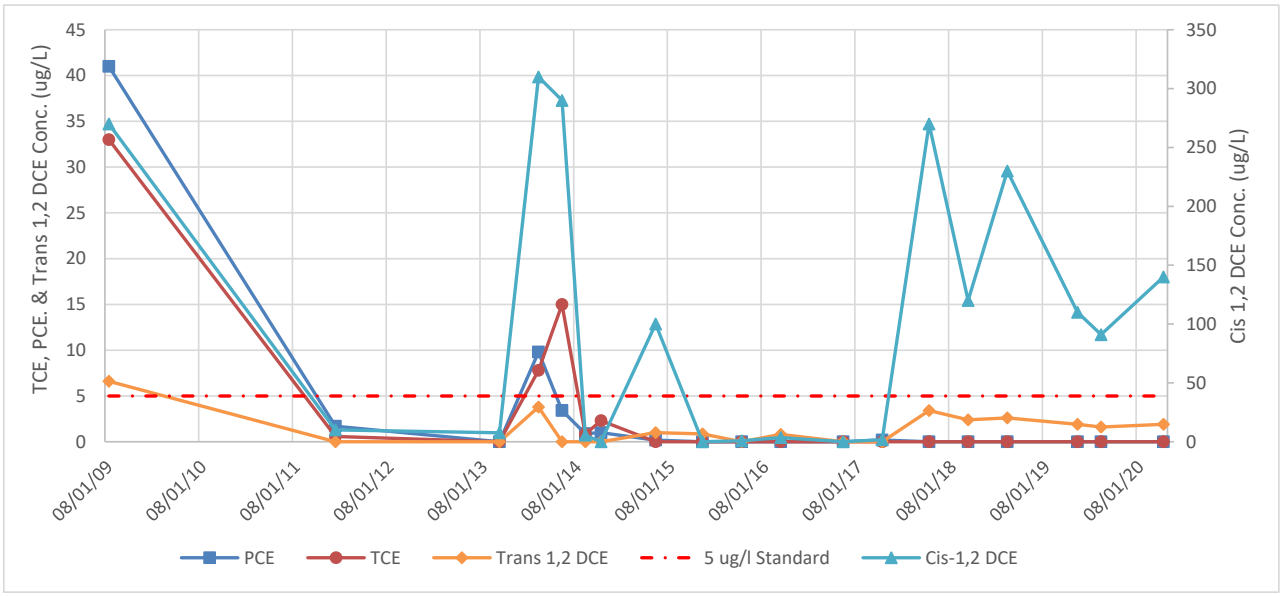
UJ = The analyte was analzyed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

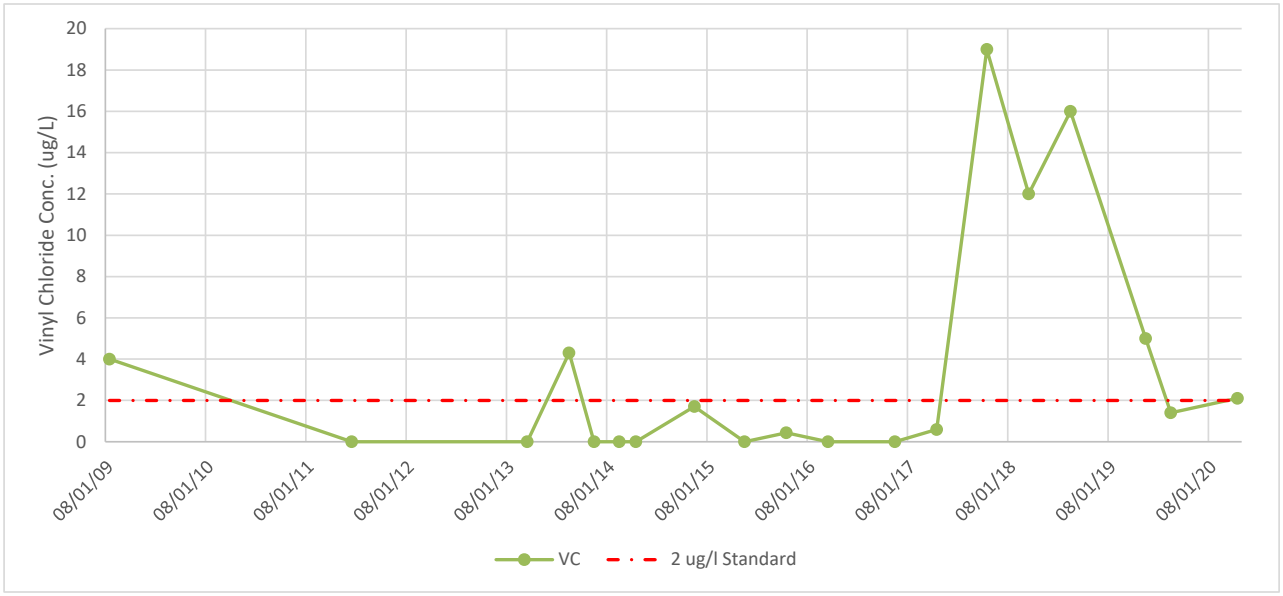
ND = Not Detected

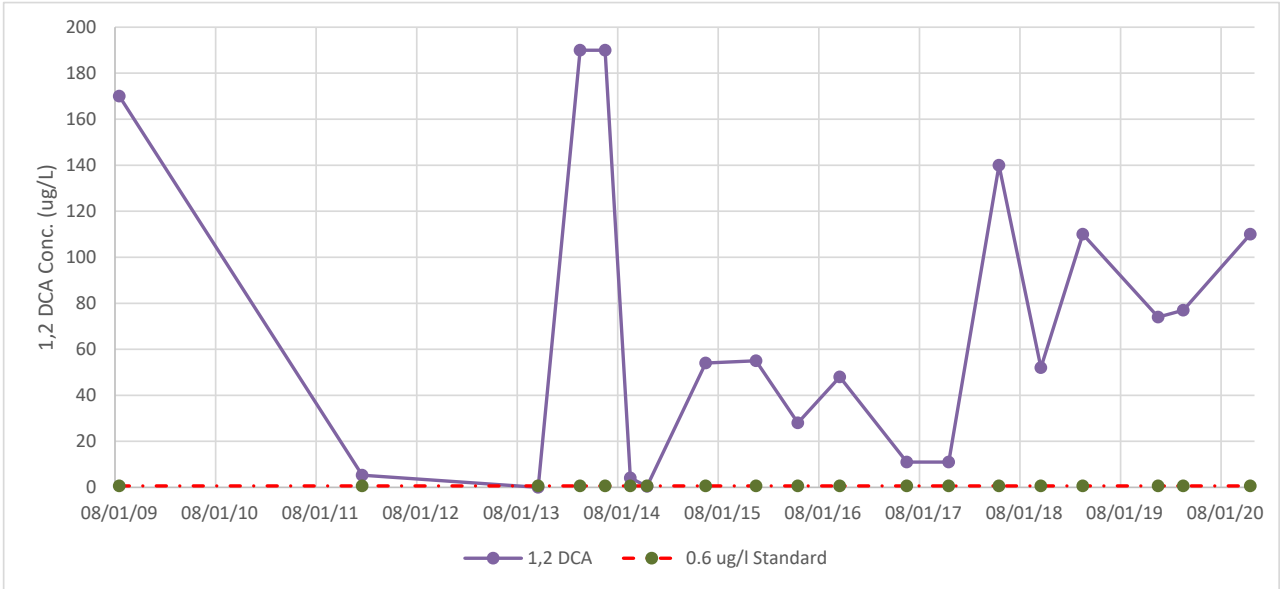
NS = Not Sampled.

DATA TREND GRAPHS

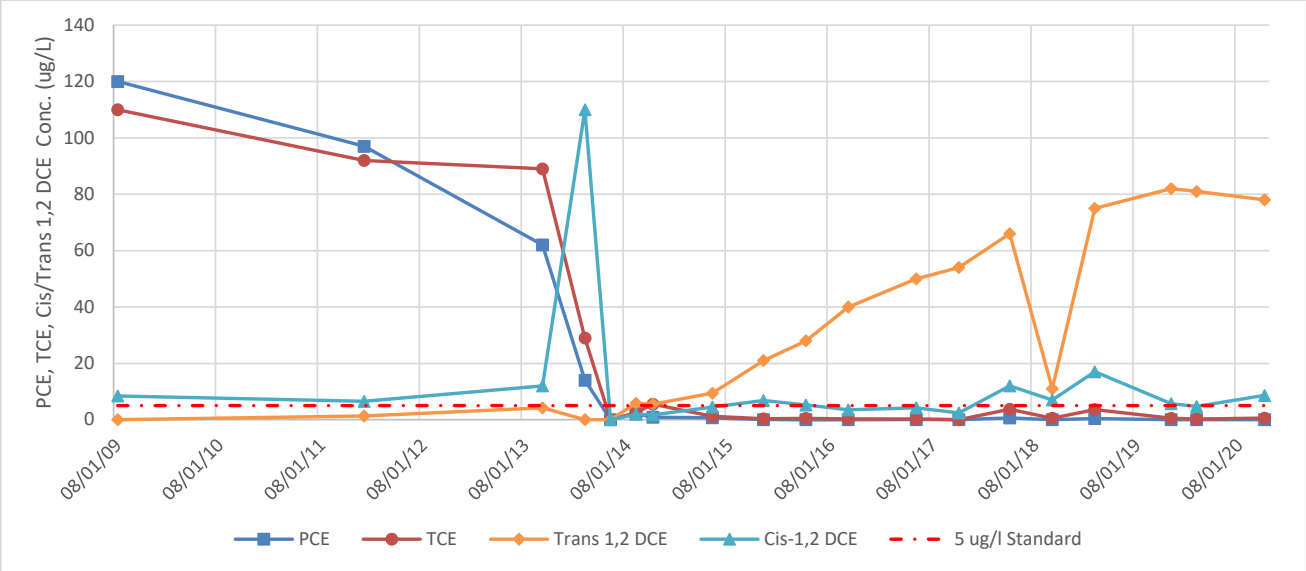
Groundwater Quality Trends
Monitoring Well GZ-21D
441 and 442 Waverly Avenue

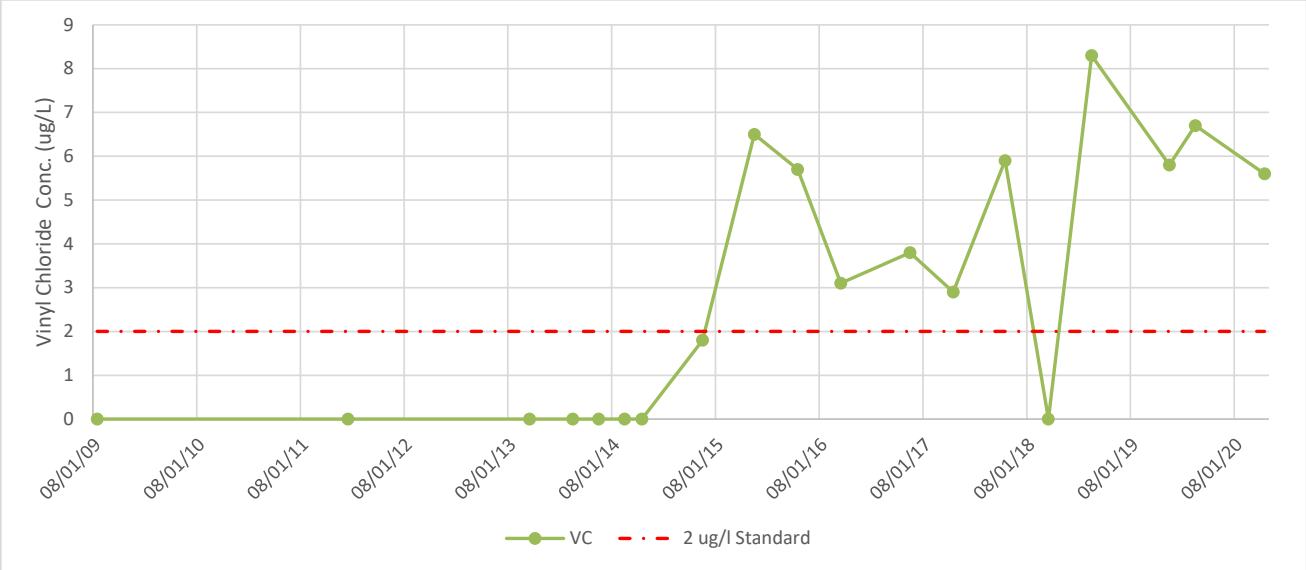


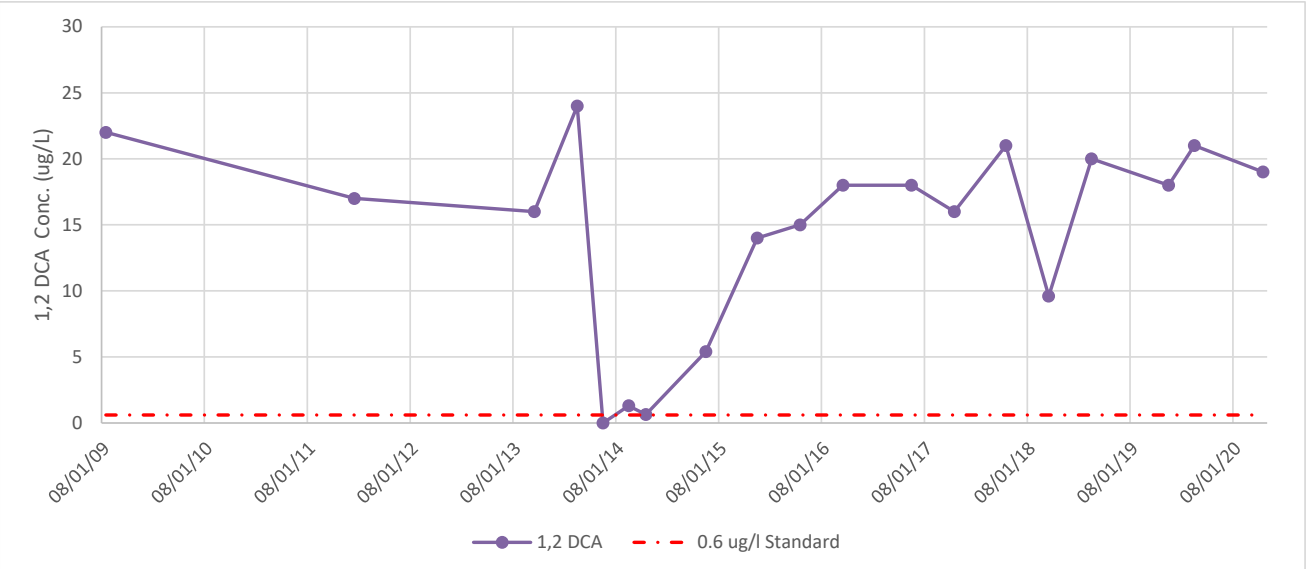




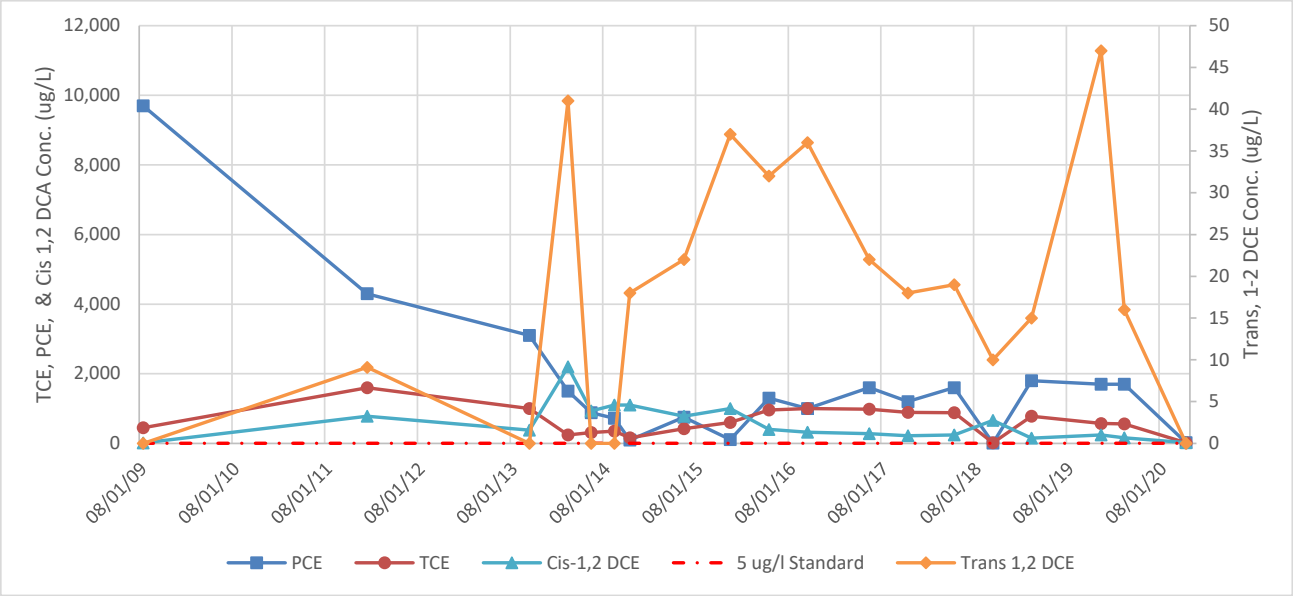
Groundwater Quality Trends
Monitoring Well GZ-22D
441 and 442 Waverly Avenue

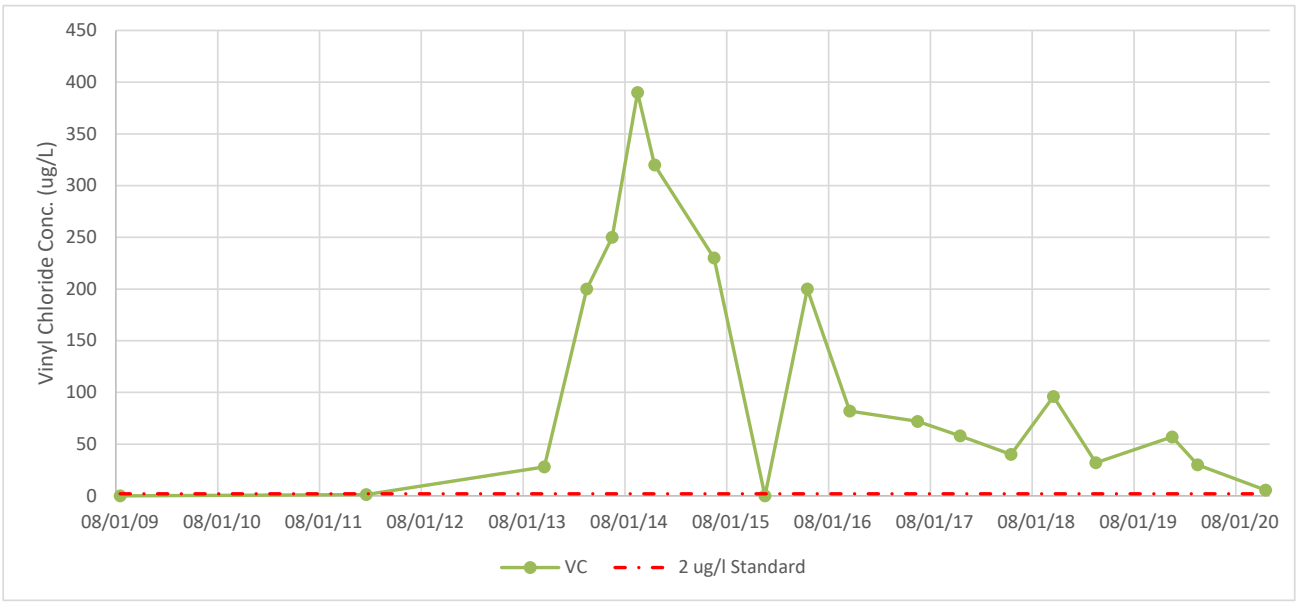


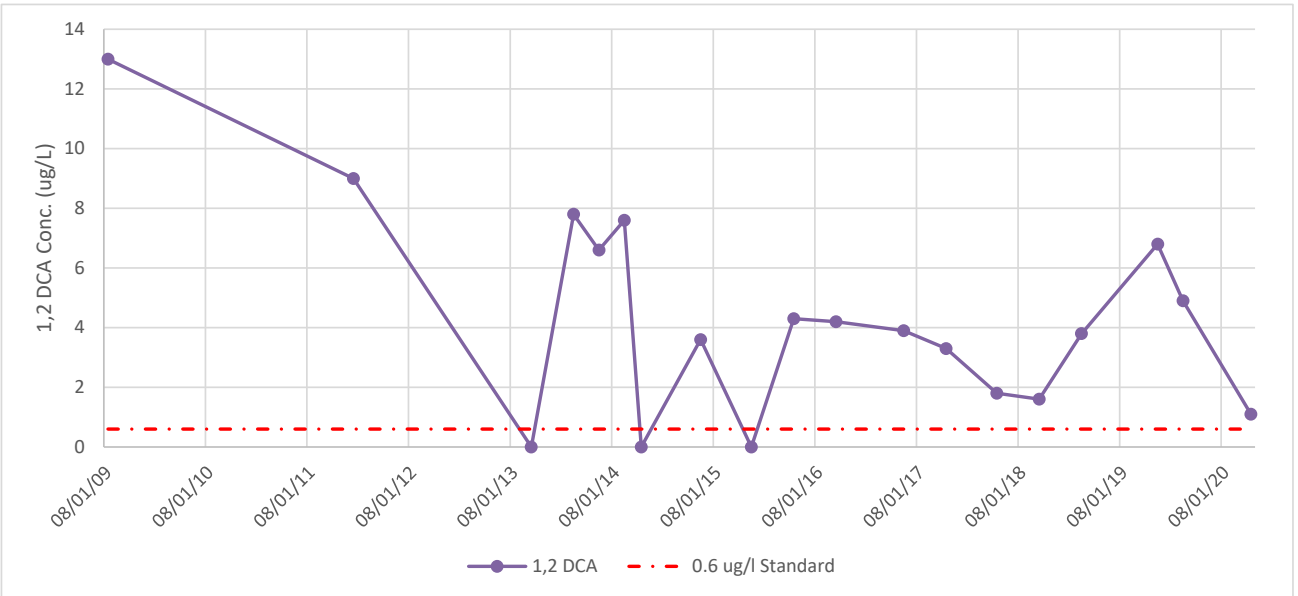




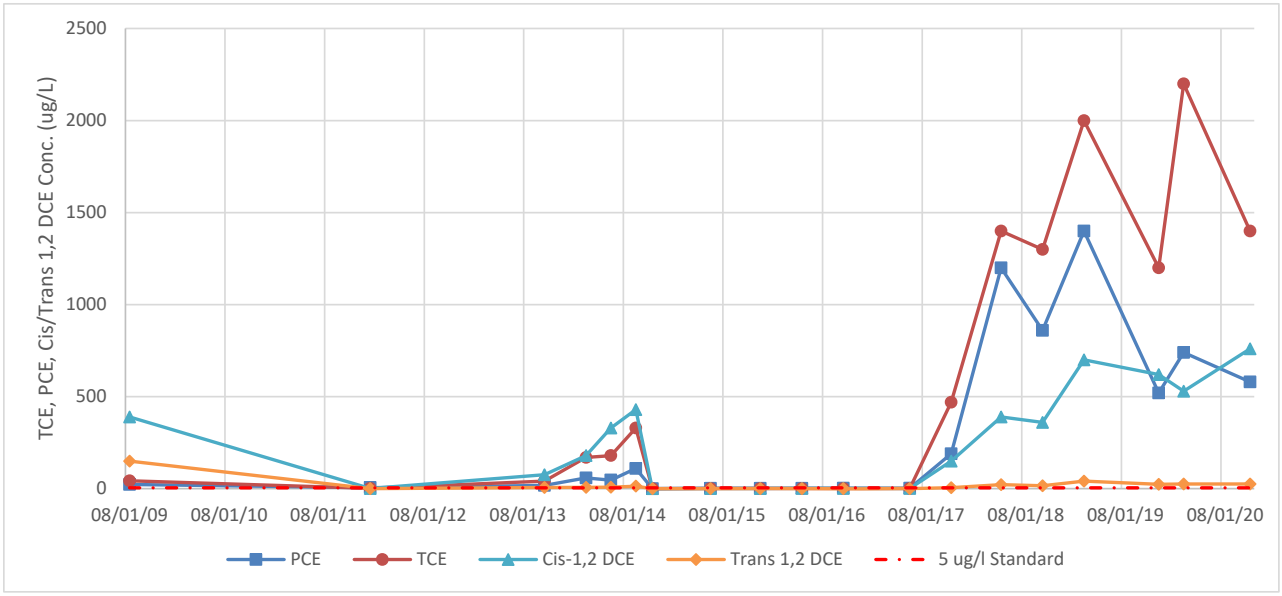
Groundwater Quality Trends
Monitoring Well GZ-23D
441 and 442 Waverly Avenue

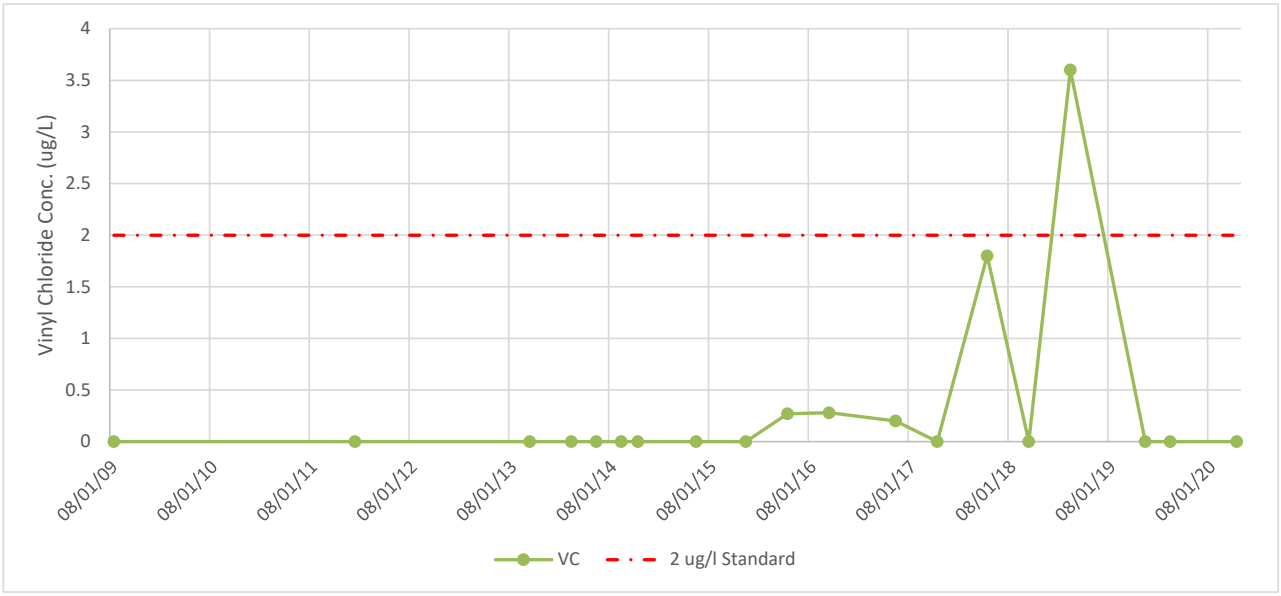


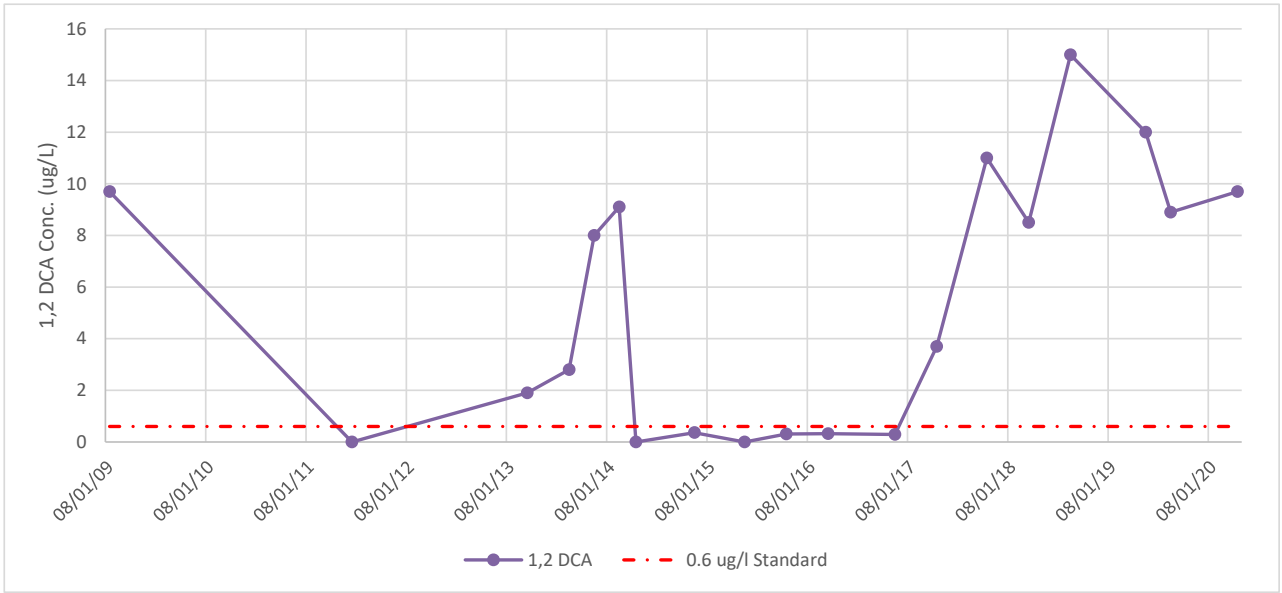




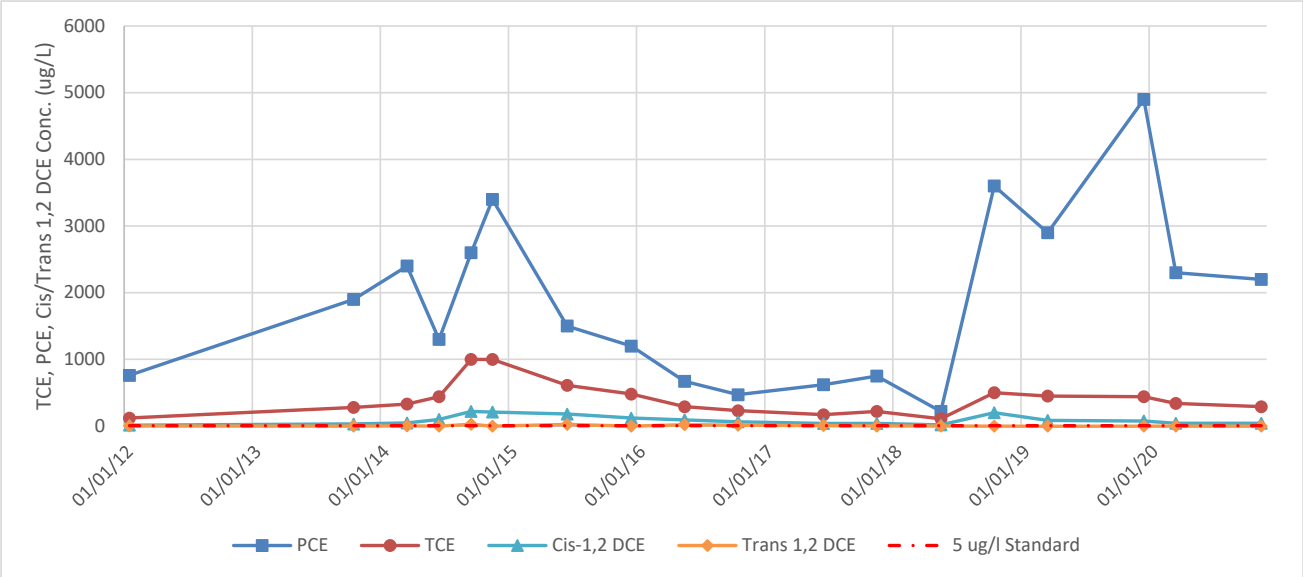
Groundwater Quality Trends
Monitoring Well B6-OWD
441 and 442 Waverly Avenue

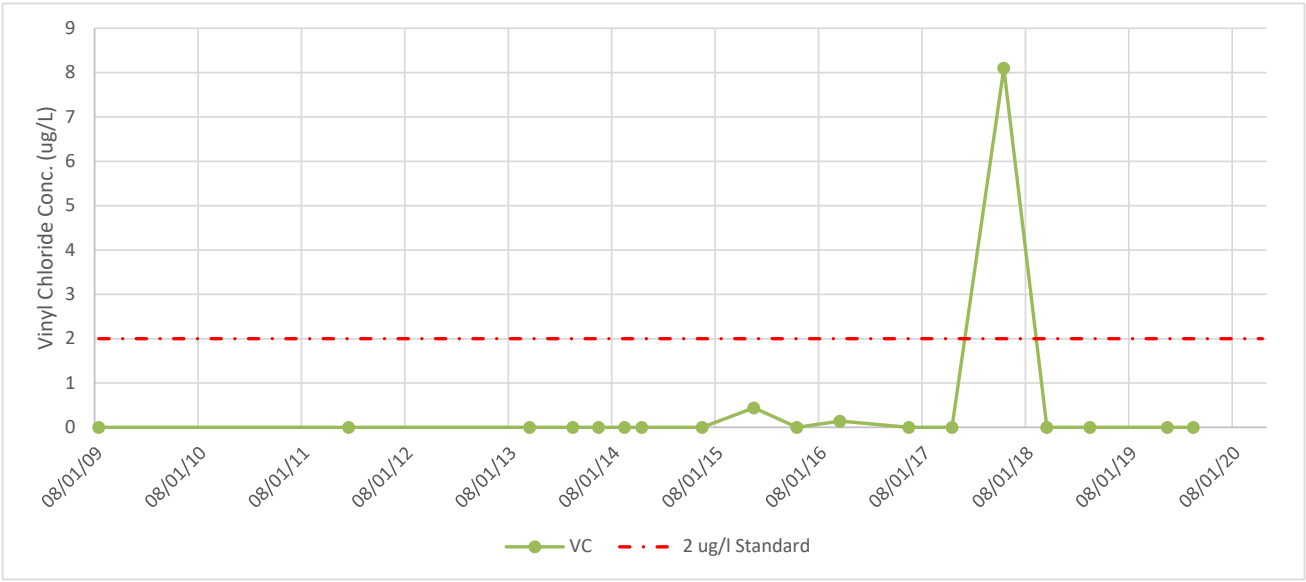


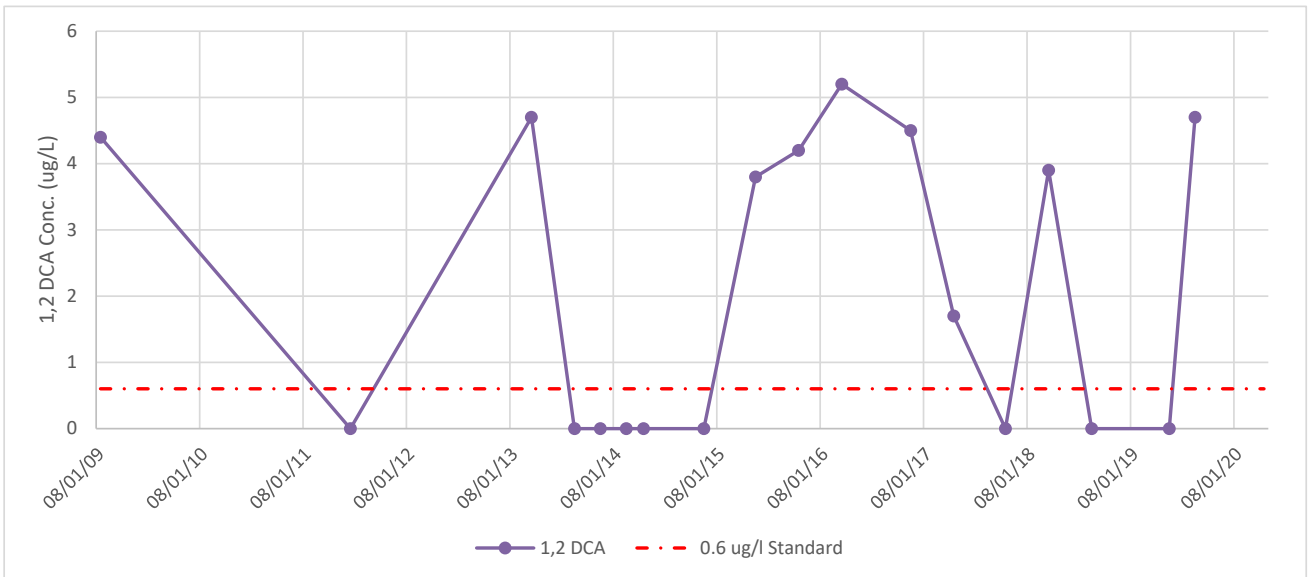




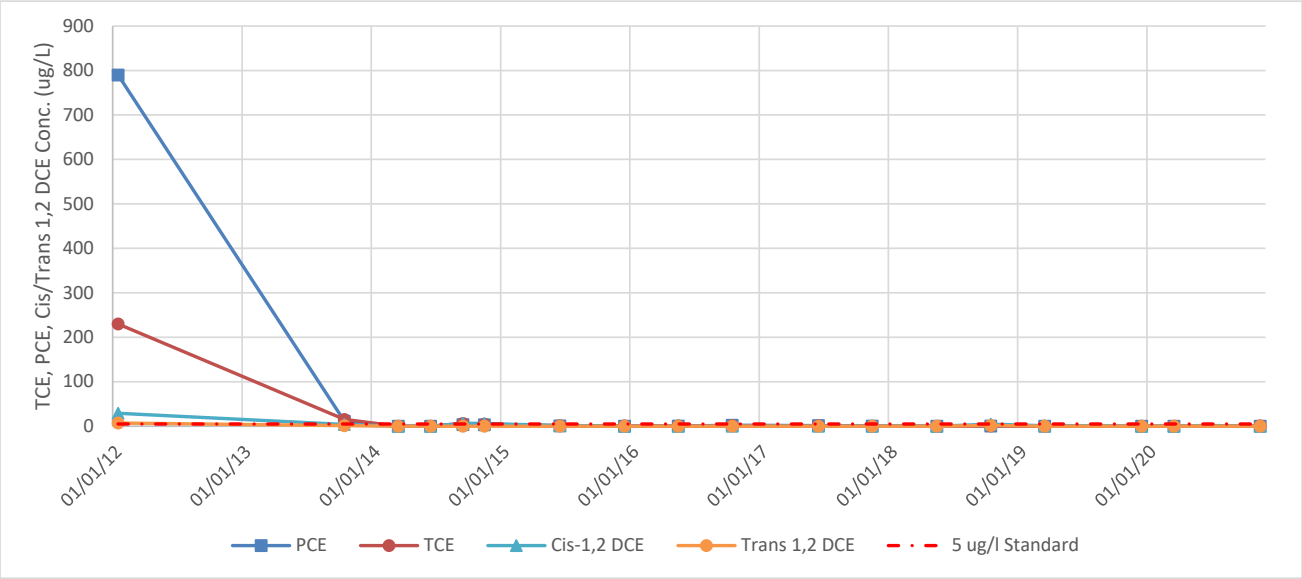
Groundwater Quality Trends
Monitoring Well OSMW-3
441 and 442 Waverly Avenue

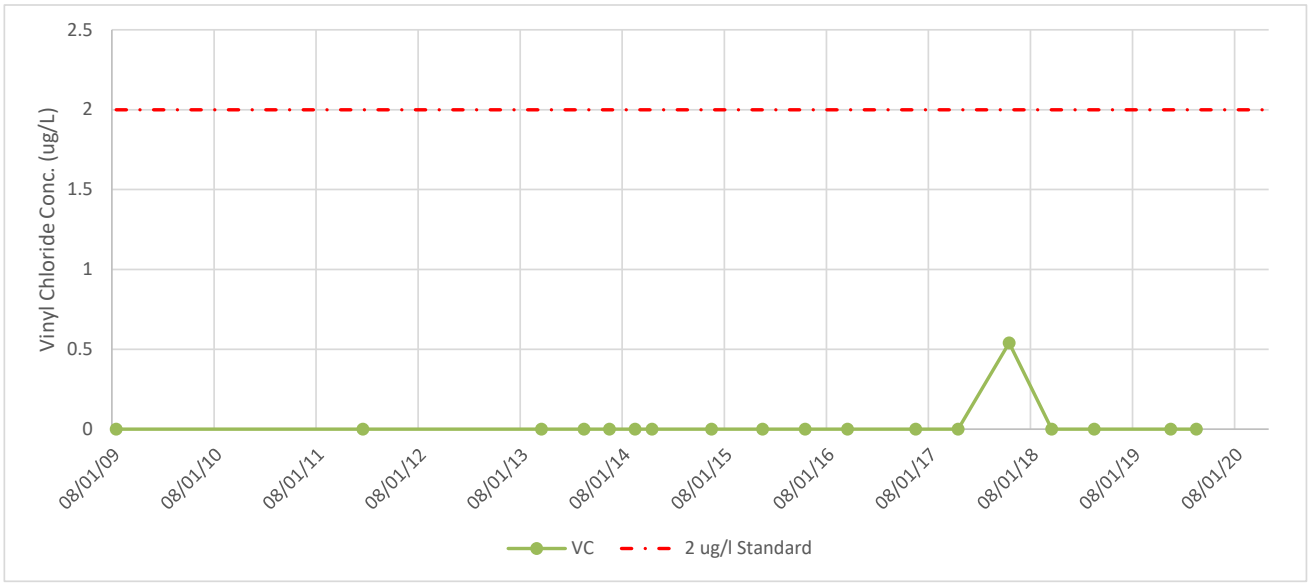


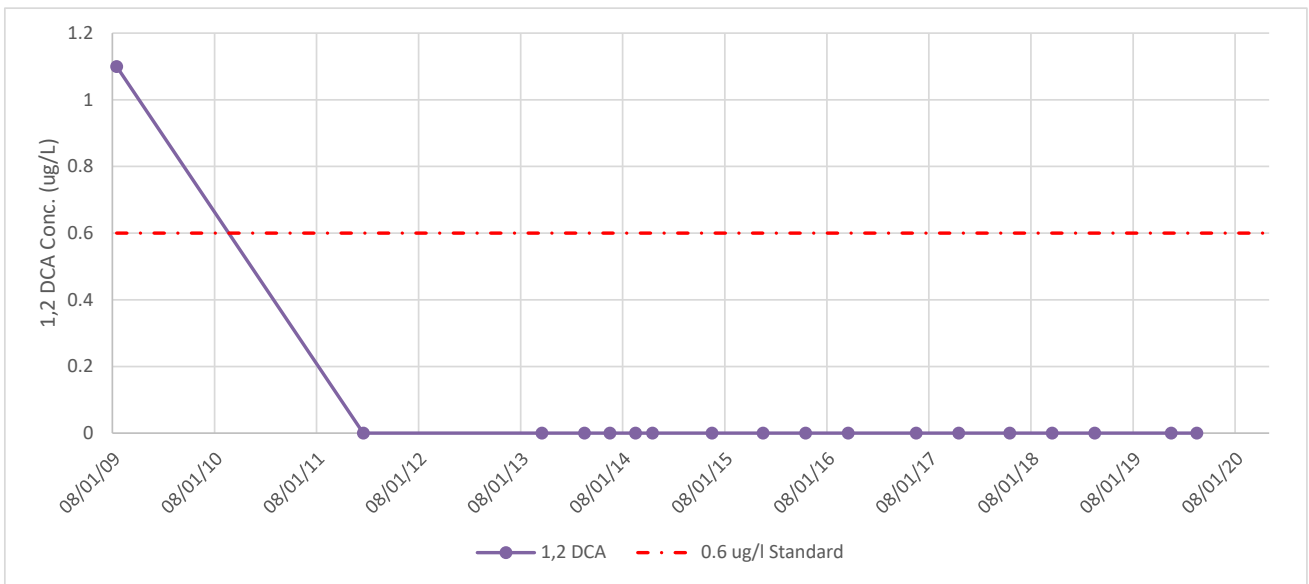




Groundwater Quality Trends
Monitoring Well OSMW-4
441 and 442 Waverly Avenue







DAILY FIELD REPORT

STERLING
Sterling Environmental Engineering, P.C.

DAILY FIELD REPORT

Project Name: 441 & 442 Waverly Avenue
Project No: 28012
Client Name: TJ Milo
Date: 11/18/2020
Location: Mamaroneck, NY
Personnel: PWS- Paul Schaller
Weather: 34°F Sunny

Work Description:

930 - PWS Onsite, Drop off Purge Drum (1 Filled,) ~~(illegible)~~
940 - Collect Depth to Water at all Wells
1030 - Setup at OSMW-4
1110 - Sample OSMW-4
1125 - Collect EB11182020 (Equipment Blank) - Bladder, Rope, Bailer, Tubing
1220 - Sample ~~MW~~ GZ-22D
1225 - Sample GZ-22D MS
1230 - Sample GZ-22D MSD
1355 - Sample GZ-21D - Site Inspection of Building
1500 - Sample GZ-23D
1545 - Sample ~~GZ~~ OSMW-3, Site Insp. Parking Lot
1625 - Sample BG-OWD, Site Insp Parking Lot
1630 - Site Cleanup - Mark Drums (1=Filled; 1=10gallons)
1715 - PWS offsite
1945 - Samples Relinquished to Alpha Albany NY

Signature: PWS

441/442 Waverly Avenue –Semiannual Groundwater Sampling Event

Name: _Paul Scholar_____

Date: _____11/18/2020_____

Event: 1st / (2nd)

Well I.D.	Total Well Depth (feet below measuring point)	Measuring Point Elevation (to inner riser mark from datum)	Depth to Water (feet below measuring point)	Ground Water Elevation	Color	Odor	Sheen
OSMW-4	**35.62**	**31.27**	**9.28**	**21.99**	**Light Gray**	**Sweet**	**None**
GZ-21D	**44.21**	**29.79**	**8.06**	**21.73**	**Clear**	**None**	**None**
GZ-22D	**46.04**	**30.87**	**9.25**	**21.62**	**Clear**	**None**	**None**
B6-OWD	**35.30**	**30.15**	**8.62**	**21.53**	**Clear**	**None**	**None**
OSMW-3	**39.40**	**30.88**	**9.00**	**21.88**	**Light Gray**	**None**	**None**
GZ-23D*	**44.86**	**31.41**	**9.98**	**21.74**	**Clear**	**Sweet**	**None**
OSMW-1	**36.24**	**31.05**	**8.92**	**22.13**	**NA**	**NA**	**NA**
OSMW-2	**40.84**	**31.29**	**9.18**	**22.11**	**NA**	**NA**	**NA**

*Adjusted +0.31 to Ground Water Elevation at Well GZ-23 to account for 30° bend in monitoring well.

PURGING/SAMPLING DATA SHEETS

STERLING
Sterling Environmental Engineering, P.C.

Well Sampling Data Sheet

Project:	441 & 442 Waverly Avenue	Well No.:	OSMW-4
Site:	Mamaroneck, NY	Sample Time:	1110
Date:	11-18-2020	Well Depth:	35.62'
Sampling Personnel:	PWS	Well Diameter:	1"
Sampling Device:	Bailer	Screen Length:	10'
Static Water Level:	9.28	Casing Type:	Steel
Measuring Point:	Top of PVC	Tubing Type:	-
Total Volume Purged:	3 gallons	Other Info:	-

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
1055	-	9.28	-	6.76	14.8	1.301	1.8	5.10	209.19
1100	-	-	-	6.92	15.3	1.343	-61.2	5.13	473.28
1110	-	-	-	7.00	15.0	1.310	-73.7	4.83	254.08

Notes: Lt Gray Color, Sweet Odor, No Sheen

Types of Samples Collected: VOCs

Sampled at 1110

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $Vol_{cyl} = \pi r^2 h$, 1 ft^3 = 7.48 gal./28.31L

STERLING
Sterling Environmental Engineering, P.C.

Well Sampling Data Sheet

Project:	441 & 442 Waverly Avenue	Well No.:	GZ-22D
Site:	Mamaroneck, NY	Sample Time:	1220
Date:	11-18-2020	Well Depth:	46.0'
Sampling Personnel:	PWS	Well Diameter:	2"
Sampling Device:	Bladder Pump	Screen Length:	5'
Static Water Level:	9.25	Casing Type:	Steel
Measuring Point:	Top of PVC	Tubing Type:	HDPE
Total Volume Purged:		Other Info:	-

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
1155	0.200	9.25	-	7.09	12.1	0.820	22.5	4.77	22.67
1200	0.200	9.30	0.05	7.13	12.7	0.824	-40.0	3.35	48.42
1205	0.200	9.30	0.00	7.16	12.9	0.844	-80.4	2.23	86.38
1210	0.200	9.30	0.00	7.18	12.9	0.859	-103.3	1.43	68.76
1215	0.200	9.30	0.00	7.19	12.9	0.863	-105.7	1.30	63.86
1220	0.200	9.30	0.00	7.19	12.9	0.866	-109.2	1.25	62.16

Notes: Clear, No Odor, No Sheen
GZ-22D MS = 1225
GZ-22D MSD = 1230
DUP101820-20 =

Types of Samples Collected: VOCs PFAS 1,4-Dioxane sampled at 1220

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $Vol_{cyl} = \pi r^2 h$, 1 ft^3 = 7.48 gal./28.31L

EB 11820 at 1125

STERLING
Sterling Environmental Engineering, P.C.

Well Sampling Data Sheet

Project:	441 & 442 Waverly Avenue	Well No.:	GZ-21D
Site:	Mamaroneck, NY	Sample Time:	1355
Date:	11-18-2020	Well Depth:	44.21'
Sampling Personnel:	PWS	Well Diameter:	2"
Sampling Device:	Bladder Pump	Screen Length:	5'
Static Water Level:	8.06	Casing Type:	Steel
Measuring Point:	Top of PVC	Tubing Type:	HDPE
Total Volume Purged:		Other Info:	—

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
1330	0.200	8.06	—	7.10	13.8	1.817	-32.1	4.77	47.77
1335	0.200	8.29	0.23	7.14	14.5	1.993	17.3	1.97	54.62
1340	0.200	8.30	0.02	7.24	14.3	2.004	24.7	1.57	70.31
1345	0.200	8.30	0.00	7.15	14.5	2.001	32.2	1.27	69.22
1350	0.200	8.30	0.00	7.15	14.2	2.012	36.5	1.12	97.45
1355	0.200	8.30	0.00	7.15	14.2	2.014	37.5	1.06	91.83

Notes: Clear, No Odors, No Sheen

Types of Samples Collected: VOCs

Sampled at 1355

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $Vol_{cyl} = \pi r^2 h$, 1 ft^3 = 7.48 gal./28.31L

STERLING
Sterling Environmental Engineering, P.C.

Well Sampling Data Sheet

Project:	441 & 442 Waverly Avenue	Well No.:	GZ-23D
Site:	Mamaroneck, NY	Sample Time:	1500
Date:	11-18-2020	Well Depth:	44.86'
Sampling Personnel:	PWS	Well Diameter:	2"
Sampling Device:	Waterra	Screen Length:	5'
Static Water Level:	9.98	Casing Type:	Steel
Measuring Point:	Top of PVC	Tubing Type:	HDPE
Total Volume Purged:		Other Info:	Bends in Well

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
1430	0.200	9.98	—	6.59	16.2	0.634	-39.7	0.86	553.05
1435	0.200	10.02	0.04	6.52	16.1	0.633	-41.6	0.74	249.04
1440	0.200	10.03	0.01	6.50	15.9	0.633	-35.9	0.69	176.87
1445	0.200	10.03	0.00	6.45	15.9	0.587	-21.9	0.68	162.93
1450	0.200	10.03	0.00	6.47	15.8	0.623	-25.4	0.76	126.17
1455	0.200	10.03	0.00	6.48	15.9	0.624	-28.5	0.71	109.93
1500	0.200	10.03	0.00	6.48	15.9	0.626	-28.4	0.69	78.87

Notes: Clear, sweet Smell, No ~~Odor~~ Sheen

Types of Samples Collected: VOCs, 1,4 Dioxane, PFAS

Sampled at 1500

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $Vol_{cyl} = \pi r^2 h$, 1 ft^3 = 7.48 gal./28.31L

STERLING
Sterling Environmental Engineering, P.C.

Well Sampling Data Sheet

Project:	441 & 442 Waverly Avenue	Well No.:	OSMW-3
Site:	Mamaroneck, NY	Sample Time:	1545
Date:	11-18-2020	Well Depth:	39.40'
Sampling Personnel:	PWS	Well Diameter:	1"
Sampling Device:	Bailer	Screen Length:	
Static Water Level:	9.00	Casing Type:	Steel
Measuring Point:	Top of PVC	Tubing Type:	HDPE
Total Volume Purged:	4.8 gallons	Other Info:	–

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
1530	–	9.00	–	7.08	14.9	0.826	-35.8	4.70	149.85
1538	–	–	–	7.08	14.8	0.827	-34.6	5.91	129.72
1545	–	–	–	7.08	14.9	0.826	-36.2	4.51	120.88

Notes: Clear to Gray, No Odor, No Sheen

Types of Samples Collected: VOCs, PFAS, 1,4-Dioxane

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $Vol_{cyl} = \pi r^2 h$, 1 ft^3 = 7.48 gal./28.31L

Sampled at 1545

STERLING
Sterling Environmental Engineering, P.C.

Well Sampling Data Sheet

Project:	441 & 442 Waverly Avenue	Well No.:	B6-OWD
Site:	Mamaroneck, NY	Sample Time:	1625
Date:	11-18-2020	Well Depth:	36.05'
Sampling Personnel:	PWS	Well Diameter:	2"
Sampling Device:	Peristaltic Pump	Screen Length:	5'
Static Water Level:	8.62	Casing Type:	PVC Steel
Measuring Point:	Top of PVC	Tubing Type:	HDPE
Total Volume Purged:	6L	Other Info:	-

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
1600	0.200	8.62	~~0.37~~	7.46	12.2	1.507	74.0	6.82	11.12
1605	0.200	9.01	0.39	7.11	14.3	1.673	67.8	1.78	22.11
1610	0.200	9.18	0.17	7.16	14.2	1.691	66.1	1.42	338.78 *
1615	0.200	9.18	0.00	7.16	13.8	1.765	63.5	1.02	40.99
1620	0.200	9.18	0.00	7.17	13.6	1.713	62.6	0.99	51.89
1625	0.200	9.18	0.00	7.17	13.6	1.710	61.4	0.82	62.98

Notes: Clear, No Odor, No Sheen

* YSI Possible Error Shock YSI and turbidy >50 NTU

Types of Samples Collected: VOCs

Sampled at 1625

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $Vol_{cyl} = \pi r^2 h$, 1 ft^3 = 7.48 gal./28.31L

WATER LEVEL MEASUREMENTS

Sterling Environmental Engineering, P.C.

24 Wade Road
Latham, N.Y. 12110

Project Name: 441 & 442 Waverly Avenue
Project No. 28012
Location Mamaroneck, NY
Weather: 34° F Sunny
Field Personnel: PWS
Measuring Device: Depth to Water Meter Heron Dipper

Well ID	Date	Time	Depth to Water	Measuring Point	Meas. Pt. Elevation	Calc. Water Level Elev.	Remarks
OSMW-1	11-18-2020	953	8.92	PVC	31.05	22.13	
OSMW-2	↓	950	9.18	PVC	31.29	22.11	
OSMW-3		1000	9.00	PVC	30.88	21.88	
OSMW-4		957	9.28	PVC	31.27	21.99	
GZ-21D		1012	8.06	PVC	29.79	21.73	
GZ-22D		1019	9.25	PVC	30.87	21.62	
GZ-23D		1006	9.98	PVC	31.41	21.43	+0.31 =21.74'
B6-OWD		1308	8.62	PVC	30.15	21.53	Car Parked on Well

LABORATORY ANALYSIS REPORT
AND
DATA USABILITY SUMMARY REPORT (DUSR)

ANALYTICAL REPORT

Lab Number:	L2051463
Client:	Sterling Environmental Engineering 24 Wade Road Latham, NY 12110
ATTN:	Mark Williams
Phone:	(518) 456-4900
Project Name:	FORMER M. ARGUESO
Project Number:	28012
Report Date:	12/11/20

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: FORMER M. ARGUESO
Project Number: 28012

Lab Number: L2051463
Report Date: 12/11/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2051463-01	OSMW-3	WATER	MAMARONECK, NY	11/18/20 15:45	11/18/20
L2051463-02	GZ-22D	WATER	MAMARONECK, NY	11/18/20 12:20	11/18/20
L2051463-03	GZ-23D	WATER	MAMARONECK, NY	11/18/20 15:00	11/18/20
L2051463-04	DUP1182020	WATER	MAMARONECK, NY	11/18/20 00:00	11/18/20
L2051463-05	EB11182020	WATER	MAMARONECK, NY	11/18/20 11:25	11/18/20
L2051463-06	B6-OWD	WATER	MAMARONECK, NY	11/18/20 16:25	11/18/20
L2051463-07	GZ-21D	WATER	MAMARONECK, NY	11/18/20 13:55	11/18/20
L2051463-08	OSMW-4	WATER	MAMARONECK, NY	11/18/20 11:10	11/18/20
L2051463-09	TB11182020	WATER	MAMARONECK, NY	11/18/20 00:00	11/18/20

Project Name:	FORMER M. ARGUESO	**Lab Number:**	L2051463
Project Number:	28012	**Report Date:**	12/11/20

Case Narrative

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

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

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	FORMER M. ARGUESO	**Lab Number:**	L2051463
Project Number:	28012	**Report Date:**	12/11/20

Case Narrative (continued)

Report Submission

December 11, 2020: This final report includes the results of all requested analyses.

November 30, 2020: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Perfluorinated Alkyl Acids by Isotope Dilution

L2051463-01 through -04 and WG1440357-6/-7: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1440357-6: The Extracted Internal Standard recovery is below the acceptance criteria for Perfluoro[13C8]Octanesulfonamide (M8FOSA) (less than 10%); however, all associated target analytes are within criteria; therefore, no further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 12/11/20

ORGANICS

VOLATILES

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-01 D
Client ID: OSMW-3
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 15:45
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/23/20 23:13
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	2200		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	4.7	J	ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
Bromoform	ND		ug/l	40	13.	20
1,1,2,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	ND		ug/l	10	3.2	20
Toluene	ND		ug/l	50	14.	20
Ethylbenzene	ND		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	ND		ug/l	50	14.	20
Vinyl chloride	ND		ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20
Trichloroethene	290		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-01 D Date Collected: 11/18/20 15:45

Client ID: OSMW-3 Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	ND		ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
cis-1,2-Dichloroethene	42	J	ug/l	50	14.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	ND		ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
Bromochloromethane	ND		ug/l	50	14.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Isopropylbenzene	ND		ug/l	50	14.	20
1,2,3-Trichlorobenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
Methyl Acetate	ND		ug/l	40	4.7	20
Cyclohexane	ND		ug/l	200	5.4	20
1,4-Dioxane	ND		ug/l	5000	1200	20
Freon-113	ND		ug/l	50	14.	20
Methyl cyclohexane	ND		ug/l	200	7.9	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-02
Client ID: GZ-22D
Sample Location: MAMARONECK, NY
Date Collected: 11/18/20 12:20
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/24/20 18:27
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	19		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	2.7		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	5.6		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	78		ug/l	2.5	0.70	1
Trichloroethene	0.56		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-02 Date Collected: 11/18/20 12:20

Client ID: GZ-22D Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	1.8	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	8.6		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	2.0	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	1.0	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	101		70-130

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-03
Client ID: GZ-23D
Sample Location: MAMARONECK, NY
Date Collected: 11/18/20 15:00
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/24/20 19:16
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	19		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	1.1		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	5.3		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	5.6		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.18	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	15		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-03 Date Collected: 11/18/20 15:00

Client ID: GZ-23D Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	1.2	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	23		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-04
Client ID: DUP1182020
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 00:00
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/24/20 18:52
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	19		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	2.7		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	5.7		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	78		ug/l	2.5	0.70	1
Trichloroethene	0.48	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-04 Date Collected: 11/18/20 00:00

Client ID: DUP1182020 Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	1.6	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	7.9		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	1.8	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	1.0	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-06 D
Client ID: B6-OWD
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 16:25
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/24/20 02:02
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	580		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	9.7		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	26		ug/l	25	7.0	10
Trichloroethene	1400		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-06 D Date Collected: 11/18/20 16:25

Client ID: B6-OWD Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	760		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-07
Client ID: GZ-21D
Sample Location: MAMARONECK, NY
Date Collected: 11/18/20 13:55
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/24/20 01:41
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	110		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.27	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	2.1		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	1.9	J	ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-07 Date Collected: 11/18/20 13:55

Client ID: GZ-21D Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.74	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	140		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-08
Client ID: OSMW-4
Sample Location: MAMARONECK, NY
Date Collected: 11/18/20 11:10
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/24/20 01:20
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.39	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-08 Date Collected: 11/18/20 11:10

Client ID: OSMW-4 Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	4.1	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	1.3	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	95		70-130

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-09
Client ID: TB11182020
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 00:00
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/24/20 17:13
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-09 Date Collected: 11/18/20 00:00

Client ID: TB11182020 Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/23/20 18:56
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,06-08 Batch: WG1438001-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/23/20 18:56
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,06-08 Batch: WG1438001-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/23/20 18:56
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,06-08 Batch: WG1438001-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/24/20 11:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,09 Batch: WG1438122-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/24/20 11:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,09 Batch: WG1438122-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/24/20 11:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,09 Batch: WG1438122-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER M. ARGUESO
Project Number: 28012

Lab Number: L2051463
Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,06-08 Batch: WG1438001-3 WG1438001-4								
Methylene chloride	97		89		70-130	9		20
1,1-Dichloroethane	100		90		70-130	11		20
Chloroform	100		88		70-130	13		20
Carbon tetrachloride	100		87		63-132	14		20
1,2-Dichloropropane	97		87		70-130	11		20
Dibromochloromethane	90		88		63-130	2		20
1,1,2-Trichloroethane	96		92		70-130	4		20
Tetrachloroethene	110		90		70-130	20		20
Chlorobenzene	100		92		75-130	8		20
Trichlorofluoromethane	110		93		62-150	17		20
1,2-Dichloroethane	93		89		70-130	4		20
1,1,1-Trichloroethane	100		89		67-130	12		20
Bromodichloromethane	93		90		67-130	3		20
trans-1,3-Dichloropropene	91		85		70-130	7		20
cis-1,3-Dichloropropene	90		82		70-130	9		20
Bromoform	91		88		54-136	3		20
1,1,2,2-Tetrachloroethane	92		90		67-130	2		20
Benzene	100		89		70-130	12		20
Toluene	100		91		70-130	9		20
Ethylbenzene	110		94		70-130	16		20
Chloromethane	100		84		64-130	17		20
Bromomethane	93		79		39-139	16		20
Vinyl chloride	110		86		55-140	**24**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER M. ARGUESO
Project Number: 28012

Lab Number: L2051463
Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,06-08 Batch: WG1438001-3 WG1438001-4								
Chloroethane	120		89		55-138	**30**	Q	20
1,1-Dichloroethene	100		84		61-145	17		20
trans-1,2-Dichloroethene	100		92		70-130	8		20
Trichloroethene	100		88		70-130	13		20
1,2-Dichlorobenzene	100		95		70-130	5		20
1,3-Dichlorobenzene	110		95		70-130	15		20
1,4-Dichlorobenzene	100		92		70-130	8		20
Methyl tert butyl ether	90		92		63-130	2		20
p/m-Xylene	115		100		70-130	14		20
o-Xylene	110		100		70-130	10		20
cis-1,2-Dichloroethene	94		83		70-130	12		20
Styrene	110		100		70-130	10		20
Dichlorodifluoromethane	110		95		36-147	15		20
Acetone	78		79		58-148	1		20
Carbon disulfide	100		89		51-130	12		20
2-Butanone	80		94		63-138	16		20
4-Methyl-2-pentanone	80		84		59-130	5		20
2-Hexanone	72		76		57-130	5		20
Bromochloromethane	92		87		70-130	6		20
1,2-Dibromoethane	90		86		70-130	5		20
1,2-Dibromo-3-chloropropane	67		75		41-144	11		20
Isopropylbenzene	120		99		70-130	19		20
1,2,3-Trichlorobenzene	74		70		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,06-08 Batch: WG1438001-3 WG1438001-4								
1,2,4-Trichlorobenzene	83		78		70-130	6		20
Methyl Acetate	74		79		70-130	7		20
Cyclohexane	120		92		70-130	**26**	Q	20
1,4-Dioxane	88		84		56-162	5		20
Freon-113	120		100		70-130	18		20
Methyl cyclohexane	120		98		70-130	20		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		100		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	104		105		70-130
Dibromofluoromethane	92		98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,09 Batch: WG1438122-3 WG1438122-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	120		110		63-132	9		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	96		98		70-130	2		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	100		98		70-130	2		20
1,1,1-Trichloroethane	110		100		67-130	10		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		98		70-130	2		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	91		94		67-130	3		20
Benzene	100		100		70-130	0		20
Toluene	97		100		70-130	3		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	120		100		64-130	18		20
Bromomethane	76		76		39-139	0		20
Vinyl chloride	110		99		55-140	11		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER M. ARGUESO
Project Number: 28012

Lab Number: L2051463
Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,09 Batch: WG1438122-3 WG1438122-4								
Chloroethane	110		100		55-138	10		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	95		98		70-130	3		20
1,3-Dichlorobenzene	97		98		70-130	1		20
1,4-Dichlorobenzene	96		98		70-130	2		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		100		70-130	10		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	100		98		36-147	2		20
Acetone	120		83		58-148	**36**	Q	20
Carbon disulfide	110		100		51-130	10		20
2-Butanone	110		96		63-138	14		20
4-Methyl-2-pentanone	96		96		59-130	0		20
2-Hexanone	95		90		57-130	5		20
Bromochloromethane	120		110		70-130	9		20
1,2-Dibromoethane	96		99		70-130	3		20
1,2-Dibromo-3-chloropropane	96		93		41-144	3		20
Isopropylbenzene	93		99		70-130	6		20
1,2,3-Trichlorobenzene	95		100		70-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,09 Batch: WG1438122-3 WG1438122-4								
1,2,4-Trichlorobenzene	94		96		70-130	2		20
Methyl Acetate	100		97		70-130	3		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	114		96		56-162	17		20
Freon-113	100		100		70-130	0		20
Methyl cyclohexane	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		95		70-130
Toluene-d8	99		101		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	106		99		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,09 QC Batch ID: WG1438122-6 WG1438122-7 QC Sample: L2051463-02 Client ID: GZ-22D												
Methylene chloride	ND	10	11	110		11	110		70-130	0		20
1,1-Dichloroethane	ND	10	11	110		11	110		70-130	0		20
Chloroform	ND	10	11	110		11	110		70-130	0		20
Carbon tetrachloride	ND	10	12	120		12	120		63-132	0		20
1,2-Dichloropropane	ND	10	11	110		11	110		70-130	0		20
Dibromochloromethane	ND	10	9.8	98		10	100		63-130	2		20
1,1,2-Trichloroethane	ND	10	10	100		10	100		70-130	0		20
Tetrachloroethene	ND	10	10	100		10	100		70-130	0		20
Chlorobenzene	ND	10	10	100		10	100		75-130	0		20
Trichlorofluoromethane	ND	10	12	120		12	120		62-150	0		20
1,2-Dichloroethane	19	10	28	90		28	90		70-130	0		20
1,1,1-Trichloroethane	ND	10	11	110		11	110		67-130	0		20
Bromodichloromethane	ND	10	10	100		10	100		67-130	0		20
trans-1,3-Dichloropropene	ND	10	9.2	92		9.1	91		70-130	1		20
cis-1,3-Dichloropropene	ND	10	9.9	99		9.8	98		70-130	1		20
Bromoform	ND	10	9.7	97		9.9	99		54-136	2		20
1,1,2,2-Tetrachloroethane	ND	10	9.4	94		9.8	98		67-130	4		20
Benzene	2.7	10	14	113		13	103		70-130	7		20
Toluene	ND	10	10	100		10	100		70-130	0		20
Ethylbenzene	ND	10	10	100		10	100		70-130	0		20
Chloromethane	ND	10	11	110		11	110		64-130	0		20
Bromomethane	ND	10	5.4	54		5.9	59		39-139	9		20
Vinyl chloride	5.6	10	17	114		17	114		55-140	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,09 QC Batch ID: WG1438122-6 WG1438122-7 QC Sample: L2051463-02 Client ID: GZ-22D												
Chloroethane	ND	10	12	120		12	120		55-138	0		20
1,1-Dichloroethene	ND	10	12	120		12	120		61-145	0		20
trans-1,2-Dichloroethene	78	10	89	110		88	100		70-130	1		20
Trichloroethene	0.56	10	12	114		11	104		70-130	9		20
1,2-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,3-Dichlorobenzene	ND	10	9.7	97		9.4	94		70-130	3		20
1,4-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
Methyl tert butyl ether	1.8J	10	12	120		12	120		63-130	0		20
p/m-Xylene	ND	20	21	105		20	100		70-130	5		20
o-Xylene	ND	20	20	100		20	100		70-130	0		20
cis-1,2-Dichloroethene	8.6	10	21	124		20	114		70-130	5		20
Styrene	ND	20	21	105		20	100		70-130	5		20
Dichlorodifluoromethane	ND	10	11	110		11	110		36-147	0		20
Acetone	ND	10	9.9	99		12	120		58-148	19		20
Carbon disulfide	ND	10	12	120		11	110		51-130	9		20
2-Butanone	ND	10	11	110		11	110		63-138	0		20
4-Methyl-2-pentanone	ND	10	9.3	93		9.8	98		59-130	5		20
2-Hexanone	ND	10	8.8	88		9.1	91		57-130	3		20
Bromochloromethane	ND	10	12	120		12	120		70-130	0		20
1,2-Dibromoethane	ND	10	9.8	98		10	100		70-130	2		20
1,2-Dibromo-3-chloropropane	ND	10	9.3	93		9.9	99		41-144	6		20
Isopropylbenzene	ND	10	10	100		9.7	97		70-130	3		20
1,2,3-Trichlorobenzene	ND	10	9.7	97		10	100		70-130	3		20

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,09 QC Batch ID: WG1438122-6 WG1438122-7 QC Sample: L2051463-02 Client ID: GZ-22D												
1,2,4-Trichlorobenzene	ND	10	9.5	95		9.8	98		70-130	3		20
Methyl Acetate	ND	10	8.8	88		9.0	90		70-130	2		20
Cyclohexane	2.0J	10	13	130		12	120		70-130	8		20
1,4-Dioxane	ND	500	530	106		600	120		56-162	12		20
Freon-113	ND	10	11	110		11	110		70-130	0		20
Methyl cyclohexane	1.0J	10	12	120		11	110		70-130	9		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		96		70-130
4-Bromofluorobenzene	96		98		70-130
Dibromofluoromethane	100		102		70-130
Toluene-d8	95		96		70-130

SEMIVOLATILES

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-01
Client ID: OSMW-3
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 15:45
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/24/20 00:13
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 11/20/20 22:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	2590		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	44		15-110

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-01
Client ID: OSMW-3
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 15:45
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 134,LCMSMS-ID
Analytical Date: 12/04/20 01:24
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/02/20 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	5.32		ng/l	1.88	0.383	1
Perfluoropentanoic Acid (PFPeA)	7.57		ng/l	1.88	0.372	1
Perfluorobutanesulfonic Acid (PFBS)	1.97		ng/l	1.88	0.223	1
Perfluorohexanoic Acid (PFHxA)	4.04		ng/l	1.88	0.308	1
Perfluoroheptanoic Acid (PFHpA)	2.72		ng/l	1.88	0.211	1
Perfluorohexanesulfonic Acid (PFHxS)	3.54		ng/l	1.88	0.353	1
Perfluorooctanoic Acid (PFOA)	8.30	F	ng/l	1.88	0.222	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.88	1.25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.88	0.646	1
Perfluorononanoic Acid (PFNA)	0.747	J	ng/l	1.88	0.293	1
Perfluorooctanesulfonic Acid (PFOS)	6.90	F	ng/l	1.88	0.473	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.88	0.285	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.88	1.14	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.88	0.608	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.88	0.244	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.88	0.920	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.88	0.544	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.88	0.755	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.88	0.349	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.88	0.307	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.88	0.233	1
PFOA/PFOS, Total	15.2		ng/l	1.88	0.222	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-01 Date Collected: 11/18/20 15:45

Client ID: OSMW-3 Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	88		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	116		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	**298**	Q	1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	**266**	Q	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	89		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	84		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	62		33-143

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-02
Client ID: GZ-22D
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 12:20
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/24/20 11:04
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 11/20/20 22:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3180		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	43		15-110

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-02
Client ID: GZ-22D
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 12:20
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 134,LCMSMS-ID
Analytical Date: 12/04/20 01:41
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/02/20 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	3.80		ng/l	1.90	0.388	1
Perfluoropentanoic Acid (PFPeA)	4.33		ng/l	1.90	0.376	1
Perfluorobutanesulfonic Acid (PFBS)	1.89	J	ng/l	1.90	0.226	1
Perfluorohexanoic Acid (PFHxA)	2.57	F	ng/l	1.90	0.312	1
Perfluoroheptanoic Acid (PFHpA)	1.78	J	ng/l	1.90	0.214	1
Perfluorohexanesulfonic Acid (PFHxS)	9.63		ng/l	1.90	0.358	1
Perfluorooctanoic Acid (PFOA)	6.26	F	ng/l	1.90	0.224	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.90	1.27	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.90	0.654	1
Perfluorononanoic Acid (PFNA)	0.570	J	ng/l	1.90	0.297	1
Perfluorooctanesulfonic Acid (PFOS)	8.68	F	ng/l	1.90	0.479	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.90	0.289	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.90	1.15	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.90	0.616	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.90	0.247	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.90	0.932	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.90	0.551	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.90	0.764	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.90	0.354	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.90	0.311	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.90	0.236	1
PFOA/PFOS, Total	14.9		ng/l	1.90	0.224	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-02 Date Collected: 11/18/20 12:20

Client ID: GZ-22D Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	99		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	114		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	241		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	80		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	**181**	Q	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	70		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	12		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	63		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	57		33-143

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-03
Client ID: GZ-23D
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 15:00
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/24/20 01:49
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 11/20/20 22:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	407.		ng/l	139	31.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	37		15-110

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-03
Client ID: GZ-23D
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 15:00
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 134,LCMSMS-ID
Analytical Date: 12/04/20 02:31
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/02/20 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	10.0		ng/l	1.84	0.374	1
Perfluoropentanoic Acid (PFPeA)	33.0		ng/l	1.84	0.363	1
Perfluorobutanesulfonic Acid (PFBS)	3.09		ng/l	1.84	0.218	1
Perfluorohexanoic Acid (PFHxA)	18.2		ng/l	1.84	0.301	1
Perfluoroheptanoic Acid (PFHpA)	6.82		ng/l	1.84	0.207	1
Perfluorohexanesulfonic Acid (PFHxS)	2.86		ng/l	1.84	0.345	1
Perfluorooctanoic Acid (PFOA)	8.18	F	ng/l	1.84	0.216	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.84	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.631	1
Perfluorononanoic Acid (PFNA)	1.63	J	ng/l	1.84	0.286	1
Perfluorooctanesulfonic Acid (PFOS)	29.7	F	ng/l	1.84	0.462	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.84	0.279	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.11	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.84	0.595	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.84	0.238	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.899	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.532	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.738	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.84	0.341	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.84	0.300	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.84	0.228	1
PFOA/PFOS, Total	37.9		ng/l	1.84	0.216	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-03 Date Collected: 11/18/20 15:00

Client ID: GZ-23D Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	76		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	72		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	103		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	**477**	Q	1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	83		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	76		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	**431**	Q	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	152		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	28		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	102		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	59		33-143

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-04
Client ID: DUP1182020
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 00:00
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/24/20 02:13
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 11/20/20 22:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3270		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-04
Client ID: DUP1182020
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 00:00
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 134,LCMSMS-ID
Analytical Date: 12/04/20 02:47
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/02/20 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	3.65		ng/l	1.80	0.368	1
Perfluoropentanoic Acid (PFPeA)	3.90		ng/l	1.80	0.357	1
Perfluorobutanesulfonic Acid (PFBS)	1.77	J	ng/l	1.80	0.214	1
Perfluorohexanoic Acid (PFHxA)	2.46		ng/l	1.80	0.296	1
Perfluoroheptanoic Acid (PFHpA)	1.70	J	ng/l	1.80	0.203	1
Perfluorohexanesulfonic Acid (PFHxS)	9.42		ng/l	1.80	0.339	1
Perfluorooctanoic Acid (PFOA)	6.31	F	ng/l	1.80	0.213	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.80	1.20	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.80	0.620	1
Perfluorononanoic Acid (PFNA)	0.479	J	ng/l	1.80	0.281	1
Perfluorooctanesulfonic Acid (PFOS)	8.93	F	ng/l	1.80	0.454	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.80	0.274	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.80	1.09	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.80	0.584	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.80	0.234	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.80	0.883	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.80	0.523	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.80	0.725	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.80	0.335	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.80	0.295	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.80	0.224	1
PFOA/PFOS, Total	15.2		ng/l	1.80	0.213	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-04 Date Collected: 11/18/20 00:00

Client ID: DUP1182020 Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	97		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	104		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	108		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	121		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	**265**	Q	1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	86		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	81		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	**173**	Q	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	68		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	82		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	11		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	65		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	57		33-143

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-05
Client ID: EB11182020
Sample Location: MAMARONECK, NY

Date Collected: 11/18/20 11:25
Date Received: 11/18/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 134,LCMSMS-ID
Analytical Date: 12/04/20 03:20
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/02/20 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.80	0.368	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.80	0.357	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.80	0.214	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.80	0.296	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.80	0.203	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.80	0.339	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.80	0.213	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.80	1.20	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.80	0.620	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.80	0.281	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.80	0.454	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.80	0.274	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.80	1.09	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.80	0.584	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.80	0.234	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.80	0.883	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.80	0.523	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.80	0.725	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.80	0.335	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.80	0.295	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.80	0.224	1
PFOA/PFOS, Total	ND		ng/l	1.80	0.213	1

Project Name: FORMER M. ARGUESO **Lab Number:** L2051463

Project Number: 28012 **Report Date:** 12/11/20

SAMPLE RESULTS

Lab ID: L2051463-05 Date Collected: 11/18/20 11:25

Client ID: EB11182020 Date Received: 11/18/20

Sample Location: MAMARONECK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	101		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	137		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	109		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	106		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	112		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	101		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	149		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	106		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	97		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	167		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	84		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	35		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	83		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	103		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	67		33-143

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/23/20 21:01
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 11/20/20 22:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-04 Batch: WG1436803-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 12/03/20 22:22
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/02/20 18:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-05 Batch: WG1440357-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 12/03/20 22:22
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/02/20 18:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-05 Batch: WG1440357-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	99		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	129		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	104		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	116		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	121		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	102		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	101		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	139		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	107		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	106		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	29		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	93		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	108		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-04		Batch: WG1436803-2 WG1436803-3					
1,4-Dioxane	113		114		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	49		45		15-110

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER M. ARGUESO
Project Number: 28012

Lab Number: L2051463
Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 Batch: WG1440357-2 WG1440357-3								
Perfluorobutanoic Acid (PFBA)	108		110		67-148	2		30
Perfluoropentanoic Acid (PFPeA)	112		114		63-161	2		30
Perfluorobutanesulfonic Acid (PFBS)	111		115		65-157	4		30
Perfluorohexanoic Acid (PFHxA)	109		113		69-168	4		30
Perfluoroheptanoic Acid (PFHpA)	104		108		58-159	4		30
Perfluorohexanesulfonic Acid (PFHxS)	114		111		69-177	3		30
Perfluorooctanoic Acid (PFOA)	106		109		63-159	3		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	112		122		49-187	9		30
Perfluoroheptanesulfonic Acid (PFHpS)	114		111		61-179	3		30
Perfluorononanoic Acid (PFNA)	106		108		68-171	2		30
Perfluorooctanesulfonic Acid (PFOS)	117		118		52-151	1		30
Perfluorodecanoic Acid (PFDA)	108		109		63-171	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	133		122		56-173	9		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	88		98		60-166	11		30
Perfluoroundecanoic Acid (PFUnA)	111		112		60-153	1		30
Perfluorodecanesulfonic Acid (PFDS)	122		115		38-156	6		30
Perfluorooctanesulfonamide (FOSA)	96		106		46-170	10		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	113		108		45-170	5		30
Perfluorododecanoic Acid (PFDoA)	109		112		67-153	3		30
Perfluorotridecanoic Acid (PFTrDA)	108		106		48-158	2		30
Perfluorotetradecanoic Acid (PFTA)	137		136		59-182	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 Batch: WG1440357-2 WG1440357-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	100		99		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	129		126		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	107		101		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	102		102		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		107		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	113		112		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		100		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	139		127		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	103		104		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		99		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		98		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	148		145		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	110		99		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	108		106		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	25		32		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	85		90		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	109		112		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	73		74		33-143

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1436803-4 WG1436803-5 QC Sample: L2051463-02 Client ID: GZ-22D												
1,4-Dioxane	3180	4630	8450	114		8700	115		40-140	3		30

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
1,4-Dioxane-d8	42		40		15-110

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1440357-6 WG1440357-7 QC Sample: L2051463-02 Client ID: GZ-22D												
Perfluorobutanoic Acid (PFBA)	3.80	35.9	41.7	106		42.7	106		67-148	2		30
Perfluoropentanoic Acid (PFPeA)	4.33	35.9	44.5	112		44.8	110		63-161	1		30
Perfluorobutanesulfonic Acid (PFBS)	1.89J	31.9	39.1	117		38.0	111		65-157	3		30
Perfluorohexanoic Acid (PFHxA)	2.57F	35.9	42.3	111		43.0	110		69-168	2		30
Perfluoroheptanoic Acid (PFHpA)	1.78J	35.9	39.5	105		40.3	105		58-159	2		30
Perfluorohexanesulfonic Acid (PFHxS)	9.63	32.8	45.4	109		44.6	104		69-177	2		30
Perfluorooctanoic Acid (PFOA)	6.26F	35.9	44.7F	107		45.5F	107		63-159	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	34.2	42.9F	126		41.9F	120		49-187	2		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	34.2	41.3	121		42.0	120		61-179	2		30
Perfluorononanoic Acid (PFNA)	0.570J	35.9	37.4	103		38.6	104		68-171	3		30
Perfluorooctanesulfonic Acid (PFOS)	8.68F	33.3	45.2F	110		47.2F	113		52-151	4		30
Perfluorodecanoic Acid (PFDA)	ND	35.9	34.4	96		37.7	103		63-171	9		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	34.4	37.8F	110		42.4F	120		56-173	11		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	35.9	30.5F	85		34.3F	94		60-166	12		30
Perfluoroundecanoic Acid (PFUnA)	ND	35.9	33.8	94		37.8	103		60-153	11		30
Perfluorodecanesulfonic Acid (PFDS)	ND	34.6	35.5	103		37.9	107		38-156	7		30
Perfluorooctanesulfonamide (FOSA)	ND	35.9	32.2	90		33.5F	91		46-170	4		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	35.9	33.4	93		37.5	102		45-170	12		30
Perfluorododecanoic Acid (PFDoA)	ND	35.9	34.2	95		37.0	101		67-153	8		30
Perfluorotridecanoic Acid (PFTrDA)	ND	35.9	33.6	94		37.8	103		48-158	12		30
Perfluorotetradecanoic Acid (PFTA)	ND	35.9	43.2	120		49.0	134		59-182	13		30

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER M. ARGUESO

Project Number: 28012

Lab Number: L2051463

Report Date: 12/11/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1440357-6 WG1440357-7 QC Sample: L2051463-02 Client ID: GZ-22D												

Surrogate (Extracted Internal Standard)	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	**175**	Q	**187**	Q	7-170
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	241		**257**	Q	1-244
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	67		73		23-146
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	73		81		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		96		40-144
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		92		38-144
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		89		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		106		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	115		122		47-153
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		95		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	60		62		33-143
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		97		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	100		105		16-173
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	8		10		1-87
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		94		42-146
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		99		36-149
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		98		34-146
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		105		31-159

Project Name: FORMER M. ARGUESO
Project Number: 28012

Lab Number: L2051463
Report Date: 12/11/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2051463-01A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-01B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-01C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-01D	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-01E	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-01F	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-01G	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-02A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02A1	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02A2	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02B1	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02B2	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02C1	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02C2	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-02D	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-02D1	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-02D2	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-02E	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-02E1	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-02E2	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)

*Values in parentheses indicate holding time in days

Project Name: FORMER M. ARGUESO
Project Number: 28012

Lab Number: L2051463
Report Date: 12/11/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2051463-02F	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-02F1	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-02F2	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-02G	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-02G1	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-02G2	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-03A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-03B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-03C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-03D	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-03E	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-03F	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-03G	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-04A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-04B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-04C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-04D	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-04E	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-04F	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-04G	Amber 250ml unpreserved	A	7	7	4.5	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2051463-05A	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-05B	Plastic 250ml unpreserved	B	NA		2.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L2051463-06A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-06B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-06C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-07A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-07B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-07C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: FORMER M. ARGUESO
Project Number: 28012

Lab Number: L2051463
Report Date: 12/11/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2051463-08A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-08B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-08C	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-09A	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)
L2051463-09B	Vial HCl preserved	A	NA		4.5	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: FORMER M. ARGUESO
Project Number: 28012
Lab Number: L2051463
Report Date: 12/11/20

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
PERFLUOROETHER SULFONIC ACIDS (PFESAs)		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

Project Name:	FORMER M. ARGUESO	**Lab Number:**	L2051463
Project Number:	28012	**Report Date:**	12/11/20

GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	FORMER M. ARGUESO	**Lab Number:**	L2051463
Project Number:	28012	**Report Date:**	12/11/20

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

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

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	FORMER M. ARGUESO	**Lab Number:**	L2051463
Project Number:	28012	**Report Date:**	12/11/20

Data Qualifiers

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	FORMER M. ARGUESO	**Lab Number:**	L2051463
Project Number:	28012	**Report Date:**	12/11/20

REFERENCES

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

134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab: 11/19/20

ALPHA Job #: L2051463

Client Information

Client: Sterling Environmental Engineerir
Address: 24 Wade Rd
Latham, NY 12110
Phone: 518-456-4900
Fax: 518-456-3532
Email:

Project Information

Project Name: ~~Waverly Ave~~ Former M. Argueso
Project Location: ~~NY~~ Mamaroneck, NY
Project #: 28012
(Use Project name as Project #)
Project Manager: Jennifer Diceibo
ALPHAQuote #:

Turn-Around Time

Standard [X] Due Date:
Rush (only if pre approved) [ ] # of Days:

These samples have been previously analyzed by Alpha [ ]

Other project specific requirements/comments:

jennifer.diceibo@sterlingenvironmental.com
mark.williams@sterlingenvironmental.com
* EPA 537.1 isotope dilution

Please specify Metals or TAL.

Deliverables

[ ] ASP-A [X] ASP-B
[ ] EQuIS (1 File) [ ] EQuIS (4 File)
[ ] Other

Billing Information

[X] Same as Client Info
PO #

Regulatory Requirement

[X] NY TOGS [ ] NY Part 375
[ ] AWQ Standards [ ] NY CP-51
[ ] NY Restricted Use [ ] Other
[ ] NY Unrestricted Use
[ ] NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
[ ] NJ [ ] NY
[ ] Other: NA

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NY-537-ISOTOPE *	1,4-DIOXANE-SIM	USEPA 8260C VOCs	Total Bottles	Sample Specific Comments
51463-01	OSMW-3	11-18-2020	1545	GW	PWS	X	X	X	7	
02	GZ-22D		1220			X	X	X	7	
02	GZ-22D MS		1225			X	X	X	7	
02	GZ-22D MSD		1230			X	X	X	7	
03	GZ-23D		1500			X	X	X	7	
04	DUP 11182020		-			X		X	2	
05	EB 11182020		1125	GW		X		X	3	
06	~~FIELD BLANK~~ BG-OWD		1625	GW		X		X	3	
07	GZ-21D		1355			X		X	3	
08	OSMW-4		1110			X		X	3	

Container Type: P (WW) | A | V
Preservative: A | A | B

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	11-18-2020 1945		11/18/20 21:30
	11/19/20 01:30		11/19/20 03:20
	11/19/20 04:00		11/19/20 05:25

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 3 of 2

Date Rec'd in Lab: 11/19/20

ALPHA Job #: L2051463

Client Information

Client: Sterling Environmental Engineerin
Address: 24 Wade Rd
Latham, NY 12110
Phone: 518-456-4900
Fax: 518-456-3532
Email:

Project Information

Project Name: ~~Waverly Ave~~ Former M. Argueso
Project Location: ~~NY~~ Mamaroneck, NY
Project #: 28012
(Use Project name as Project #)
Project Manager: Jennifer Dicerbo
ALPHAQuote #:

Turn-Around Time

Standard: X
Rush (only if pre approved): ☐
Due Date:
# of Days:

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☒ Same as Client Info
PO #

Regulatory Requirement

☒ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
jennifer.dicerbo@sterlingenvironmental.com
mack.williams@sterlingenvironmental.com

Please specify Metals or TAL.

ANALYSIS

VOCs 8260

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottles

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Sample Specific Comments
	~~GZ-21D~~ (PWS)					
	~~GZ-22D~~ (PWS)					
	~~GZ-22D MS~~ (PWS)					
	~~GZ-22D MSD~~					
	~~OSMW-3~~					
	~~OSMW-4~~					
	~~BG-DWD~~					
	~~GZ-23D~~					
	~~DUP~~ (PWS)					
09	~~TRIP BLANK~~ TB11182020	11-18-2020	—	LW	PWS	2

Container Type: V
Preservative: B

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	11-18-2020 1945		11/18/20 2130
	11/18/20 2130		11/19/20 0020
	11/19/20 0500		11/19/20 0525

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

ALPHA
GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

December 18, 2020

Mr. Paul W. Scholar
Senior Geologist
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Re: Data Validation Report
441 and 442 Waverly Avenue (#28012)
November Ground Water Samples

Dear Mr. Scholar:

The data usability summary report (DUSR) and QA/QC reviews are attached to this letter for the above referenced project sampling event. The data for Alpha Analytical, SDG number: L2051463 are mostly acceptable with some issues identified and discussed in the DUSR and validation summaries. There are volatile data that are qualified as rejected, unusable (R) in the data pack. The reasons for rejecting the data are outlined in the DUSR and QA/QC review. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Sterling Environmental Engineering, P.C.

Sincerely,
Alpha Geoscience

Donald Anné
Senior Chemist

DCA:dca
attachments

z:\projects\2009\09600 - 09620\09619-waverly ave\2020\waverly ave-203.ltr.docx

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L2051463

6 Ground Water Samples, 1 Field Duplicate,
1 Equipment Blank, and 1 Trip Blank
Collected November 18, 2020

Prepared by: Donald Anné
December 18, 2020

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained volatile results for 6 ground water samples, 1 field duplicate, and 1 trip blank; 1,4-dioxane results for 3 ground water samples and 1 field duplicate; and PFAS results for 3 ground water samples, 1 field duplicate, and 2 equipment blank.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The positive volatile result for vinyl chloride was qualified as estimated (J) in sample GZ-21D because the relative percent difference for vinyl chloride was above allowable maximum in the associated aqueous LCS/LCSD.

- The positive volatile result for cyclohexane was qualified as estimated (J) in sample OSMW-4 because the relative percent difference for cyclohexane was above allowable maximum in the associated aqueous LCS/LCSD.

- The "not detected" volatile results for 1,4-dioxane were qualified as "rejected, unusable" (R) in samples OSMW-3, OSMW-4, GZ-21D, and B6-OWD because the RRF for 1,4-dioxane was below the allowable minimum in the associated continuing calibration.

- The "not detected" PFAS results for NMeFOSAA qualified as "estimated" (UJ) in samples OSMW-3, GZ-22D, GZ-23D, and DUP11182020 because percent recovery for br-NMeFOSAA (part of the total) was below QC limits, but not below 10% in the associated continuing calibration.

679 Plank Road ● Clifton Park, New York 12065 ● (518) 348-6995 ● Fax (518) 348-6966
www.alphageoscience.com

All data that are not qualified rejected, unusable (R) are considered usable with estimated (UJ or J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8260C Volatiles Data
for Alpha Analytical, SDG Number: L2051463

6 Ground Water Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected November 18, 2020

Prepared by: Donald Anné
December 18, 2020

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for bromomethane, chloroethane, acetone, 2-butanone, trichloroethene, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 for ELAINE on 09-29-20. The average RRFs for acetone, 2-butanone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 for VOA122 on 11-18-20. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for bromomethane, acetone, methyl acetate, 2-butanone, trichloroethene, 4-methyl-2-pentanone, 2-hexanone, and 1,2-dibromo-3-chloropropane were below the method minimums, but not below 0.010 on 11-23-20 (VE201123N01). The RRFs for bromomethane, acetone, 2-butanone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 on 11-24-20 (V22201124A01). The %Ds for freon 113, acetone, methyl acetate, methyl cyclohexane, 2-hexanone, and 1,2-dibromo-3-chloropropane were above the method maximum on 11-23-20 (VE201123N01). The %Ds for bromomethane and acetone were above the method maximum on 11-24-20 (V22201124A01). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The RRF for 1,4-dioxane was below the allowable minimums (0.001) on 11-23-20 (VE201123N01). Positive results for 1,4-dioxane should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated samples.

679 Plank Road ● Clifton Park, New York 12065 ● (518) 348-6995 ● Fax (518) 348-6966
www.alphageoscience.com

The %Ds for methyl acetate, 2-hexanone, 1,2-dibromo-3-chloropropane, and 1,2,3-trichlorobenzene were above the allowable maximum (25%) on 11-23-20 (VE201123N01). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample GZ-22D.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits, but the relative percent differences (RPDs) for vinyl chloride, chloroethane, and cyclohexane were above the allowable maximum for aqueous samples WG1438001-3/4. The %Rs for target compounds were within QC limits, but the RPD for acetone was above the allowable maximum for aqueous samples WG1438001-3/4. Positive results for these compounds should be considered estimated (J) in associated aqueous samples.

Field Duplicates: The relative percent differences for applicable compounds were below the allowable maximum (20%) for aqueous field duplicate pair GZ-22D/DUP11182020 (attached table), as required.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

ALPHA
GEOSCIENCE
Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8270D SIM 1,4-Dioxane
Data for Alpha Analytical, SDG Number: L2051463

3 Ground Water Samples and 1 Field Duplicate
Collected November18, 2020

Prepared by: Donald Anné
December 18, 2020

Holding Times: The samples were extracted and analyzed within USEPA SW-846 holding times.

Initial Calibration: The average RRF for 1,4-dioxane was above the allowable minimum (0.010) and the %RSD was below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for 1,4-dioxane were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analysis of the method blank reported 1,4-dioxane as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and equipment blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent difference for 1,4-dioxane was below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample GZ-22D.

Laboratory Control Sample: The relative percent difference for 1,4-dioxane was below the allowable maximum and the percent recoveries were within QC limits for aqueous samples WG1436803-2/3.

Field Duplicates: The relative percent difference for 1,4-dioxane was below the allowable maximum for aqueous field duplicate pair GZ-22D/DUP11182020 (attached table), as required.

Compound ID: Checked 1,4-dioxane results were within quantitation limits.

z:\projects\2009\09600 - 09620\09619-waverly ave\2020\l2051463.dix.docx

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 537 (Modified) PFAS Data
for Alpha Analytical Labs SDG Number: L2051463

3 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, and 1 Equipment Blank
Collected November 18, 2020

Prepared by: Donald Anné
December 18, 2020

Holding Times: Samples were extracted and analyzed within USEPA holding time.

Initial Calibration: The %RSDs for applicable PFASs were below the method maximum (20%) or the R or R squared were above the method minimums, as required.

Continuing Calibration: The percent recovery for br-NMeFOSAA was below QC limits, but not below 10% on 12-03-20 (WG1440658-3). Positive and "not detected" results for NMeFOSAA should be considered estimated (J, UJ) in associated samples.

The percent recoveries for 8:2FTS and PFTA were above QC limits on 12-04-20 (WG1440658-4). Positive results for 8:2FTS and PFTA should be considered estimated (J) in associated samples.

Blanks: The analyses of method and equipment blanks reported target PFAS as not detected.

Surrogate Recovery: Two of eighteen (S8, S12) surrogate recoveries for samples OSMW-3, GZ-23D, and DUP11182020 were above QC limits. One of eighteen (S12) surrogate recoveries for sample GZ-22D was above QC limits. Positive results associated with surrogates outside QC limits should be considered estimated (J) in these samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target PFAS were below the allowable maximum and the percent recoveries within QC limits for aqueous MS/MSD sample GZ-22D.

Laboratory Control Sample: The relative percent differences for target PFAS were below the allowable maximum and the percent recoveries were within QC limits for aqueous samples WG1440357-2/3.

679 Plank Road ● Clifton Park, New York 12065 ● (518) 348-6995 ● Fax (518) 348-6966
www.alphageoscience.com

Field Duplicates: The relative percent differences for applicable PFAS were below the allowable maximum (20%) for aqueous field duplicate pair GZ-22D/DUP11182020 (attached table), as required.

Compound ID: Checked compound and surrogate results were within LC quantitation limits.

Volatiles Data

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2051463

S1= GZ-22D **S2=** DUP11182020

Analyte	S1	S2	RPD (%)
1,2-Dichloroethane	19	19	0%
Benzene	2.7	2.7	0%
Vinyl chloride	5.6	5.7	2%
trans-1,2-Dichloroethene	78	78	0%
Trichloroethene	**0.56**	**0.48**	NC
Methyl tert butyl ether	**1.8**	**1.6**	NC
cis-1,2-Dichloroethene	8.6	7.9	8%
Cyclohexane	**2.0**	**1.8**	NC
Methyl cyclohexane	**1.0**	**1.0**	NC

* RPD is above the allowable maximum (20%)

Results are in units of ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

1,4-Dioxane (SIM) Data

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2051463

S1= GZ-22D **S2=** DUP11182020

Analyte	S1	S2	RPD (%)
1,4-Dioxane	3180	3270	3%

* RPD is above the allowable maximum (20%)

Results are in units of ng/L.

Bold numbers were values that are below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

EPA Method 537 PFC Data

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2051463

S1= GZ-22D **S2=** DUP11182020

Analyte	S1	S2	RPD (%)
Perfluorobutanoic acid (PFBA)	3.8	3.65	4%
Perfluoropentanoic acid (PFPeA)	4.33	3.90	10%
Perfluorobutanesulfonic Acid (PFBS)	**1.89**	**1.77**	NC
Perfluorohexanoic Acid (PFHxA)	2.57	2.46	4%
Perfluoroheptanoic acid (PFHpA)	**1.78**	**1.70**	NC
Perfluorohexanesulfonic Acid (PFHxS)	9.63	9.42	2%
Perfluorooctanoic Acid (PFOA)	6.26	6.31	1%
Perfluorononanoic Acid (PFNA)	**0.570**	**0.479**	NC
Perfluorooctanesulfonic Acid (PFOS)	8.68	8.93	3%
PFOA/PFOS, Total	14.9	15.2	2%

* RPD is above the allowable maximum (20%)

All results are in ng/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-01D	Date Collected	: 11/18/20 15:45
Client ID	: OSMW-3	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/23/20 23:13
Sample Matrix	: WATER	Dilution Factor	: 20
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N16	Instrument ID	: ELAINE
Sample Amount	: 0.5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	50	14.	U
75-34-3	1,1-Dichloroethane	ND	50	14.	U
67-66-3	Chloroform	ND	50	14.	U
56-23-5	Carbon tetrachloride	ND	10	2.7	U
78-87-5	1,2-Dichloropropane	ND	20	2.7	U
124-48-1	Dibromochloromethane	ND	10	3.0	U
79-00-5	1,1,2-Trichloroethane	ND	30	10.	U
127-18-4	Tetrachloroethene	2200	10	3.6	
108-90-7	Chlorobenzene	ND	50	14.	U
75-69-4	Trichlorofluoromethane	ND	50	14.	U
107-06-2	1,2-Dichloroethane	4.7	10	2.6	J
71-55-6	1,1,1-Trichloroethane	ND	50	14.	U
75-27-4	Bromodichloromethane	ND	10	3.8	U
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.3	U
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	U
75-25-2	Bromoform	ND	40	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.3	U
71-43-2	Benzene	ND	10	3.2	U
108-88-3	Toluene	ND	50	14.	U
100-41-4	Ethylbenzene	ND	50	14.	U
74-87-3	Chloromethane	ND	50	14.	U
74-83-9	Bromomethane	ND	50	14.	U
75-01-4	Vinyl chloride	ND	20	1.4	U
75-00-3	Chloroethane	ND	50	14.	U
75-35-4	1,1-Dichloroethene	ND	10	3.4	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-01D	Date Collected	: 11/18/20 15:45
Client ID	: OSMW-3	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/23/20 23:13
Sample Matrix	: WATER	Dilution Factor	: 20
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N16	Instrument ID	: ELAINE
Sample Amount	: 0.5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	50	14.	U
79-01-6	Trichloroethene	290	10	3.5	
95-50-1	1,2-Dichlorobenzene	ND	50	14.	U
541-73-1	1,3-Dichlorobenzene	ND	50	14.	U
106-46-7	1,4-Dichlorobenzene	ND	50	14.	U
1634-04-4	Methyl tert butyl ether	ND	50	14.	U
179601-23-1	p/m-Xylene	ND	50	14.	U
95-47-6	o-Xylene	ND	50	14.	U
156-59-2	cis-1,2-Dichloroethene	42	50	14.	J
100-42-5	Styrene	ND	50	14.	U
75-71-8	Dichlorodifluoromethane	ND	100	20.	U
67-64-1	Acetone	ND	100	29.	U
75-15-0	Carbon disulfide	ND	100	20.	U
78-93-3	2-Butanone	ND	100	39.	U
108-10-1	4-Methyl-2-pentanone	ND	100	20.	U
591-78-6	2-Hexanone	ND	100	20.	U
74-97-5	Bromochloromethane	ND	50	14.	U
106-93-4	1,2-Dibromoethane	ND	40	13.	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	14.	U
98-82-8	Isopropylbenzene	ND	50	14.	U
87-61-6	1,2,3-Trichlorobenzene	ND	50	14.	U
120-82-1	1,2,4-Trichlorobenzene	ND	50	14.	U
79-20-9	Methyl Acetate	ND	40	4.7	U
110-82-7	Cyclohexane	ND	200	5.4	U
123-91-1	1,4-Dioxane	ND	5000	1200	U R

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-01D	**Date Collected**	: 11/18/20 15:45
Client ID	: OSMW-3	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/23/20 23:13
Sample Matrix	: WATER	**Dilution Factor**	: 20
Analytical Method	: 1,8260C	**Analyst**	: PD
Lab File ID	: VE201123N16	**Instrument ID**	: ELAINE
Sample Amount	: 0.5 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	50	14.	U
108-87-2	Methyl cyclohexane	ND	200	7.9	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-02	Date Collected	: 11/18/20 12:20
Client ID	: GZ-22D	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 18:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A23	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	19	0.50	0.13	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	2.7	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	5.6	1.0	0.07	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-02	Date Collected	: 11/18/20 12:20
Client ID	: GZ-22D	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 18:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A23	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	78	2.5	0.70	
79-01-6	Trichloroethene	0.56	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	1.8	2.5	0.70	J
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	8.6	2.5	0.70	
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	2.0	10	0.27	J
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-02	**Date Collected**	: 11/18/20 12:20
Client ID	: GZ-22D	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/24/20 18:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: AJK
Lab File ID	: V22201124A23	**Instrument ID**	: VOA122
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	1.0	10	0.40	J

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-03	Date Collected	: 11/18/20 15:00
Client ID	: GZ-23D	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 19:16
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A25	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	19	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	1.1	0.50	0.13	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	5.3	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	5.6	1.0	0.07	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	0.18	0.50	0.17	J

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-03	Date Collected	: 11/18/20 15:00
Client ID	: GZ-23D	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 19:16
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A25	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	15	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	1.2	2.5	0.70	J
156-59-2	cis-1,2-Dichloroethene	23	2.5	0.70	
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-03	**Date Collected**	: 11/18/20 15:00
Client ID	: GZ-23D	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/24/20 19:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: AJK
Lab File ID	: V22201124A25	**Instrument ID**	: VOA122
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-04	Date Collected	: 11/18/20 00:00
Client ID	: DUP11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 18:52
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A24	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	19	0.50	0.13	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	2.7	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	5.7	1.0	0.07	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-04	Date Collected	: 11/18/20 00:00
Client ID	: DUP11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 18:52
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A24	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	78	2.5	0.70	
79-01-6	Trichloroethene	0.48	0.50	0.18	J
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	1.6	2.5	0.70	J
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	7.9	2.5	0.70	
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	1.8	10	0.27	J
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-04	Date Collected	: 11/18/20 00:00
Client ID	: DUP11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 18:52
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A24	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	1.0	10	0.40	J

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-06D	Date Collected	: 11/18/20 16:25
Client ID	: B6-OWD	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 02:02
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N24	Instrument ID	: ELAINE
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	25	7.0	U
75-34-3	1,1-Dichloroethane	ND	25	7.0	U
67-66-3	Chloroform	ND	25	7.0	U
56-23-5	Carbon tetrachloride	ND	5.0	1.3	U
78-87-5	1,2-Dichloropropane	ND	10	1.4	U
124-48-1	Dibromochloromethane	ND	5.0	1.5	U
79-00-5	1,1,2-Trichloroethane	ND	15	5.0	U
127-18-4	Tetrachloroethene	580	5.0	1.8	
108-90-7	Chlorobenzene	ND	25	7.0	U
75-69-4	Trichlorofluoromethane	ND	25	7.0	U
107-06-2	1,2-Dichloroethane	9.7	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	ND	25	7.0	U
75-27-4	Bromodichloromethane	ND	5.0	1.9	U
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.6	U
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.4	U
75-25-2	Bromoform	ND	20	6.5	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.7	U
71-43-2	Benzene	ND	5.0	1.6	U
108-88-3	Toluene	ND	25	7.0	U
100-41-4	Ethylbenzene	ND	25	7.0	U
74-87-3	Chloromethane	ND	25	7.0	U
74-83-9	Bromomethane	ND	25	7.0	U
75-01-4	Vinyl chloride	ND	10	0.71	U
75-00-3	Chloroethane	ND	25	7.0	U
75-35-4	1,1-Dichloroethene	ND	5.0	1.7	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-06D	Date Collected	: 11/18/20 16:25
Client ID	: B6-OWD	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 02:02
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N24	Instrument ID	: ELAINE
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	26	25	7.0	
79-01-6	Trichloroethene	1400	5.0	1.8	
95-50-1	1,2-Dichlorobenzene	ND	25	7.0	U
541-73-1	1,3-Dichlorobenzene	ND	25	7.0	U
106-46-7	1,4-Dichlorobenzene	ND	25	7.0	U
1634-04-4	Methyl tert butyl ether	ND	25	7.0	U
179601-23-1	p/m-Xylene	ND	25	7.0	U
95-47-6	o-Xylene	ND	25	7.0	U
156-59-2	cis-1,2-Dichloroethene	760	25	7.0	
100-42-5	Styrene	ND	25	7.0	U
75-71-8	Dichlorodifluoromethane	ND	50	10.	U
67-64-1	Acetone	ND	50	15.	U
75-15-0	Carbon disulfide	ND	50	10.	U
78-93-3	2-Butanone	ND	50	19.	U
108-10-1	4-Methyl-2-pentanone	ND	50	10.	U
591-78-6	2-Hexanone	ND	50	10.	U
74-97-5	Bromochloromethane	ND	25	7.0	U
106-93-4	1,2-Dibromoethane	ND	20	6.5	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	7.0	U
98-82-8	Isopropylbenzene	ND	25	7.0	U
87-61-6	1,2,3-Trichlorobenzene	ND	25	7.0	U
120-82-1	1,2,4-Trichlorobenzene	ND	25	7.0	U
79-20-9	Methyl Acetate	ND	20	2.3	U
110-82-7	Cyclohexane	ND	100	2.7	U
123-91-1	1,4-Dioxane	ND	2500	610	U R

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-06D	Date Collected	: 11/18/20 16:25
Client ID	: B6-OWD	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 02:02
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N24	Instrument ID	: ELAINE
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
76-13-1	Freon-113	ND	25	7.0	U
108-87-2	Methyl cyclohexane	ND	100	4.0	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-07	Date Collected	: 11/18/20 13:55
Client ID	: GZ-21D	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 01:41
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N23	Instrument ID	: ELAINE
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	110	0.50	0.13	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	0.27	0.50	0.16	J
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	2.1	1.0	0.07	J
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-07	Date Collected	: 11/18/20 13:55
Client ID	: GZ-21D	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 01:41
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N23	Instrument ID	: ELAINE
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	1.9	2.5	0.70	J
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	0.74	2.5	0.70	J
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	140	2.5	0.70	
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U R

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-07	**Date Collected**	: 11/18/20 13:55
Client ID	: GZ-21D	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/24/20 01:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PD
Lab File ID	: VE201123N23	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-08	Date Collected	: 11/18/20 11:10
Client ID	: OSMW-4	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 01:20
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N22	Instrument ID	: ELAINE
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-08	Date Collected	: 11/18/20 11:10
Client ID	: OSMW-4	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 01:20
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PD
Lab File ID	: VE201123N22	Instrument ID	: ELAINE
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.39	0.50	0.18	J
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	4.1	10	0.27	J J
123-91-1	1,4-Dioxane	ND	250	61.	U R

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-08	**Date Collected**	: 11/18/20 11:10
Client ID	: OSMW-4	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/24/20 01:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PD
Lab File ID	: VE201123N22	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	1.3	10	0.40	J

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-09	Date Collected	: 11/18/20 00:00
Client ID	: TB11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 17:13
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A20	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-09	Date Collected	: 11/18/20 00:00
Client ID	: TB11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 17:13
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V22201124A20	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-09	**Date Collected**	: 11/18/20 00:00
Client ID	: TB11182020	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/24/20 17:13
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: AJK
Lab File ID	: V22201124A20	**Instrument ID**	: VOA122
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-01	**Date Collected**	: 11/18/20 15:45
Client ID	: OSMW-3	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/24/20 00:13
Sample Matrix	: WATER	**Date Extracted**	: 11/20/20
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: F2211232037	**Analyst**	: PS
Sample Amount	: 250 ml	**Instrument ID**	: PAH22
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 2500 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
123-91-1	1,4-Dioxane	2590	150	33.9	

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-02	**Date Collected**	: 11/18/20 12:20
Client ID	: GZ-22D	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/24/20 11:04
Sample Matrix	: WATER	**Date Extracted**	: 11/20/20
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: F2211242006	**Analyst**	: PS
Sample Amount	: 250 ml	**Instrument ID**	: PAH22
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 2500 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
123-91-1	1,4-Dioxane	3180	150	33.9	

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-03	**Date Collected**	: 11/18/20 15:00
Client ID	: GZ-23D	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 11/24/20 01:49
Sample Matrix	: WATER	**Date Extracted**	: 11/20/20
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: F2211232041	**Analyst**	: PS
Sample Amount	: 270 ml	**Instrument ID**	: PAH22
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 2500 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
123-91-1	1,4-Dioxane	407.	139	31.4	

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-04	Date Collected	: 11/18/20 00:00
Client ID	: DUP11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 11/24/20 02:13
Sample Matrix	: WATER	Date Extracted	: 11/20/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F2211232042	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: PAH22
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	3270	150	33.9	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-01	Date Collected	: 11/18/20 15:45
Client ID	: OSMW-3	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 12/04/20 01:24
Sample Matrix	: WATER	Date Extracted	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I33385	Analyst	: JW
Sample Amount	: 266.26 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	5.32	1.88	0.383	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	7.57	1.88	0.372	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	1.97	1.88	0.223	
307-24-4	Perfluorohexanoic Acid (PFHxA)	4.04	1.88	0.308	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	2.72	1.88	0.211	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	3.54	1.88	0.353	
335-67-1	Perfluorooctanoic Acid (PFOA)	8.30	1.88	0.222	F
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.88	1.25	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.88	0.646	U
375-95-1	Perfluorononanoic Acid (PFNA)	0.747	1.88	0.293	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	6.90	1.88	0.473	F
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.88	0.285	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.88	1.14	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.88	0.608	U UJ
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.88	0.244	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.88	0.920	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.88	0.544	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.88	0.755	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-01	**Date Collected**	: 11/18/20 15:45
Client ID	: OSMW-3	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 12/04/20 01:24
Sample Matrix	: WATER	**Date Extracted**	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	**Dilution Factor**	: 1
Lab File ID	: I33385	**Analyst**	: JW
Sample Amount	: 266.26 g	**Instrument ID**	: LCMS02
Extraction Method	: ALPHA 23528	**GC Column**	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 3 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.88	0.349	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.88	0.307	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.88	0.233	U
NONE	PFOA/PFOS, Total	15.2	1.88	0.222	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-02	Date Collected	: 11/18/20 12:20
Client ID	: GZ-22D	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 12/04/20 01:41
Sample Matrix	: WATER	Date Extracted	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I33386	Analyst	: JW
Sample Amount	: 262.92 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	3.80	1.90	0.388	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	4.33	1.90	0.376	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	1.89	1.90	0.226	J
307-24-4	Perfluorohexanoic Acid (PFHxA)	2.57	1.90	0.312	F
375-85-9	Perfluoroheptanoic Acid (PFHpA)	1.78	1.90	0.214	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	9.63	1.90	0.358	
335-67-1	Perfluorooctanoic Acid (PFOA)	6.26	1.90	0.224	F
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.90	1.27	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.90	0.654	U
375-95-1	Perfluorononanoic Acid (PFNA)	0.570	1.90	0.297	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	8.68	1.90	0.479	F
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.90	0.289	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.90	1.15	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.90	0.616	U UJ
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.90	0.247	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.90	0.932	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.90	0.551	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.90	0.764	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-02	**Date Collected**	: 11/18/20 12:20
Client ID	: GZ-22D	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 12/04/20 01:41
Sample Matrix	: WATER	**Date Extracted**	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	**Dilution Factor**	: 1
Lab File ID	: I33386	**Analyst**	: JW
Sample Amount	: 262.92 g	**Instrument ID**	: LCMS02
Extraction Method	: ALPHA 23528	**GC Column**	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 3 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.90	0.354	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.90	0.311	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.90	0.236	U
NONE	PFOA/PFOS, Total	14.9	1.90	0.224	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-03	Date Collected	: 11/18/20 15:00
Client ID	: GZ-23D	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 12/04/20 02:31
Sample Matrix	: WATER	Date Extracted	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I33389	Analyst	: JW
Sample Amount	: 272.45 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	10.0	1.84	0.374	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	33.0	1.84	0.363	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	3.09	1.84	0.218	
307-24-4	Perfluorohexanoic Acid (PFHxA)	18.2	1.84	0.301	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	6.82	1.84	0.207	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	2.86	1.84	0.345	
335-67-1	Perfluorooctanoic Acid (PFOA)	8.18	1.84	0.216	F
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.84	1.22	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.84	0.631	U
375-95-1	Perfluorononanoic Acid (PFNA)	1.63	1.84	0.286	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	29.7	1.84	0.462	F
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.84	0.279	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.84	1.11	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.84	0.595	U UJ
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.84	0.238	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.84	0.899	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.84	0.532	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.84	0.738	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-03	**Date Collected**	: 11/18/20 15:00
Client ID	: GZ-23D	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 12/04/20 02:31
Sample Matrix	: WATER	**Date Extracted**	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	**Dilution Factor**	: 1
Lab File ID	: I33389	**Analyst**	: JW
Sample Amount	: 272.45 g	**Instrument ID**	: LCMS02
Extraction Method	: ALPHA 23528	**GC Column**	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 3 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.84	0.341	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.84	0.300	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.84	0.228	U
NONE	PFOA/PFOS, Total	37.9	1.84	0.216	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-04	Date Collected	: 11/18/20 00:00
Client ID	: DUP11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 12/04/20 02:47
Sample Matrix	: WATER	Date Extracted	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I33390	Analyst	: JW
Sample Amount	: 277.39 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	3.65	1.80	0.368	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	3.90	1.80	0.357	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	1.77	1.80	0.214	J
307-24-4	Perfluorohexanoic Acid (PFHxA)	2.46	1.80	0.296	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	1.70	1.80	0.203	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	9.42	1.80	0.339	
335-67-1	Perfluorooctanoic Acid (PFOA)	6.31	1.80	0.213	F
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.80	1.20	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.80	0.620	U
375-95-1	Perfluorononanoic Acid (PFNA)	0.479	1.80	0.281	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	8.93	1.80	0.454	F
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.80	0.274	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.80	1.09	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.80	0.584	U UJ
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.80	0.234	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.80	0.883	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.80	0.523	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.80	0.725	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-04	Date Collected	: 11/18/20 00:00
Client ID	: DUP11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 12/04/20 02:47
Sample Matrix	: WATER	Date Extracted	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I33390	Analyst	: JW
Sample Amount	: 277.39 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.80	0.335	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.80	0.295	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.80	0.224	U
NONE	PFOA/PFOS, Total	15.2	1.80	0.213	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Lab ID	: L2051463-05	Date Collected	: 11/18/20 11:25
Client ID	: EB11182020	Date Received	: 11/18/20
Sample Location	: MAMARONECK, NY	Date Analyzed	: 12/04/20 03:20
Sample Matrix	: WATER	Date Extracted	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I33392	Analyst	: JW
Sample Amount	: 277.39 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.80	0.368	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.80	0.357	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.80	0.214	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	ND	1.80	0.296	U
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.80	0.203	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.80	0.339	U
335-67-1	Perfluorooctanoic Acid (PFOA)	ND	1.80	0.213	U
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.80	1.20	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.80	0.620	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.80	0.281	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.80	0.454	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.80	0.274	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.80	1.09	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.80	0.584	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.80	0.234	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.80	0.883	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.80	0.523	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.80	0.725	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Lab ID	: L2051463-05	**Date Collected**	: 11/18/20 11:25
Client ID	: EB11182020	**Date Received**	: 11/18/20
Sample Location	: MAMARONECK, NY	**Date Analyzed**	: 12/04/20 03:20
Sample Matrix	: WATER	**Date Extracted**	: 12/02/20
Analytical Method	: 134,LCMSMS-ID	**Dilution Factor**	: 1
Lab File ID	: I33392	**Analyst**	: JW
Sample Amount	: 277.39 g	**Instrument ID**	: LCMS02
Extraction Method	: ALPHA 23528	**GC Column**	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 3 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.80	0.335	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.80	0.295	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.80	0.224	U
NONE	PFOA/PFOS, Total	ND	1.80	0.213	U

Surrogate (Extracted Internal Standard) Recovery Summary
Form 2
Semivolatiles

Client: Sterling Environmental Engineering
Project Name: FORMER M. ARGUESO

Lab Number: L2051463
Project Number: 28012
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 ()	S2 ()	S3 ()	S4 ()	S5 ()	S6 ()	S7 ()
OSMW-3 (L2051463-01)	95	105	101	88	101	116	96
GZ-22D (L2051463-02)	89	97	100	82	99	114	92
GZ-23D (L2051463-03)	89	76	89	72	90	103	88
DUP1182020 (L2051463-04)	97	104	108	90	107	121	97
EB11182020 (L2051463-05)	101	137	109	106	112	119	101
WG1440357-1BLANK	99	129	104	100	107	116	97
WG1440357-2LCS	100	129	107	102	107	113	100
WG1440357-3LCSD	99	126	101	102	107	112	100
GZ-22DMS	92	100	100	85	101	115	94
GZ-22DMSD	97	105	105	89	106	122	99

QC LIMITS

(2-156) S1 = PERFLUORO[13C4]BUTANOIC ACID (MPFBA)
(16-173) S2 = PERFLUORO[13C5]PENTANOIC ACID (M5PFPEA)
(31-159) S3 = PERFLUORO[2,3,4-13C3]BUTANESULFONIC ACID (M3PFBS)
(21-145) S4 = PERFLUORO[1,2,3,4,6-13C5]HEXANOIC ACID (M5PFHXA)
(30-139) S5 = PERFLUORO[1,2,3,4-13C4]HEPTANOIC ACID (M4PFHPA)
(47-153) S6 = PERFLUORO[1,2,3-13C3]HEXANESULFONIC ACID (M3PFHXS)
(47-153) S7 = PERFLUORO[13C8]OCTANOIC ACID (M8PFOA)

* Values outside of QC limits

Surrogate (Extracted Internal Standard) Recovery Summary
Form 2
Semivolatiles

Client: Sterling Environmental Engineering
Project Name: FORMER M. ARGUESO

Lab Number: L2051463
Project Number: 28012
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S8 ()	S9 ()	S10 ()	S11 ()	S12 ()	S13 ()	S14 ()
OSMW-3 (L2051463-01)	298*	98	97	88	266*	89	90
GZ-22D (L2051463-02)	241	91	89	80	181*	70	86
GZ-23D (L2051463-03)	477*	91	83	76	431*	152	83
DUP1182020 (L2051463-04)	265*	96	86	81	173*	68	82
EB11182020 (L2051463-05)	149	106	102	97	167	84	105
WG1440357-1BLANK	121	102	101	95	139	107	106
WG1440357-2LCS	139	103	100	95	148	110	108
WG1440357-3LCSD	127	104	99	98	145	99	106
GZ-22DMS	241	93	89	85	175*	73	89
GZ-22DMSD	257*	98	94	92	187*	81	96

QC LIMITS

(1-244) S8 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]OCTANESULFONIC ACID (M2-6:2FTS)
(34-146) S9 = PERFLUORO[13C9]NONANOIC ACID (M9PFNA)
(42-146) S10 = PERFLUORO[13C8]OCTANESULFONIC ACID (M8PFOS)
(38-144) S11 = PERFLUORO[1,2,3,4,5,6-13C6]DECANOIC ACID (M6PFDA)
(7-170) S12 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]DECANESULFONIC ACID (M2-8:2FTS)
(1-181) S13 = N-DEUTERIOMETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D3-NMEFOSAA)
(1-181) S14 = PERFLUORO[1,2,3,4,5,6,7-13C7]UNDECANOIC ACID (M7-PFUDA)

*** Values outside of QC limits**

Surrogate (Extracted Internal Standard) Recovery Summary
Form 2
Semivolatiles

Client: Sterling Environmental Engineering
Project Name: FORMER M. ARGUESO

Lab Number: L2051463
Project Number: 28012
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S15 ()	S16 ()	S17 ()	S18 ()	S19 ()	S20 ()	S21 ()	TOT OUT
OSMW-3 (L2051463-01)	14	74	84	62	--	--	--	2
GZ-22D (L2051463-02)	12	63	83	57	--	--	--	1
GZ-23D (L2051463-03)	28	102	82	59	--	--	--	2
DUP1182020 (L2051463-04)	11	65	83	57	--	--	--	2
EB11182020 (L2051463-05)	35	83	103	67	--	--	--	0
WG1440357-1BLANK	29	93	108	72	--	--	--	0
WG1440357-2LCS	25	85	109	73	--	--	--	0
WG1440357-3LCSD	32	90	112	74	--	--	--	0
GZ-22DMS	8	67	83	60	--	--	--	1
GZ-22DMSD	10	73	95	62	--	--	--	2

QC LIMITS

(1-87) S15 = PERFLUORO[13C8]OCTANESULFONAMIDE (M8FOSA)
(23-146) S16 = N-DEUTERIOETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D5-NETFOSAA)
(24-161) S17 = PERFLUORO[1,2-13C2]DODECANOIC ACID (MPFDOA)
(33-143) S18 = PERFLUORO[1,2-13C2]TETRADECANOIC ACID (M2PFTEDA)

* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Sterling Environmental Engineering		Lab Number	: L2051463	
Project Name	: FORMER M. ARGUESO		Project Number	: 28012	
Instrument ID	: LCMS02		Calibration Date	: 12/03/20 22:06	
Lab File ID	: I33373		Init. Calib. Date(s)	: 10/27/20	10/27/20
Sample No	: WG1440658-3		Init. Calib. Times	: 17:40	19:19
Channel	:				

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluorobutanoic Acid (PFBA)	0.444	0.500	88.7	50-150
Perfluoropentanoic Acid (PFPeA)	0.515	0.500	102.9	50-150
Perfluorobutanesulfonic Acid (PFBS)	0.415	0.440	93.7	50-150
Perfluorohexanoic Acid (PFHxA)	0.501	0.500	100.2	50-150
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	0.562	0.470	120.3	50-150
Perfluoropentanesulfonic Acid (PFPeS)	0.432	0.470	91.9	50-150
Perfluoroheptanoic Acid (PFHpA)	0.455	0.500	91.1	50-150
Perfluorohexanesulfonic Acid-Branched (br-PFHxS)	0.068	0.086	80.2	50-150
Perfluorohexanesulfonic Acid-Linear (L-PFHxS)	0.320	0.370	86.5	50-150
Perfluorohexanesulfonic Acid (PFHxS)	0.388	0.460	-	50-150
Perfluorooctanoic Acid-Branched (br-PFOA)			-	50-150
Perfluorooctanoic Acid-Linear (L-PFOA)	0.500		99.9	50-150
Perfluorooctanoic Acid (PFOA)	0.500	0.500	-	50-150
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.391	0.480	82.4	50-150
Perfluoroheptanesulfonic Acid (PFHpS)	0.387	0.480	81.5	50-150
Perfluorononanoic Acid (PFNA)	0.494	0.500	98.8	50-150
Perfluorooctanesulfonic Acid-Branched (br-PFOS)	0.085	0.098	85.4	50-150
Perfluorooctanesulfonic Acid-Linear (L-PFOS)	0.395	0.365	108.2	50-150
Perfluorooctanesulfonic Acid (PFOS)	0.480	0.460	-	50-150
Perfluorodecanoic Acid (PFDA)	0.447	0.500	89.4	50-150
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	0.274	0.480	57.2	50-150
Perfluorononanesulfonic Acid (PFNS)	0.482	0.480	100.5	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.298	0.500	-	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NMeFOSAA)	0.020		16.5*	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NMeFOSAA)	0.278	0.500	73.2	50-150
Perfluoroundecanoic Acid (PFUnA)	0.488	0.500	97.6	50-150
Perfluorodecanesulfonic Acid (PFDS)	0.496	0.480	102.8	50-150
Perfluorooctanesulfonamide (FOSA)	0.499	0.500	99.8	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.464	0.500	-	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NEtFOSAA)	0.090		79.9	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NEtFOSAA)	0.374	0.500	96.6	50-150
Perfluorododecanoic Acid (PFDoA)	0.502	0.500	100.4	50-150
Perfluorotridecanoic Acid (PFTrDA)	0.498	0.500	99.7	50-150
Perfluorotetradecanoic Acid (PFTA)	0.601	0.500	120.3	50-150
Perfluoro[13C4]Butanoic Acid (MPFBA)	9.575	10.000	95.8	50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	11.560	10.000	115.6	50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	8.808	10.000	88.1	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	9.779	10.000	97.8	50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	9.964	10.000	99.6	50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	10.763	10.000	107.6	50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	10.237	10.000	102.4	50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	9.745	10.000	97.5	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	10.112	10.000	101.1	50-150

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Sterling Environmental Engineering		**Lab Number**	: L2051463	
Project Name	: FORMER M. ARGUESO		**Project Number**	: 28012	
Instrument ID	: LCMS02		**Calibration Date**	: 12/03/20 22:06	
Lab File ID	: I33373		**Init. Calib. Date(s)**	: 10/27/20	10/27/20
Sample No	: WG1440658-3		**Init. Calib. Times**	: 17:40	19:19
Channel	:				

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	9.945	10.000	99.4	50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	9.270	10.000	92.7	50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	9.521	10.000	95.2	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	10.323	10.000	103.2	50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	13.239	10.000	132.4	50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	10.333	10.000	103.3	50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	5.174	10.000	51.7	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	9.750	10.000	97.5	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	9.944	10.000	99.4	50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	7.536	10.000	75.4	50-150
M4PFOS	12.580		125.8	
M2PFDA	18.496		185	
M2PFOA	15.760		157.6	
M3PFBA	11.810		118.1	

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Sterling Environmental Engineering	Lab Number	: L2051463
Project Name	: FORMER M. ARGUESO	Project Number	: 28012
Instrument ID	: LCMS02	Calibration Date	: 12/04/20 03:04
Lab File ID	: I33391	Init. Calib. Date(s)	: 10/27/20 10/27/20
Sample No	: WG1440658-4	Init. Calib. Times	: 17:40 19:19
Channel	:		

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluorobutanoic Acid (PFBA)	10.681	10.000	106.8	70-130
Perfluoropentanoic Acid (PFPeA)	11.281	10.000	112.8	70-130
Perfluorobutanesulfonic Acid (PFBS)	10.162	8.850	114.8	70-130
Perfluorohexanoic Acid (PFHxA)	10.689	10.000	106.9	70-130
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	13.730	9.350	146.8*	70-130
Perfluoropentanesulfonic Acid (PFPeS)	10.222	9.400	108.7	70-130
Perfluoroheptanoic Acid (PFHpA)	10.676	10.000	106.8	70-130
Perfluorohexanesulfonic Acid-Branched (br-PFHxS)	1.998	1.720	117.5	70-130
Perfluorohexanesulfonic Acid-Linear (L-PFHxS)	8.040	7.400	108.6	70-130
Perfluorohexanesulfonic Acid (PFHxS)	10.038	9.120	-	70-130
Perfluorooctanoic Acid-Branched (br-PFOA)			-	70-130
Perfluorooctanoic Acid-Linear (L-PFOA)	10.795	10.000	107.9	70-130
Perfluorooctanoic Acid (PFOA)	10.795	10.000	-	70-130
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	11.423	9.500	120.2	70-130
Perfluoroheptanesulfonic Acid (PFHpS)	10.952	9.500	115.3	70-130
Perfluorononanoic Acid (PFNA)	10.574	10.000	105.7	70-130
Perfluorooctanesulfonic Acid-Branched (br-PFOS)	2.499	1.960	125	70-130
Perfluorooctanesulfonic Acid-Linear (L-PFOS)	8.355	7.300	114.4	70-130
Perfluorooctanesulfonic Acid (PFOS)	10.854	9.260	-	70-130
Perfluorodecanoic Acid (PFDA)	10.667	10.000	106.7	70-130
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	12.993	9.600	135.3*	70-130
Perfluorononanesulfonic Acid (PFNS)	12.664	9.600	131.9*	70-130
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	9.673	10.000	-	70-130
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NMeFOSAA)	2.061		85.9	70-130
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NMeFOSAA)	7.612	10.000	100.2	70-130
Perfluoroundecanoic Acid (PFUnA)	11.333	10.000	113.3	70-130
Perfluorodecanesulfonic Acid (PFDS)	12.480	9.650	129.3	70-130
Perfluorooctanesulfonamide (FOSA)	10.446	10.000	104.5	70-130
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	11.004	10.000	-	70-130
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NEtFOSAA)	2.324		103.3	70-130
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NEtFOSAA)	8.680	10.000	112	70-130
Perfluorododecanoic Acid (PFDoA)	10.879	10.000	108.8	70-130
Perfluorotridecanoic Acid (PFTrDA)	10.984	10.000	109.8	70-130
Perfluorotetradecanoic Acid (PFTA)	13.506	10.000	135.1*	70-130
Perfluoro[13C4]Butanoic Acid (MPFBA)	9.081	10.000	90.8	50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	10.499	10.000	105	50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	8.791	10.000	87.9	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	10.645	10.000	106.4	50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	9.772	10.000	97.7	50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	10.244	10.000	102.4	50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	9.983	10.000	99.8	50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	9.215	10.000	92.2	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	10.561	10.000	105.6	50-150

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463	
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012	
Instrument ID	: LCMS02	**Calibration Date**	: 12/04/20 03:04	
Lab File ID	: I33391	**Init. Calib. Date(s)**	: 10/27/20	10/27/20
Sample No	: WG1440658-4	**Init. Calib. Times**	: 17:40	19:19
Channel	:			

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	9.586	10.000	95.9	50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	8.447	10.000	84.5	50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	9.075	10.000	90.7	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	10.986	10.000	109.9	50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	9.152	10.000	91.5	50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	9.799	10.000	98	50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	5.805	10.000	58.1	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	7.768	10.000	77.7	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	9.572	10.000	95.7	50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	7.102	10.000	71	50-150
M4PFOS	13.451		134.5	
M2PFDA	19.494		194.9	
M2PFOA	17.294		172.9	
M3PFBA	14.637		146.4	

* Value outside of QC limits.

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Matrix	: WATER		
LCS Sample ID	: WG1438001-3 **Analysis Date** : 11/23/20 17:50	**File ID**	: VE201123N01
LCSD Sample ID	: WG1438001-4 **Analysis Date** : 11/23/20 18:12	**File ID**	: VE201123N02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	9.7	97	10	8.9	89	9	70-130	20
1,1-Dichloroethane	10	10	100	10	9.0	90	11	70-130	20
Chloroform	10	10	100	10	8.8	88	13	70-130	20
Carbon tetrachloride	10	10	100	10	8.7	87	14	63-132	20
1,2-Dichloropropane	10	9.7	97	10	8.7	87	11	70-130	20
Dibromochloromethane	10	9.0	90	10	8.8	88	2	63-130	20
1,1,2-Trichloroethane	10	9.6	96	10	9.2	92	4	70-130	20
Tetrachloroethene	10	11	110	10	9.0	90	20	70-130	20
Chlorobenzene	10	10	100	10	9.2	92	8	75-130	20
Trichlorofluoromethane	10	11	110	10	9.3	93	17	62-150	20
1,2-Dichloroethane	10	9.3	93	10	8.9	89	4	70-130	20
1,1,1-Trichloroethane	10	10	100	10	8.9	89	12	67-130	20
Bromodichloromethane	10	9.3	93	10	9.0	90	3	67-130	20
trans-1,3-Dichloropropene	10	9.1	91	10	8.5	85	7	70-130	20
cis-1,3-Dichloropropene	10	9.0	90	10	8.2	82	9	70-130	20
Bromoform	10	9.1	91	10	8.8	88	3	54-136	20
1,1,2,2-Tetrachloroethane	10	9.2	92	10	9.0	90	2	67-130	20
Benzene	10	10	100	10	8.9	89	12	70-130	20
Toluene	10	10	100	10	9.1	91	9	70-130	20
Ethylbenzene	10	11	110	10	9.4	94	16	70-130	20
Chloromethane	10	10	100	10	8.4	84	17	64-130	20
Bromomethane	10	9.3	93	10	7.9	79	16	39-139	20
Vinyl chloride	10	11	110	10	8.6	86	24 Q	55-140	20
Chloroethane	10	12	120	10	8.9	89	30 Q	55-138	20
1,1-Dichloroethene	10	10	100	10	8.4	84	17	61-145	20
trans-1,2-Dichloroethene	10	10	100	10	9.2	92	8	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Matrix	: WATER		
LCS Sample ID	: WG1438001-3 **Analysis Date** : 11/23/20 17:50	**File ID**	: VE201123N01
LCSD Sample ID	: WG1438001-4 **Analysis Date** : 11/23/20 18:12	**File ID**	: VE201123N02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Trichloroethene	10	10	100	10	8.8	88	13	70-130	20
1,2-Dichlorobenzene	10	10	100	10	9.5	95	5	70-130	20
1,3-Dichlorobenzene	10	11	110	10	9.5	95	15	70-130	20
1,4-Dichlorobenzene	10	10	100	10	9.2	92	8	70-130	20
Methyl tert butyl ether	10	9.0	90	10	9.2	92	2	63-130	20
p/m-Xylene	20	23	115	20	20	100	14	70-130	20
o-Xylene	20	22	110	20	20	100	10	70-130	20
cis-1,2-Dichloroethene	10	9.4	94	10	8.3	83	12	70-130	20
Styrene	20	22	110	20	20	100	10	70-130	20
Dichlorodifluoromethane	10	11	110	10	9.5	95	15	36-147	20
Acetone	10	7.8	78	10	7.9	79	1	58-148	20
Carbon disulfide	10	10	100	10	8.9	89	12	51-130	20
2-Butanone	10	8.0	80	10	9.4	94	16	63-138	20
4-Methyl-2-pentanone	10	8.0	80	10	8.4	84	5	59-130	20
2-Hexanone	10	7.2	72	10	7.6	76	5	57-130	20
Bromochloromethane	10	9.2	92	10	8.7	87	6	70-130	20
1,2-Dibromoethane	10	9.0	90	10	8.6	86	5	70-130	20
1,2-Dibromo-3-chloropropane	10	6.7	67	10	7.5	75	11	41-144	20
Isopropylbenzene	10	12	120	10	9.9	99	19	70-130	20
1,2,3-Trichlorobenzene	10	7.4	74	10	7.0	70	6	70-130	20
1,2,4-Trichlorobenzene	10	8.3	83	10	7.8	78	6	70-130	20
Methyl Acetate	10	7.4	74	10	7.9	79	7	70-130	20
Cyclohexane	10	12	120	10	9.2	92	26 Q	70-130	20
1,4-Dioxane	500	440	88	500	420	84	5	56-162	20
Freon-113	10	12	120	10	10	100	18	70-130	20
Methyl cyclohexane	10	12	120	10	9.8	98	20	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Matrix	: WATER		
LCS Sample ID	: WG1438122-3	**Analysis Date** : 11/24/20 09:25	**File ID** : V22201124A01
LCSD Sample ID	: WG1438122-4	**Analysis Date** : 11/24/20 09:49	**File ID** : V22201124A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	11	110	10	10	100	10	70-130	20
1,1-Dichloroethane	10	11	110	10	10	100	10	70-130	20
Chloroform	10	11	110	10	10	100	10	70-130	20
Carbon tetrachloride	10	12	120	10	11	110	9	63-132	20
1,2-Dichloropropane	10	10	100	10	10	100	0	70-130	20
Dibromochloromethane	10	10	100	10	10	100	0	63-130	20
1,1,2-Trichloroethane	10	9.6	96	10	9.8	98	2	70-130	20
Tetrachloroethene	10	10	100	10	10	100	0	70-130	20
Chlorobenzene	10	10	100	10	10	100	0	75-130	20
Trichlorofluoromethane	10	11	110	10	11	110	0	62-150	20
1,2-Dichloroethane	10	10	100	10	9.8	98	2	70-130	20
1,1,1-Trichloroethane	10	11	110	10	10	100	10	67-130	20
Bromodichloromethane	10	10	100	10	10	100	0	67-130	20
trans-1,3-Dichloropropene	10	10	100	10	9.8	98	2	70-130	20
cis-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
Bromoform	10	10	100	10	10	100	0	54-136	20
1,1,2,2-Tetrachloroethane	10	9.1	91	10	9.4	94	3	67-130	20
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	9.7	97	10	10	100	3	70-130	20
Ethylbenzene	10	9.9	99	10	10	100	1	70-130	20
Chloromethane	10	12	120	10	10	100	18	64-130	20
Bromomethane	10	7.6	76	10	7.6	76	0	39-139	20
Vinyl chloride	10	11	110	10	9.9	99	11	55-140	20
Chloroethane	10	11	110	10	10	100	10	55-138	20
1,1-Dichloroethene	10	11	110	10	11	110	0	61-145	20
trans-1,2-Dichloroethene	10	11	110	10	10	100	10	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Matrix	: WATER		
LCS Sample ID	: WG1438122-3	**Analysis Date** : 11/24/20 09:25	**File ID** : V22201124A01
LCSD Sample ID	: WG1438122-4	**Analysis Date** : 11/24/20 09:49	**File ID** : V22201124A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Trichloroethene	10	10	100	10	10	100	0	70-130	20
1,2-Dichlorobenzene	10	9.5	95	10	9.8	98	3	70-130	20
1,3-Dichlorobenzene	10	9.7	97	10	9.8	98	1	70-130	20
1,4-Dichlorobenzene	10	9.6	96	10	9.8	98	2	70-130	20
Methyl tert butyl ether	10	10	100	10	10	100	0	63-130	20
p/m-Xylene	20	20	100	20	20	100	0	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
cis-1,2-Dichloroethene	10	11	110	10	10	100	10	70-130	20
Styrene	20	20	100	20	20	100	0	70-130	20
Dichlorodifluoromethane	10	10	100	10	9.8	98	2	36-147	20
Acetone	10	12	120	10	8.3	83	36 Q	58-148	20
Carbon disulfide	10	11	110	10	10	100	10	51-130	20
2-Butanone	10	11	110	10	9.6	96	14	63-138	20
4-Methyl-2-pentanone	10	9.6	96	10	9.6	96	0	59-130	20
2-Hexanone	10	9.5	95	10	9.0	90	5	57-130	20
Bromochloromethane	10	12	120	10	11	110	9	70-130	20
1,2-Dibromoethane	10	9.6	96	10	9.9	99	3	70-130	20
1,2-Dibromo-3-chloropropane	10	9.6	96	10	9.3	93	3	41-144	20
Isopropylbenzene	10	9.3	93	10	9.9	99	6	70-130	20
1,2,3-Trichlorobenzene	10	9.5	95	10	10	100	5	70-130	20
1,2,4-Trichlorobenzene	10	9.4	94	10	9.6	96	2	70-130	20
Methyl Acetate	10	10	100	10	9.7	97	3	70-130	20
Cyclohexane	10	11	110	10	11	110	0	70-130	20
1,4-Dioxane	500	570	114	500	480	96	17	56-162	20
Freon-113	10	10	100	10	10	100	0	70-130	20
Methyl cyclohexane	10	10	100	10	10	100	0	70-130	20

Initial Calibration Summary
Form 6
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Instrument ID	: ELAINE	**Ical Ref**	: ICAL17184
Calibration dates	: 09/29/20 17:13 09/30/20 14:50		

Calibration Files
L11 =VE200930B02.D L1 =VE200930B03.D L2 =VE200930B04.D L3 =VE200929N09.D L4 =VE200929N10.D
L6 =VE200929N11.D L8 =VE200929N12.D L10 =VE200929N13.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.127	0.166	0.131	0.159	0.156	0.162	0.163	0.152	10.65
3)	TP	Chloromethane		0.221	0.250	0.203	0.230	0.213	0.228	0.235	0.226	6.83
4)	TC	Vinyl chloride	0.184	0.183	0.224	0.178	0.211	0.205	0.220	0.217	0.203	9.02
5)	TP	Bromomethane		0.069	0.073	0.057	0.074	0.076	0.094	0.102	0.078#	19.50
6)	TP	Chloroethane		0.090	0.108	0.093	0.106	0.095	0.100	0.098	0.099#	6.92
7)	TP	Trichlorofluor		0.217	0.265	0.214	0.249	0.240	0.252	0.254	0.241	7.93
8)	TP	Ethyl ether		0.089	0.088	0.073	0.088	0.086	0.088	0.090	0.086	7.03
10)	TC	1,1-Dichloroet		0.141	0.157	0.126	0.149	0.145	0.157	0.160	0.148	8.05
11)	TP	Carbon disulfide		0.277	0.334	0.258	0.296	0.285	0.305	0.314	0.296	8.48
12)	TP	Freon-113		0.125	0.156	0.134	0.157	0.155	0.165	0.168	0.151	10.54
14)	TP	Acrolein			0.019	0.018	0.021	0.023	0.022	0.022	0.021#	9.94
15)	TP	Methylene chlo		0.175	0.179	0.144	0.168	0.154	0.166	0.168	0.165	7.25
17)	TP	Acetone			0.049	0.032	0.037	0.033	0.032	0.032	0.036#	19.48
18)	TP	trans-1,2-Dich		0.154	0.165	0.132	0.158	0.148	0.161	0.161	0.154	7.35
19)	TP	Methyl acetate		0.112	0.107	0.094	0.105	0.107	0.108	0.107	0.106	5.21
20)	TP	Methyl tert butyl ether		0.348	0.356	0.329	0.394	0.388	0.404	0.407	0.375	8.17
21)	TP	tert-Butyl alc		0.008	0.011	0.009	0.011	0.011	0.011	0.011	0.010#	11.12
22)	TP	Diisopropyl ether		0.658	0.694	0.631	0.764	0.719	0.763	0.766	0.714	7.68
23)	TP	1,1-Dichloroet		0.336	0.357	0.297	0.350	0.323	0.348	0.350	0.337	6.19
24)	TP	Halothane		0.123	0.140	0.120	0.141	0.135	0.144	0.146	0.136	7.56
25)	TP	Acrylonitrile		0.037	0.044	0.040	0.047	0.047	0.046	0.046	0.044#	9.12
26)	TP	Ethyl tert-but		0.487	0.500	0.466	0.578	0.564	0.600	0.608	0.543	10.66
27)	TP	Vinyl acetate		0.321	0.352	0.327	0.411	0.409	0.425	0.428	0.382	12.29
28)	TP	cis-1,2-Dichlo		0.186	0.199	0.174	0.198	0.185	0.197	0.198	0.191	5.01
29)	TP	2,2-Dichloropr		0.228	0.242	0.203	0.225	0.215	0.233	0.248	0.228	6.73
30)	TP	Bromochloromet		0.074	0.087	0.078	0.088	0.082	0.082	0.075	0.081	6.94
31)	TP	Cyclohexane		0.256	0.301	0.288	0.366	0.360	0.384	0.395	0.336	15.94
32)	TC	Chloroform		0.316	0.326	0.258	0.308	0.282	0.302	0.306	0.300	7.60
33)	TP	Ethyl acetate		0.134	0.131	0.118	0.141	0.140	0.144	0.140	0.135	6.54
34)	TP	Carbon tetrachloride		0.215	0.226	0.192	0.232	0.225	0.241	0.244	0.225	7.91
35)	TP	Tetrahydrofuran			0.035	0.035	0.039	0.039	0.038	0.038	0.037#	4.71
36)	S	Dibromofluoromethane	0.250	0.256	0.257	0.245	0.246	0.240	0.250	0.237	0.248	2.91
37)	TP	1,1,1-Trichlor		0.243	0.265	0.222	0.261	0.253	0.273	0.277	0.256	7.48
39)	TP	2-Butanone		0.040	0.064	0.055	0.058	0.061	0.060	0.059	0.057#	13.73
40)	TP	1,1-Dichloropr		0.196	0.225	0.196	0.234	0.228	0.246	0.254	0.226	10.03

Initial Calibration Summary
Form 6
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Instrument ID	: ELAINE	**Ical Ref**	: ICAL17184
Calibration dates	: 09/29/20 17:13 09/30/20 14:50		

Calibration Files
L11 =VE200930B02.D L1 =VE200930B03.D L2 =VE200930B04.D L3 =VE200929N09.D L4 =VE200929N10.D
L6 =VE200929N11.D L8 =VE200929N12.D L10 =VE200929N13.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
41)	TP	Benzene	0.777	0.703	0.755	0.639	0.738	0.690	0.748	0.746	0.725	6.11
42)	TP	Tertiary-Amyl Methyl Ether		0.284	0.367	0.339	0.420	0.420	0.447	0.453	0.390	15.94
43)	S	1,2-Dichloroethane-d4	0.268	0.278	0.271	0.255	0.253	0.262	0.260	0.261	0.264	3.12
44)	TP	1,2-Dichloroet		0.235	0.227	0.190	0.219	0.206	0.214	0.212	0.215	6.79
47)	TP	Methyl cyclohe		0.201	0.238	0.237	0.294	0.294	0.313	0.321	0.271	16.78
48)	TP	Trichloroethene	0.216	0.148	0.184	0.159	0.175	0.170	0.181	0.184	0.177#	11.45
50)	TP	Dibromomethane		0.075	0.085	0.076	0.087	0.083	0.085	0.085	0.082	5.53
51)	TC	1,2-Dichloropr		0.198	0.194	0.172	0.200	0.186	0.199	0.201	0.193	5.53
53)	TP	2-Chloroethyl		0.062	0.068	0.071	0.089	0.088	0.090	0.092	0.080	15.73
54)	TP	Bromodichlorom		0.209	0.206	0.190	0.224	0.212	0.228	0.231	0.214	6.63
57)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	8.71
58)	TP	cis-1,3-Dichlo		0.223	0.244	0.224	0.280	0.271	0.288	0.291	0.260	11.30
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.219	1.237	1.242	1.271	1.267	1.252	1.283	1.292	1.258	1.96
61)	TC	Toluene		0.578	0.591	0.524	0.597	0.564	0.605	0.613	0.582	5.20
62)	TP	4-Methyl-2-pen			0.044	0.050	0.062	0.066	0.068	0.068	0.060#	17.16
63)	TP	Tetrachloroethene		0.242	0.287	0.245	0.289	0.265	0.283	0.283	0.271	7.32
65)	TP	trans-1,3-Dich		0.258	0.261	0.243	0.298	0.299	0.321	0.327	0.286	11.48
67)	TP	Ethyl methacry			0.152	0.158	0.214	0.225	0.236	0.242	0.204	19.36
68)	TP	1,1,2-Trichlor		0.132	0.155	0.127	0.148	0.141	0.147	0.146	0.142	6.77
69)	TP	Chlorodibromom		0.176	0.190	0.171	0.208	0.203	0.213	0.213	0.196	8.94
70)	TP	1,3-Dichloropr		0.303	0.307	0.270	0.312	0.299	0.312	0.312	0.302	5.00
71)	TP	1,2-Dibromoethane		0.145	0.161	0.140	0.170	0.164	0.170	0.170	0.160	7.88
72)	TP	2-Hexanone		0.114	0.095	0.089	0.118	0.122	0.125	0.123	0.112	12.79
73)	TP	Chlorobenzene		0.630	0.671	0.575	0.674	0.621	0.660	0.655	0.641	5.48
74)	TC	Ethylbenzene		0.897	0.960	0.931	1.122	1.051	1.111	1.087	1.023	9.00
75)	TP	1,1,1,2-Tetrac		0.234	0.233	0.202	0.238	0.226	0.244	0.244	0.231	6.29
76)	TP	p/m Xylene		0.325	0.377	0.380	0.451	0.422	0.447	0.435	0.405	11.45
77)	TP	o Xylene		0.311	0.367	0.346	0.415	0.384	0.411	0.397	0.376	9.96
78)	TP	Styrene		0.440	0.563	0.581	0.698	0.649	0.672	0.628	0.604	14.38
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	TP	Bromoform		0.207	0.218	0.198	0.248	0.244	0.253	0.247	0.231	9.73
82)	TP	Isopropylbenzene		1.590	1.780	1.810	2.186	2.058	2.170	2.106	1.957	11.76
83)	S	4-Bromofluorobenzene	0.824	0.853	0.831	0.861	0.868	0.870	0.885	0.900	0.861	2.95
84)	TP	Bromobenzene		0.526	0.545	0.458	0.558	0.514	0.544	0.537	0.526	6.30
85)	TP	n-Propylbenzene		1.785	1.962	2.006	2.436	2.288	2.403	2.288	2.167	11.47

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2051463**
Project Name	**: FORMER M. ARGUESO**	**Project Number**	**: 28012**
Instrument ID	**: ELAINE**	**Ical Ref**	**: ICAL17184**
Calibration dates	**: 09/29/20 17:13 09/30/20 14:50**		

Calibration Files

L11 =VE200930B02.D L1 =VE200930B03.D L2 =VE200930B04.D L3 =VE200929N09.D L4 =VE200929N10.D

L6 =VE200929N11.D L8 =VE200929N12.D L10 =VE200929N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
86)	TP 1,4-Dichlorobu		0.596	0.623	0.527	0.637	0.606	0.634	0.625	0.607	6.31
87)	TP 1,1,2,2-Tetrac		0.340	0.365	0.308	0.366	0.356	0.364	0.359	0.351	5.99
88)	TP 4-Ethyltoluene		1.588	1.671	1.654	2.061	1.920	2.036	1.982	1.845	10.85
89)	TP 2-Chlorotoluene		1.389	1.495	1.389	1.678	1.567	1.671	1.658	1.550	8.23
90)	TP 1,3,5-Trimethy		1.281	1.487	1.461	1.823	1.691	1.789	1.747	1.611	12.62
91)	TP 1,2,3-Trichlor		0.299	0.294	0.269	0.312	0.298	0.302	0.299	0.296	4.49
92)	TP trans-1,4-Dich		0.087	0.078	0.067	0.100	0.102	0.107	0.109	0.093	17.34
93)	TP 4-Chlorotoluene		1.351	1.337	1.252	1.527	1.423	1.520	1.500	1.416	7.49
94)	TP tert-Butylbenzene		1.281	1.442	1.521	1.775	1.675	1.768	1.722	1.598	11.78
95)	TP Pentachloroethane		0.269	0.297	0.337	0.323	0.308	0.334	0.331	0.314	7.82
97)	TP 1,2,4-Trimethy		1.304	1.431	1.456	1.796	1.675	1.787	1.741	1.599	12.41
98)	TP sec-Butylbenzene		1.548	1.627	1.712	2.130	2.004	2.088	1.994	1.872	12.65
99)	TP p-Isopropyltol		1.236	1.355	1.499	1.919	1.811	1.901	1.809	1.647	16.95
100)	TP 1,3-Dichlorobe		0.951	1.029	0.873	1.057	0.969	1.014	1.000	0.985	6.15
101)	TP 1,4-Dichlorobe		1.115	1.000	0.879	1.046	0.973	1.021	0.990	1.003	7.16
102)	TP p-Diethylbenzene		0.696	0.721	0.838	1.089	1.045	1.105	1.092	0.941	19.49
103)	TP n-Butylbenzene		1.072	1.175	1.267	1.596	1.521	1.603	1.564	1.400	15.89
104)	TP 1,2-Dichlorobe		0.886	0.900	0.797	0.966	0.890	0.921	0.900	0.894	5.69
105)	TP 1,2,4,5-Tetram			1.106	1.237	1.692	1.632	1.700	1.659	1.504	17.44
106)	TP 1,2-Dibromo-3-			0.042	0.045	0.055	0.057	0.059	0.058	0.053	13.29
107)	TP 1,3,5-Trichlor		0.612	0.638	0.591	0.721	0.677	0.709	0.696	0.663	7.60
108)	TP Hexachlorobuta		0.192	0.195	0.200	0.244	0.239	0.252	0.256	0.225	12.65
109)	TP 1,2,4-Trichlor		0.510	0.519	0.492	0.627	0.615	0.637	0.634	0.576	11.41
110)	TP Naphthalene			0.696	0.757	1.044	1.095	1.127	1.113	0.972	19.87
111)	TP 1,2,3-Trichlor		0.476	0.448	0.419	0.536	0.532	0.550	0.541	0.500	10.45

Initial Calibration Summary
Form 6
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012
Instrument ID	: VOA122	**Ical Ref**	: ICAL17366
Calibration dates	: 11/18/20 17:28 11/18/20 21:34		

Calibration Files
L11 =V22201118N03.D L1 =V22201118N05.D L2 =V22201118N07.D L3 =V22201118N09.D L4 =V22201118N10.D
L6 =V22201118N11.D L8 =V22201118N12.D L10 =V22201118N13.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.125	0.179	0.214	0.227	0.222	0.215	0.215	0.200	18.22
3)	TP	Chloromethane		0.231	0.325	0.306	0.310	0.303	0.288	0.282	0.292	10.44
4)	TC	Vinyl chloride	0.297	0.185	0.280	0.281	0.290	0.285	0.274	0.272	0.271	13.06
5)	TP	Bromomethane		0.091	0.082	0.079	0.087	0.111	0.120	0.130	0.100	19.90
6)	TP	Chloroethane		0.130	0.157	0.147	0.149	0.139	0.125	0.112	0.137	11.46
7)	TP	Trichlorofluor		0.174	0.263	0.311	0.327	0.323	0.315	0.317	0.290	19.10
8)	TP	Ethyl ether		0.077	0.093	0.097	0.097	0.096	0.091	0.092	0.092	7.36
10)	TC	1,1-Dichloroet		0.116	0.173	0.183	0.187	0.186	0.181	0.180	0.172	14.56
11)	TP	Carbon disulfide		0.333	0.439	0.438	0.452	0.454	0.442	0.443	0.429	9.93
12)	TP	Freon-113			0.161	0.197	0.209	0.205	0.201	0.200	0.196	8.89
13)	TP	Iodomethane			0.048	0.105	0.177	0.180	0.177	0.181	*L	0.9982
14)	TP	Acrolein		0.025	0.031	0.033	0.034	0.033	0.031	0.031	0.031#	10.13
15)	TP	Methylene chlo		0.170	0.211	0.196	0.199	0.195	0.190	0.190	0.193	6.48
17)	TP	Acetone			0.056	0.051	0.047	0.045	0.042	0.041	0.047#	11.69
18)	TP	trans-1,2-Dich		0.151	0.217	0.206	0.212	0.211	0.204	0.203	0.200	11.11
19)	TP	Methyl acetate			0.121	0.107	0.110	0.106	0.101	0.102	0.108	6.77
21)	TP	Methyl tert butyl ether		0.424	0.465	0.445	0.434	0.404	0.397	0.414	0.426	5.58
22)	TP	tert-Butyl alc		0.014	0.014	0.015	0.015	0.014	0.015	0.014	0.014#	3.46
24)	TP	Diisopropyl ether		0.665	0.768	0.747	0.759	0.748	0.710	0.697	0.727	5.19
25)	TP	1,1-Dichloroet		0.344	0.446	0.417	0.423	0.420	0.406	0.403	0.408	7.78
26)	TP	Halothane		0.122	0.159	0.162	0.169	0.172	0.167	0.168	0.160	10.85
27)	TP	Acrylonitrile			0.054	0.063	0.065	0.062	0.059	0.059	0.060	6.47
28)	TP	Ethyl tert-but		0.658	0.707	0.686	0.690	0.651	0.628	0.632	0.665	4.61
29)	TP	Vinyl acetate			0.412	0.391	0.428	0.402	0.385	0.380	0.400	4.51
30)	TP	cis-1,2-Dichlo		0.197	0.241	0.232	0.233	0.228	0.219	0.220	0.224	6.36
31)	TP	2,2-Dichloropr		0.219	0.271	0.237	0.249	0.245	0.250	0.261	0.247	6.74
32)	TP	Bromochloromet		0.078	0.102	0.099	0.097	0.086	0.082	0.082	0.089	10.83
33)	TP	Cyclohexane			0.378	0.456	0.485	0.481	0.465	0.465	0.455	8.67
34)	TC	Chloroform		0.292	0.375	0.361	0.356	0.355	0.344	0.346	0.347	7.53
35)	TP	Ethyl acetate			0.167	0.167	0.165	0.160	0.151	0.153	0.160	4.35
36)	TP	Carbon tetrachloride	0.243	0.182	0.257	0.280	0.293	0.297	0.292	0.294	0.267	14.90
37)	TP	Tetrahydrofuran			0.059	0.059	0.056	0.054	0.052	0.051	0.055	6.26
38)	S	Dibromofluoromethane	0.232	0.228	0.229	0.229	0.230	0.225	0.227	0.225	0.228	1.11
39)	TP	1,1,1-Trichlor		0.230	0.332	0.328	0.337	0.337	0.327	0.330	0.317	12.14
41)	TP	2-Butanone			0.071	0.071	0.065	0.065	0.062	0.062	0.066#	6.05

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2051463**
Project Name	**: FORMER M. ARGUESO**	**Project Number**	**: 28012**
Instrument ID	**: VOA122**	**Ical Ref**	**: ICAL17366**
Calibration dates	**: 11/18/20 17:28 11/18/20 21:34**		

Calibration Files

L11 =V22201118N03.D L1 =V22201118N05.D L2 =V22201118N07.D L3 =V22201118N09.D L4 =V22201118N10.D

L6 =V22201118N11.D L8 =V22201118N12.D L10 =V22201118N13.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
42)	TP	1,1-Dichloropr		0.178	0.251	0.269	0.280	0.279	0.271	0.272	0.257	14.08
44)	TP	Benzene	0.799	0.664	0.842	0.802	0.818	0.815	0.788	0.786	0.789	6.83
45)	TP	Tertiary-Amyl Methyl Ether		0.493	0.505	0.490	0.488	0.468	0.452	0.463	0.480	3.99
46)	S	1,2-Dichloroethane-d4	0.245	0.246	0.243	0.241	0.246	0.243	0.238	0.246	0.244	1.14
47)	T	1,2-Dichloroet		0.248	0.258	0.254	0.252	0.271	0.241	0.260	0.255	3.82
50)	TP	Methyl cyclohe			0.282	0.353	0.372	0.377	0.368	0.373	0.354	10.25
51)	TP	Trichloroethene	0.241	0.153	0.231	0.220	0.224	0.232	0.226	0.228	0.219	12.53
53)	TP	Dibromomethane		0.085	0.118	0.111	0.113	0.111	0.107	0.108	0.108	9.83
54)	TC	1,2-Dichloropr		0.203	0.232	0.225	0.234	0.234	0.225	0.226	0.226	4.76
57)	TP	Bromodichlorom		0.218	0.265	0.260	0.270	0.273	0.264	0.270	0.260	7.30
60)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	19.25
61)	TP	cis-1,3-Dichlo		0.280	0.312	0.307	0.317	0.317	0.309	0.312	0.308	4.19
62)	I	Chlorobenzene-d5	----------ISTD----------									
63)	S	Toluene-d8	1.302	1.319	1.319	1.318	1.331	1.308	1.309	1.346	1.319	1.07
64)	TC	Toluene		0.404	0.492	0.426	0.436	0.430	0.424	0.420	0.433	6.38
65)	TP	4-Methyl-2-pen		0.049	0.088	0.088	0.092	0.089	0.088	0.090	0.083#	18.35
66)	TP	Tetrachloroethene		0.222	0.324	0.324	0.334	0.331	0.332	0.332	0.314	13.03
68)	TP	trans-1,3-Dich		0.333	0.382	0.371	0.388	0.380	0.381	0.385	0.374	5.04
70)	TP	Ethyl methacry		0.252	0.288	0.286	0.293	0.286	0.283	0.288	0.282	4.87
71)	TP	1,1,2-Trichlor		0.166	0.195	0.187	0.190	0.187	0.185	0.187	0.185	4.97
72)	TP	Chlorodibromom		0.213	0.249	0.255	0.271	0.272	0.274	0.277	0.259	8.72
73)	TP	1,3-Dichloropr		0.338	0.371	0.372	0.375	0.367	0.362	0.367	0.365	3.43
74)	TP	1,2-Dibromoethane		0.194	0.218	0.230	0.230	0.225	0.220	0.224	0.220	5.70
76)	TP	2-Hexanone		0.117	0.134	0.143	0.145	0.141	0.137	0.138	0.137	6.76
77)	TP	Chlorobenzene		0.683	0.855	0.805	0.824	0.806	0.799	0.795	0.795	6.72
78)	TC	Ethylbenzene		1.116	1.517	1.428	1.469	1.436	1.424	1.403	1.399	9.30
79)	TP	1,1,1,2-Tetrac		0.221	0.292	0.280	0.289	0.290	0.292	0.294	0.280	9.36
80)	TP	p/m Xylene		0.450	0.593	0.563	0.579	0.565	0.557	0.541	0.550	8.54
81)	TP	o Xylene		0.429	0.544	0.515	0.521	0.508	0.496	0.482	0.499	7.33
82)	TP	Styrene		0.678	0.882	0.847	0.868	0.836	0.816	0.791	0.817	8.37
83)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
84)	TP	Bromoform		0.257	0.302	0.332	0.346	0.347	0.352	0.368	0.329	11.51
86)	TP	Isopropylbenzene		2.549	3.254	3.177	3.291	3.485	3.452	3.402	3.230	9.91
87)	S	4-Bromofluorobenzene	1.035	1.027	1.023	1.009	1.005	1.009	1.027	1.031	1.021	1.12
88)	TP	Bromobenzene		0.601	0.728	0.708	0.725	0.704	0.709	0.721	0.699	6.33
89)	TP	n-Propylbenzene		2.955	3.830	3.786	3.872	3.774	3.730	3.672	3.660	8.67

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2051463**
Project Name	**: FORMER M. ARGUESO**	**Project Number**	**: 28012**
Instrument ID	**: VOA122**	**Ical Ref**	**: ICAL17366**
Calibration dates	**: 11/18/20 17:28 11/18/20 21:34**		

Calibration Files
L11 =V22201118N03.D L1 =V22201118N05.D L2 =V22201118N07.D L3 =V22201118N09.D L4 =V22201118N10.D
L6 =V22201118N11.D L8 =V22201118N12.D L10 =V22201118N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
90) TP	1,4-Dichlorobu		1.067	1.046	1.012	0.989	0.959	0.949	0.959	0.997	4.63
91) TP	1,1,2,2-Tetrac		0.547	0.565	0.561	0.559	0.532	0.529	0.533	0.547	2.83
92) TP	4-Ethyltoluene		2.406	3.078	3.038	3.100	3.045	3.034	2.986	2.955	8.29
93) TP	2-Chlorotoluene		2.024	2.585	2.458	2.484	2.422	2.423	2.422	2.403	7.35
94) TP	1,3,5-Trimethy		2.115	2.685	2.559	2.627	2.577	2.557	2.534	2.522	7.40
95) TP	1,2,3-Trichlor		0.431	0.457	0.427	0.430	0.413	0.409	0.419	0.427	3.72
96) TP	trans-1,4-Dich		0.158	0.184	0.170	0.177	0.174	0.176	0.182	0.174	4.93
97) TP	4-Chlorotoluene		1.954	2.334	2.219	2.240	2.202	2.199	2.195	2.192	5.26
98) TP	tert-Butylbenzene		1.779	2.258	2.244	2.303	2.240	2.224	2.186	2.176	8.21
101) TP	1,2,4-Trimethy		2.106	2.577	2.507	2.542	2.507	2.472	2.449	2.452	6.45
102) TP	sec-Butylbenzene		2.100	2.764	2.843	2.945	2.884	2.809	2.771	2.731	10.45
103) TP	p-Isopropyltol		2.135	2.620	2.684	3.028	2.932	2.863	2.780	2.720	10.80
104) TP	1,3-Dichlorobe		1.368	1.713	1.407	1.422	1.365	1.490	1.267	1.433	9.81
105) TP	1,4-Dichlorobe		1.270	1.471	1.379	1.413	1.375	1.354	1.353	1.374	4.47
106) TP	p-Diethylbenzene		1.170	1.503	1.505	1.561	1.531	1.507	1.488	1.466	9.06
107) TP	n-Butylbenzene		1.625	2.233	2.222	2.304	2.231	2.206	2.181	2.143	10.81
108) TP	1,2-Dichlorobe		1.091	1.296	1.240	1.245	1.224	1.205	1.198	1.214	5.21
109) TP	1,2,4,5-Tetram		1.746	2.106	2.087	2.156	2.095	2.087	2.051	2.047	6.66
110) TP	1,2-Dibromo-3-		0.050	0.082	0.078	0.089	0.085	0.085	0.088	0.080	16.85
111) TP	1,3,5-Trichlor		0.610	0.771	0.741	0.763	0.745	0.748	0.745	0.732	7.49
112) TP	Hexachlorobuta		0.161	0.236	0.238	0.250	0.255	0.261	0.261	0.237	14.86
113) TP	1,2,4-Trichlor		0.620	0.690	0.666	0.693	0.691	0.692	0.703	0.679	4.21
114) TP	Naphthalene		1.667	1.758	1.722	1.754	1.709	1.681	1.706	1.714	2.00
115) TP	1,2,3-Trichlor		0.504	0.583	0.576	0.601	0.589	0.597	0.603	0.579	5.98

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering		Lab Number	: L2051463	
Project Name	: FORMER M. ARGUESO		Project Number	: 28012	
Instrument ID	: ELAINE		Calibration Date	: 11/23/20 17:50	
Lab File ID	: VE201123N01		Init. Calib. Date(s)	: 09/29/20	09/30/20
Sample No	: WG1438001-2		Init. Calib. Times	: 17:13	14:50
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	80	0
Dichlorodifluoromethane	0.152	0.175	-	-15.1	20	106	.01
Chloromethane	0.226	0.233	-	-3.1	20	91	0
Vinyl chloride	0.203	0.223	-	-9.9	20	100	.01
Bromomethane	0.078	0.073*	-	6.4	20	101	.01
Chloroethane	0.099	0.117	-	-18.2	20	100	.01
Trichlorofluoromethane	0.241	0.276	-	-14.5	20	102	.01
Ethyl ether	0.086	0.082	-	4.7	20	90	0
1,1-Dichloroethene	0.148	0.151	-	-2	20	95	0
Carbon disulfide	0.296	0.305	-	-3	20	94	0
Freon-113	0.151	0.188	-	-24.5*	20	112	.01
Acrolein	0.021	0.021*	-	0	20	94	0
Methylene chloride	0.165	0.159	-	3.6	20	88	0
Acetone	0.036	0.028*	-	22.2*	20	70	0
trans-1,2-Dichloroethene	0.154	0.161	-	-4.5	20	98	0
Methyl acetate	0.106	0.078*	-	26.4*	20	66	0
Methyl tert-butyl ether	0.375	0.339	-	9.6	20	82	0
tert-Butyl alcohol	0.01038	0.00825*	-	20.5*	20	72	0
Diisopropyl ether	0.714	0.651	-	8.8	20	82	0
1,1-Dichloroethane	0.337	0.346	-	-2.7	20	93	0
Halothane	0.136	0.142	-	-4.4	20	94	0
Acrylonitrile	0.044	0.038*	-	13.6	20	75	0
Ethyl tert-butyl ether	0.543	0.503	-	7.4	20	86	0
Vinyl acetate	0.382	0.311	-	18.6	20	76	0
cis-1,2-Dichloroethene	0.191	0.179	-	6.3	20	82	0
2,2-Dichloropropane	0.228	0.247	-	-8.3	20	97	0
Bromochloromethane	0.081	0.075	-	7.4	20	76	0
Cyclohexane	0.336	0.389	-	-15.8	20	107	0
Chloroform	0.3	0.299	-	0.3	20	92	0
Ethyl acetate	0.135	0.105	-	22.2*	20	71	0
Carbon tetrachloride	0.225	0.228	-	-1.3	20	95	0
Tetrahydrofuran	0.037	0.028*	-	24.3*	20	63	0
Dibromofluoromethane	0.248	0.228	-	8.1	20	74	0
1,1,1-Trichloroethane	0.256	0.264	-	-3.1	20	95	0
2-Butanone	0.057	0.046*	-	19.3	20	66	0
1,1-Dichloropropene	0.226	0.233	-	-3.1	20	95	0
Benzene	0.725	0.731	-	-0.8	20	91	0
tert-Amyl methyl ether	0.39	0.356	-	8.7	20	84	0
1,2-Dichloroethane-d4	0.264	0.249	-	5.7	20	78	0
1,2-Dichloroethane	0.215	0.199	-	7.4	20	83	0
Methyl cyclohexane	0.271	0.329	-	-21.4*	20	110	0
Trichloroethene	0.177	0.177*	-	0	20	89	0
Dibromomethane	0.082	0.077	-	6.1	20	80	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering		Lab Number	: L2051463	
Project Name	: FORMER M. ARGUESO		Project Number	: 28012	
Instrument ID	: ELAINE		Calibration Date	: 11/23/20 17:50	
Lab File ID	: VE201123N01		Init. Calib. Date(s)	: 09/29/20	09/30/20
Sample No	: WG1438001-2		Init. Calib. Times	: 17:13	14:50
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.193	0.187	-	3.1	20	87	0
Bromodichloromethane	0.214	0.2	-	6.5	20	84	0
1,4-Dioxane	0.00096	0.00084*	-	12.5	20	70	0
cis-1,3-Dichloropropene	0.26	0.234	-	10	20	83	0
Chlorobenzene-d5	1	1	-	0	20	77	0
Toluene-d8	1.258	1.264	-	-0.5	20	76	0
Toluene	0.582	0.612	-	-5.2	20	89	0
4-Methyl-2-pentanone	0.06	0.048*	-	20	20	73	0
Tetrachloroethene	0.271	0.288	-	-6.3	20	90	0
trans-1,3-Dichloropropene	0.286	0.261	-	8.7	20	82	0
Ethyl methacrylate	0.204	0.178	-	12.7	20	86	0
1,1,2-Trichloroethane	0.142	0.137	-	3.5	20	82	0
Chlorodibromomethane	0.196	0.176	-	10.2	20	79	0
1,3-Dichloropropane	0.302	0.286	-	5.3	20	81	0
1,2-Dibromoethane	0.16	0.144	-	10	20	79	0
2-Hexanone	0.112	0.081*	-	27.7*	20	70	0
Chlorobenzene	0.641	0.679	-	-5.9	20	90	0
Ethylbenzene	1.023	1.139	-	-11.3	20	94	0
1,1,1,2-Tetrachloroethane	0.231	0.223	-	3.5	20	85	0
p/m Xylene	0.405	0.463	-	-14.3	20	93	0
o Xylene	0.376	0.424	-	-12.8	20	94	0
Styrene	0.604	0.681	-	-12.7	20	90	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	73	0
Bromoform	0.231	0.21	-	9.1	20	78	0
Isopropylbenzene	1.957	2.316	-	-18.3	20	94	0
4-Bromofluorobenzene	0.861	0.896	-	-4.1	20	76	0
Bromobenzene	0.526	0.545	-	-3.6	20	87	0
n-Propylbenzene	2.167	2.612	-	-20.5*	20	95	0
1,4-Dichlorobutane	0.607	0.593	-	2.3	20	83	0
1,1,2,2-Tetrachloroethane	0.351	0.323	-	8	20	77	0
4-Ethyltoluene	1.845	2.2	-	-19.2	20	97	0
2-Chlorotoluene	1.55	1.825	-	-17.7	20	96	0
1,3,5-Trimethylbenzene	1.611	1.927	-	-19.6	20	97	0
1,2,3-Trichloropropane	0.296	0.282	-	4.7	20	77	0
trans-1,4-Dichloro-2-buten	0.093	0.083	-	10.8	20	91	0
4-Chlorotoluene	1.416	1.642	-	-16	20	96	0
tert-Butylbenzene	1.598	1.633	-	-2.2	20	79	0
1,2,4-Trimethylbenzene	1.599	1.878	-	-17.4	20	95	0
sec-Butylbenzene	1.872	2.163	-	-15.5	20	93	0
p-Isopropyltoluene	1.647	1.945	-	-18.1	20	95	0
1,3-Dichlorobenzene	0.985	1.055	-	-7.1	20	89	0
1,4-Dichlorobenzene	1.003	1.036	-	-3.3	20	86	0
p-Diethylbenzene	0.941	1.083	-	-15.1	20	95	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering		Lab Number	: L2051463	
Project Name	: FORMER M. ARGUESO		Project Number	: 28012	
Instrument ID	: ELAINE		Calibration Date	: 11/23/20 17:50	
Lab File ID	: VE201123N01		Init. Calib. Date(s)	: 09/29/20	09/30/20
Sample No	: WG1438001-2		Init. Calib. Times	: 17:13	14:50
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	1.4	1.655	-	-18.2	20	96	0
1,2-Dichlorobenzene	0.894	0.914	-	-2.2	20	84	0
1,2,4,5-Tetramethylbenzene	1.504	1.542	-	-2.5	20	91	0
1,2-Dibromo-3-chloropropan	0.053	0.035*	-	34*	20	57	0
1,3,5-Trichlorobenzene	0.663	0.688	-	-3.8	20	85	0
Hexachlorobutadiene	0.225	0.249	-	-10.7	20	91	0
1,2,4-Trichlorobenzene	0.576	0.477	-	17.2	20	71	0
Naphthalene	0.972	0.613	-	36.9*	20	59	0
1,2,3-Trichlorobenzene	0.5	0.368	-	26.4*	20	64	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering		Lab Number	: L2051463	
Project Name	: FORMER M. ARGUESO		Project Number	: 28012	
Instrument ID	: VOA122		Calibration Date	: 11/24/20 09:25	
Lab File ID	: V22201124A01		Init. Calib. Date(s)	: 11/18/20	11/18/20
Sample No	: WG1438122-2		Init. Calib. Times	: 17:28	21:34
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	94	0
Dichlorodifluoromethane	0.2	0.208	-	-4	20	91	0
Chloromethane	0.292	0.346	-	-18.5	20	106	0
Vinyl chloride	0.271	0.291	-	-7.4	20	97	0
Bromomethane	0.1	0.076*	-	24*	20	90	0
Chloroethane	0.137	0.149	-	-8.8	20	94	0
Trichlorofluoromethane	0.29	0.333	-	-14.8	20	100	0
Ethyl ether	0.092	0.094	-	-2.2	20	91	0
1,1-Dichloroethene	0.172	0.188	-	-9.3	20	96	0
Carbon disulfide	0.429	0.469	-	-9.3	20	100	0
Freon-113	0.196	0.207	-	-5.6	20	98	0
Iodomethane	10	7.248	-	27.5*	20	87	0
Acrolein	0.031	0.035*	-	-12.9	20	100	0
Methylene chloride	0.193	0.211	-	-9.3	20	101	0
Acetone	0.047	0.057*	-	-21.3*	20	104	0
trans-1,2-Dichloroethene	0.2	0.218	-	-9	20	99	0
Methyl acetate	0.108	0.113	-	-4.6	20	99	0
Methyl tert-butyl ether	0.426	0.445	-	-4.5	20	93	0
tert-Butyl alcohol	0.014	0.015*	-	-7.1	20	99	0
Diisopropyl ether	0.727	0.833	-	-14.6	20	104	0
1,1-Dichloroethane	0.408	0.453	-	-11	20	102	0
Halothane	0.16	0.176	-	-10	20	101	0
Acrylonitrile	0.06	0.066	-	-10	20	97	0
Ethyl tert-butyl ether	0.665	0.715	-	-7.5	20	97	0
Vinyl acetate	0.4	0.427	-	-6.7	20	102	0
cis-1,2-Dichloroethene	0.224	0.244	-	-8.9	20	98	0
2,2-Dichloropropane	0.247	0.267	-	-8.1	20	105	0
Bromochloromethane	0.089	0.106	-	-19.1	20	100	0
Cyclohexane	0.455	0.515	-	-13.2	20	106	0
Chloroform	0.347	0.377	-	-8.6	20	98	0
Ethyl acetate	0.16	0.165	-	-3.1	20	92	0
Carbon tetrachloride	0.267	0.313	-	-17.2	20	105	0
Tetrahydrofuran	0.055	0.061	-	-10.9	20	98	0
Dibromofluoromethane	0.228	0.242	-	-6.1	20	99	0
1,1,1-Trichloroethane	0.317	0.343	-	-8.2	20	98	0
2-Butanone	0.066	0.073*	-	-10.6	20	97	0
1,1-Dichloropropene	0.257	0.28	-	-8.9	20	97	0
Benzene	0.789	0.822	-	-4.2	20	96	0
tert-Amyl methyl ether	0.48	0.479	-	0.2	20	91	0
1,2-Dichloroethane-d4	0.244	0.257	-	-5.3	20	100	0
1,2-Dichloroethane	0.255	0.267	-	-4.7	20	98	0
Methyl cyclohexane	0.354	0.365	-	-3.1	20	97	0
Trichloroethene	0.219	0.227	-	-3.7	20	97	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering		Lab Number	: L2051463	
Project Name	: FORMER M. ARGUESO		Project Number	: 28012	
Instrument ID	: VOA122		Calibration Date	: 11/24/20 09:25	
Lab File ID	: V22201124A01		Init. Calib. Date(s)	: 11/18/20	11/18/20
Sample No	: WG1438122-2		Init. Calib. Times	: 17:28	21:34
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.108	0.112	-	-3.7	20	94	0
1,2-Dichloropropane	0.226	0.236	-	-4.4	20	98	0
Bromodichloromethane	0.26	0.268	-	-3.1	20	96	0
1,4-Dioxane	0.0013	0.00149*	-	-14.6	20	99	0
cis-1,3-Dichloropropene	0.308	0.317	-	-2.9	20	96	0
Chlorobenzene-d5	1	1	-	0	20	96	0
Toluene-d8	1.319	1.307	-	0.9	20	95	0
Toluene	0.433	0.421	-	2.8	20	95	-.03
4-Methyl-2-pentanone	0.083	0.08*	-	3.6	20	87	0
Tetrachloroethene	0.314	0.319	-	-1.6	20	94	0
trans-1,3-Dichloropropene	0.374	0.373	-	0.3	20	96	0
Ethyl methacrylate	0.282	0.257	-	8.9	20	86	0
1,1,2-Trichloroethane	0.185	0.177	-	4.3	20	91	0
Chlorodibromomethane	0.259	0.261	-	-0.8	20	98	0
1,3-Dichloropropane	0.365	0.35	-	4.1	20	90	0
1,2-Dibromoethane	0.22	0.212	-	3.6	20	88	0
2-Hexanone	0.137	0.13	-	5.1	20	87	0
Chlorobenzene	0.795	0.797	-	-0.3	20	95	0
Ethylbenzene	1.399	1.382	-	1.2	20	93	0
1,1,1,2-Tetrachloroethane	0.28	0.286	-	-2.1	20	97	0
p/m Xylene	0.55	0.549	-	0.2	20	93	0
o Xylene	0.499	0.496	-	0.6	20	92	0
Styrene	0.817	0.811	-	0.7	20	92	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	98	0
Bromoform	0.329	0.329	-	0	20	97	0
Isopropylbenzene	3.23	3.005	-	7	20	92	0
4-Bromofluorobenzene	1.021	0.988	-	3.2	20	95	0
Bromobenzene	0.699	0.679	-	2.9	20	93	0
n-Propylbenzene	3.66	3.544	-	3.2	20	91	0
1,4-Dichlorobutane	0.997	0.928	-	6.9	20	89	0
1,1,2,2-Tetrachloroethane	0.547	0.5	-	8.6	20	87	0
4-Ethyltoluene	2.955	2.848	-	3.6	20	91	0
2-Chlorotoluene	2.403	2.281	-	5.1	20	90	0
1,3,5-Trimethylbenzene	2.522	2.383	-	5.5	20	91	0
1,2,3-Trichloropropane	0.427	0.382	-	10.5	20	87	0
trans-1,4-Dichloro-2-buten	0.174	0.161	-	7.5	20	92	0
4-Chlorotoluene	2.192	2.084	-	4.9	20	92	0
tert-Butylbenzene	2.176	2.094	-	3.8	20	91	0
1,2,4-Trimethylbenzene	2.452	2.323	-	5.3	20	90	0
sec-Butylbenzene	2.731	2.683	-	1.8	20	92	0
p-Isopropyltoluene	2.72	2.504	-	7.9	20	91	0
1,3-Dichlorobenzene	1.433	1.392	-	2.9	20	96	0
1,4-Dichlorobenzene	1.374	1.314	-	4.4	20	93	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2051463		
Project Name	: FORMER M. ARGUESO	**Project Number**	: 28012		
Instrument ID	: VOA122	**Calibration Date**	: 11/24/20 09:25		
Lab File ID	: V22201124A01	**Init. Calib. Date(s)**	: 11/18/20	11/18/20	
Sample No	: WG1438122-2	**Init. Calib. Times**	: 17:28	21:34	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.466	1.392	-	5	20	90	0
n-Butylbenzene	2.143	2.105	-	1.8	20	92	0
1,2-Dichlorobenzene	1.214	1.158	-	4.6	20	91	0
1,2,4,5-Tetramethylbenzene	2.047	1.942	-	5.1	20	91	0
1,2-Dibromo-3-chloropropan	0.08	0.077	-	3.8	20	95	0
1,3,5-Trichlorobenzene	0.732	0.695	-	5.1	20	91	0
Hexachlorobutadiene	0.237	0.23	-	3	20	95	0
1,2,4-Trichlorobenzene	0.679	0.637	-	6.2	20	93	0
Naphthalene	1.714	1.537	-	10.3	20	87	0
1,2,3-Trichlorobenzene	0.579	0.551	-	4.8	20	93	0

* Value outside of QC limits.