

August 2, 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

1st Semiannual 2021 Groundwater Monitoring Report

STERLING File #28012 (Task 995)

Dear Mr. Lanners,

Sterling Environmental Engineering P.C. (STERLING) performed semiannual groundwater monitoring at the subject site on June 17, 2021. Groundwater monitoring was conducted 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 first semiannual groundwater monitoring event for 2021, 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.

Groundwater Flow Direction

The estimated groundwater flow in the deep overburden hydrogeologic unit is to the north-northeast (Figure 1), which is consistent with historical conditions. The deep overburden groundwater elevation increased an average of 0.18 feet compared to groundwater elevation measurements collected in November 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. Groundwater samples were collected in accordance with the SMP and submitted to Alpha Analytical, Inc. of Westborough, Massachusetts under chain-of-custody protocol for

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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. The laboratory analytical report is attached.

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 µg/L in GZ-22D (2.1 µg/L), GZ-23D (14 µg/L), and B6-OWD (8.8 µg/L). Methyl tert butyl ether (MTBE) was detected in GZ-22D (1.2 µg/L), below the Guidance Value of 10 µg/L. O-xylene was detected in GZ-23D at 1.6 µg/L, below the groundwater standard of 5 µg/L.

The following sections detail data trends in each deep zone monitoring well based on data summarized in Table 1:

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). Cis-1,2-DCE and VC concentrations have decreased below standards for this monitoring event. Total cVOCs decreased from the previous monitoring event in November 2020 and are lower than the highest levels in 2014. Concentrations of PCE and TCE remain below standards.

GZ-22D

PCE and TCE concentrations have decreased below standards for the last thirteen (13) 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. Total cVOCs have remained relatively stable since March 2019.

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 (non detect and estimated 0.45 ug/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 4.8 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 0.63 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.

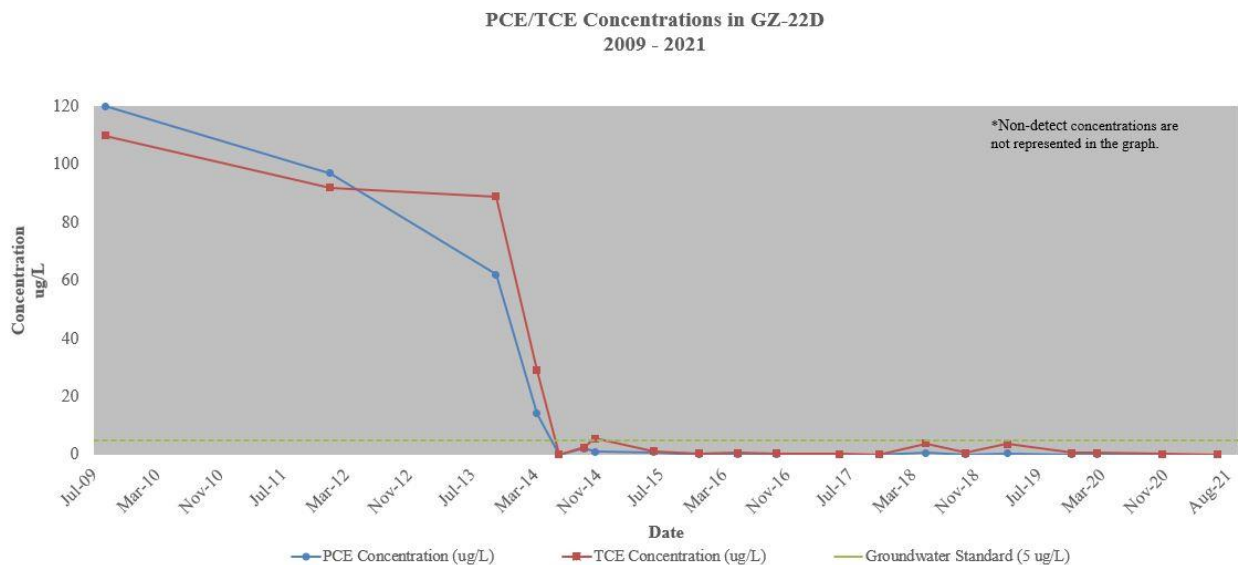
OSMW-4

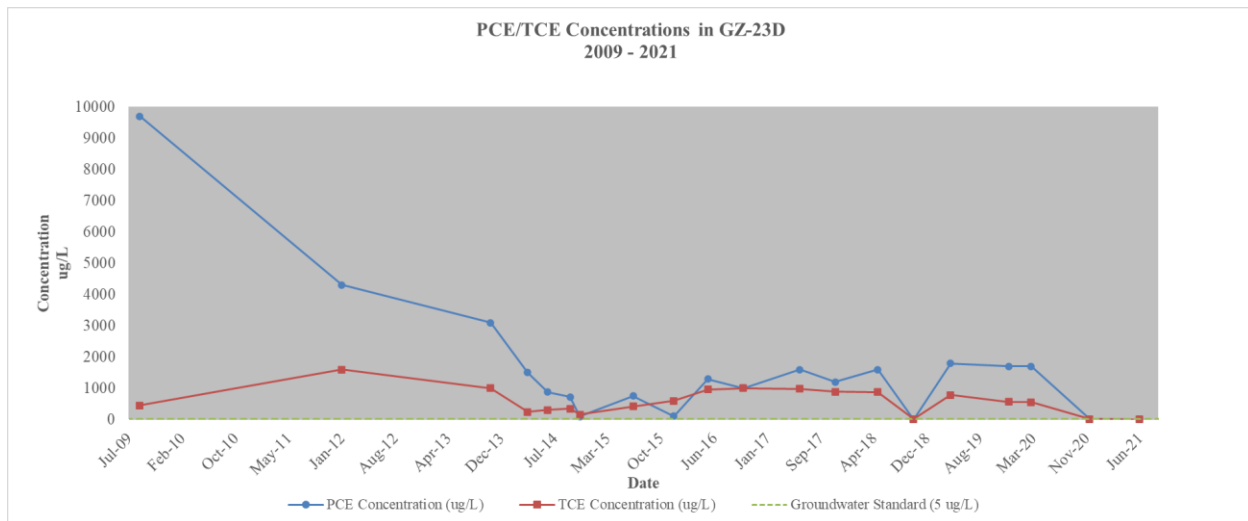
All cVOCs have been below groundwater standards since 2014.

Monitoring Well Data Trends

The graphs below depict PCE and TCE concentrations in monitoring wells GZ-22D and GZ-23D over time (2009 - 2021). 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 concentrations 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.
- 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.
- The next 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

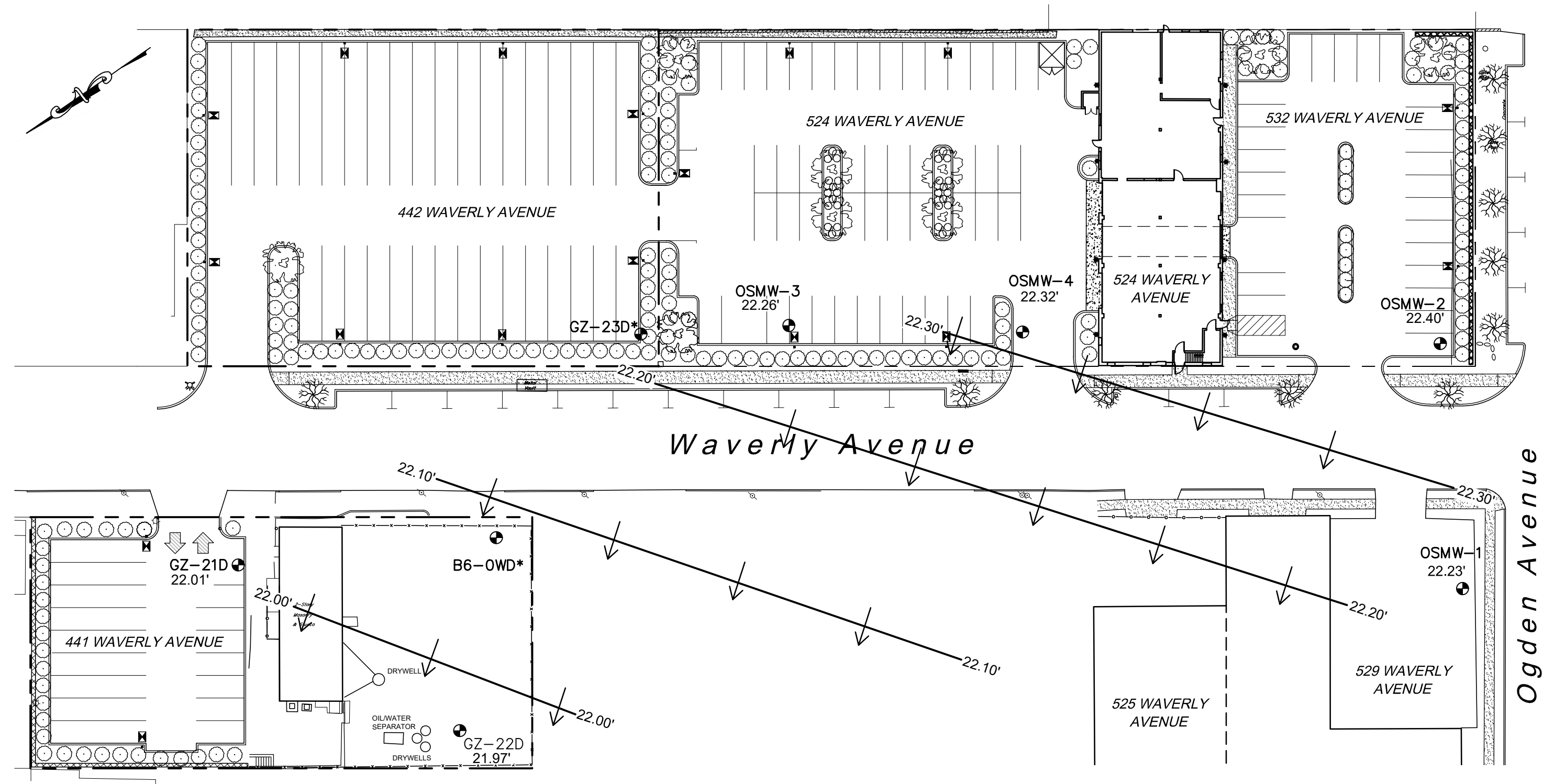
Attachments

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

\\Sevmc01\shared\Sterling\Projects\2008 Projects\Waverly Avenue (441 & 442) - 28012\Reports\GWM Reports\2021 1st GWM\2021-08-02_1st 2021 GW Monitoring Results Letter_Waverly Avenue.docx

FIGURES

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LEGEND:

- GZ-22D 21.97' MONITORING WELL WITH CORRESPONDING GROUNDWATER ELEVATION
- 21.8' GROUNDWATER CONTOUR JUNE 17, 2021
- ← GROUNDWATER FLOW DIRECTION (DASHED WHERE INFERRED)
- - - SITE BOUNDARY (441 & 442 WAVERLY AVENUE)
- LIGHT POLE
- ▨ CONCRETE SIDEWALK
- x - x - FENCE

TOTAL cVOCs (µg/L)		
WELL ID	HIGHEST CONCENTRATION PRIOR TO 2013	JUNE 2021
B6-OWD	615.70	3,572.6
GZ-21D	524.60	17.1
GZ-22D	260.40	107.9
GZ-23D	10,178.5	11.08
OSMW-3	900.10	1,526.8
OSMW-4	1,057.00	ND

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

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

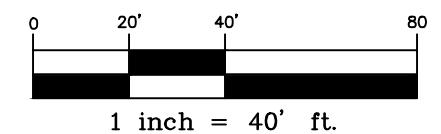
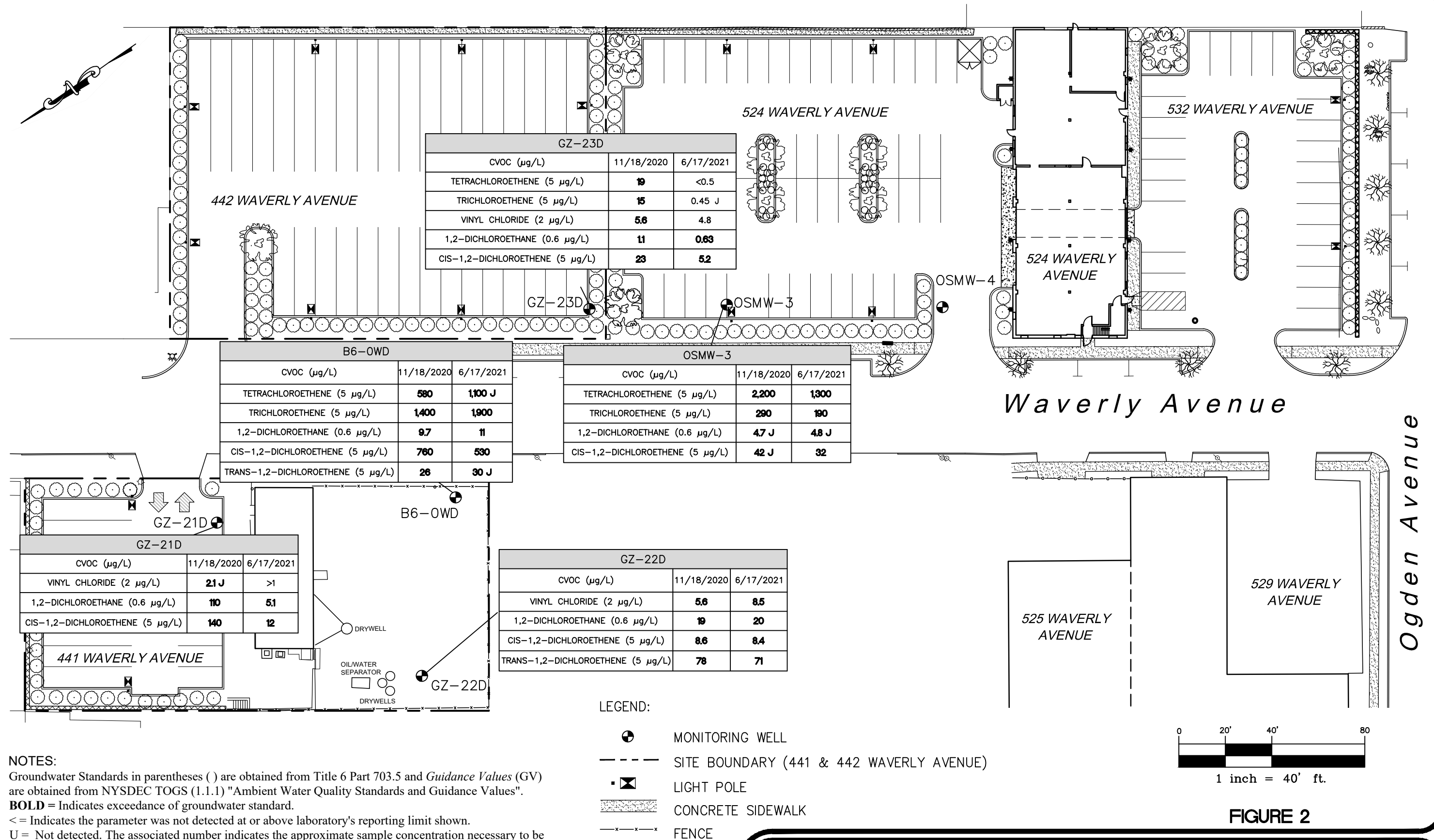


FIGURE 1

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

GROUNDWATER CONTOUR MAP
JUNE 17, 2021
SITE# C360108
NEW WAVERLY AVENUE ASSOCIATES, LLC
V/T OF MAMARONECK WESTCHESTER CO., N.Y.

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

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

MONITORING LOCATION MAP WITH EXCEEDANCES
JUNE 17, 2021
SITE# C360108
NEW WAVERLY AVENUE ASSOCIATES, LLC
V/T OF MAMARONECK WESTCHESTER CO., N.Y.

PROJ. No.: 28012 | DATE: 7/28/2021 | SCALE: 1" = 40' | DWG. NO. 28012112 | FIGURE 2

TABLE

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	06/17/21	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	<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	<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	<1.5
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	<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	<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	5.1	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	12	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	<2.5	<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	---	<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	<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	<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	<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	<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	<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	<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	<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	<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	---	<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	<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	<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	<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	<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	<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	<1	<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	17.1	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 analyzed 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	06/17/21	11/18/20	03/24/14	03/09/20
Chlorinated Volatile Organic Compounds:																								
1,1,1-Trichloroethane	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	<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	---	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	---	<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	<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	<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	20	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	8.4	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	71	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	---	<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	---	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	---	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	<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	---	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	<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	---	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	---	<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	---	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	---	<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	---	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	<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	---	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	<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	<0.5	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	8.5	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	107.9	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.

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 analyzed 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	06/17/21	06/13/17
Chlorinated Volatile Organic Compounds:																						
1,1,1-Trichloroethane	5.0	---	---	<100	<40	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<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	<0.5	<10
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	---	<15	<30	<15	<38	<30	<30	<15	<7.5	<30	<30	<30	<1.5	<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	<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	<0.5	<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	0.63	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	5.2	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	<2.5	21 D,J
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<10	<20	<10	<25	<20	<20	<10	<5.0	<20	<20	<20	<1.0	<1	<20
Bromochloromethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<2.5	<50
Bromodichloromethane	50.0	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10	<10	<10	<0.5	<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	<0.5	<10
Chloroethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<2.5	<50
Chloroform	7.0	---	---	<100	<40	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<2.5	<50
Chloromethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<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	<0.5	<10
Dibromochloromethane	50.0	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10	<10	<10	<0.5	<0.5	<10
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<50	<100	<50	<120	<100	<100	<50	<25	<100	<100	<100	<5.0	<5	<100
Freon-113	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<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	<2.5	<50
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50	<50	<50	<2.5	<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	<0.5	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	0.45 J	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	4.8	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	11.08	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 analyzed 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	DUP-1	DUP-1
Unit	µg/L	µg/L																				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	06/17/21	12/16/15	05/16/18	10/18/18	10/18/18	06/17/21
Chlorinated Volatile Organic Compounds:																										
1,1,1-Trichloroethane	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	<50	<2.5	<50	<25	<25	<50
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	<10	<0.5	<10	<5.0	<5.0	<10
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	---	<1.5	<1.5	<1.5	<1.5	<3.0	<7.5	<30	<15	<30	<15	<30	<15	<30	<1.5	<30	<15	<15	<30
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	<50	<2.5	<50	<25	<25	<50
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	<10	<0.50	<10	<5.0	<5.0	<10
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	11	<0.50	9.1 J	9.4	9.4	8 J
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	530	1.2 J	330	380	380	480
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, J	22 J	16 J	41 J	24 J+	26 J	26	30 J	<2.5	20 J	17 J	17 J	22 J
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<2.0	<5.0	<20	<10	<20	<10	<20	<10	<20	<1.0	<20	<10	<10	<20
Bromochloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<50	<2.5	<50	<25	<25	<50
Bromodichloromethane	50.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<10	<5.0	<10	<5.0	<10	<0.5	<10	<5.0	<5.0	<10
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	<10	<0.5	<10	<5.0	<5.0	<10
Chloroethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<50	<2.5	<50	<25	<25	<50
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	<50	<2.5	<50	<25	<25	<50
Chloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<50	<2.5	<50	<25	<25	<50
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	<10	<0.5	<10	<5.0	<5.0	<10
Dibromochloromethane	50.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<10	<5.0	<10	<5.0	<10	<0.5	<10	<5.0	<5.0	<10
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<5.0	<5.0	<5.0	<5.0	<10	<25	<100	<50	<100	<50	<100	<50	<100	<5.0	<100	<50	<50	<100
Freon-113	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<50	<2.5	<50	<25	<25	<50
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	<50	<2.5	<50	<25	<25	<50
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<50	<25	<50	<25	<50	<2.5	<50	<25	<25	<50
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	1,100 J	2.2	1,100 J-	950	950	800 J
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	1,900	1.4	1,400	1,400	1400	1,700
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	1.6 J	<1.0	1.8 J	2.1 J	2.1 J	1.7 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	3,572.6	4.8	2,860.9	2,758.5	2,758.5	3,011.7

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 analyzed 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	06/17/21	11/05/14	11/14/17	
Chlorinated Volatile Organic Compounds:																							
1,1,1-Trichloroethane	5.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<25	<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	<5	---	---	
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	<30	<60	<7.5	<15	<1.5	<15	<3.0	<38	<38	<75	<38	<30	<15	---	---	
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	<25	<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	<5	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	4.8 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	32	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	<25	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	<10	---	---	
Bromochloromethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<25	---	---	
Bromodichloromethane	50.0	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	<5	---	---	
Carbon Tetrachloride	5.0	---	<80	---	<20	---	<50	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	<5	<1.0	---	
Chloroethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<25	---	---	
Chloroform	7.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<25	<1.0	---	
Chloromethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<25	---	---	
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	<5	---	---	
Dibromochloromethane	50.0	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<12	<25	<12	<10	<5	---	---	
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	<100	<200	<25	<50	<5.0	<50	<10	<120	<120	<250	<120	<100	<50	---	---	
Freon-113	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<25	---	---	
Methylene Chloride	5.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<25	<1.0	---	
Trichlorofluoromethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<62	<120	<62	<50	<25	---	---	
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	1,300	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	190	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	<10	<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	1,526.8	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 analyzed 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	06/17/21	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	<2.5	---	<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	<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	<1.5	
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	<2.5	<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	<0.5	<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	<0.5	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	<2.5	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	<2.5	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	---	---	<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	<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	<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	<0.5	---	<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	<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	<2.5	---	<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	<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	<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	<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	---	---	<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	<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	<2.5	---	<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	<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	<0.5	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	<0.5	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	<1	<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	ND	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 analyzed 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-Trichloroethane	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.
- NANot Analyzed.
- No standard or not applicable.

Laboratory Qualifiers:

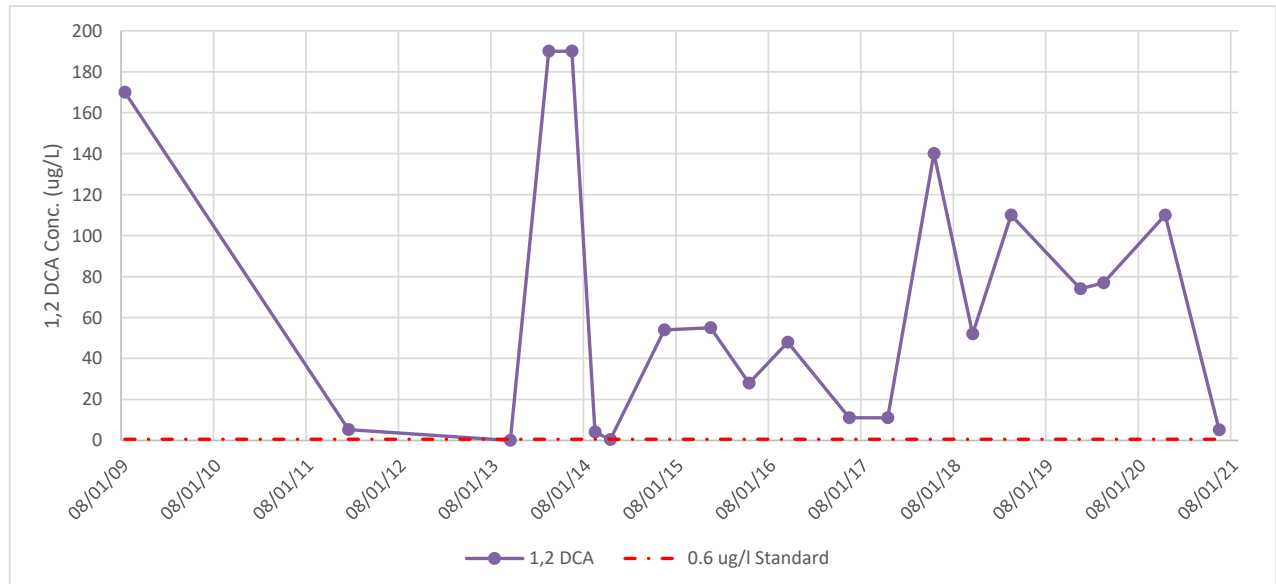
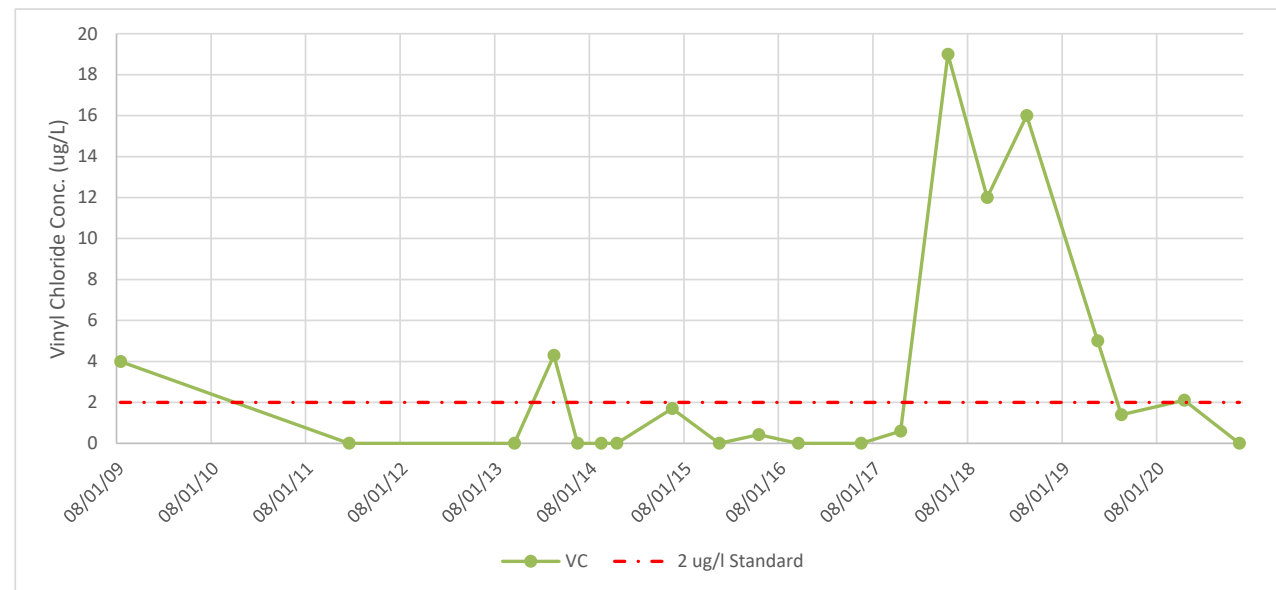
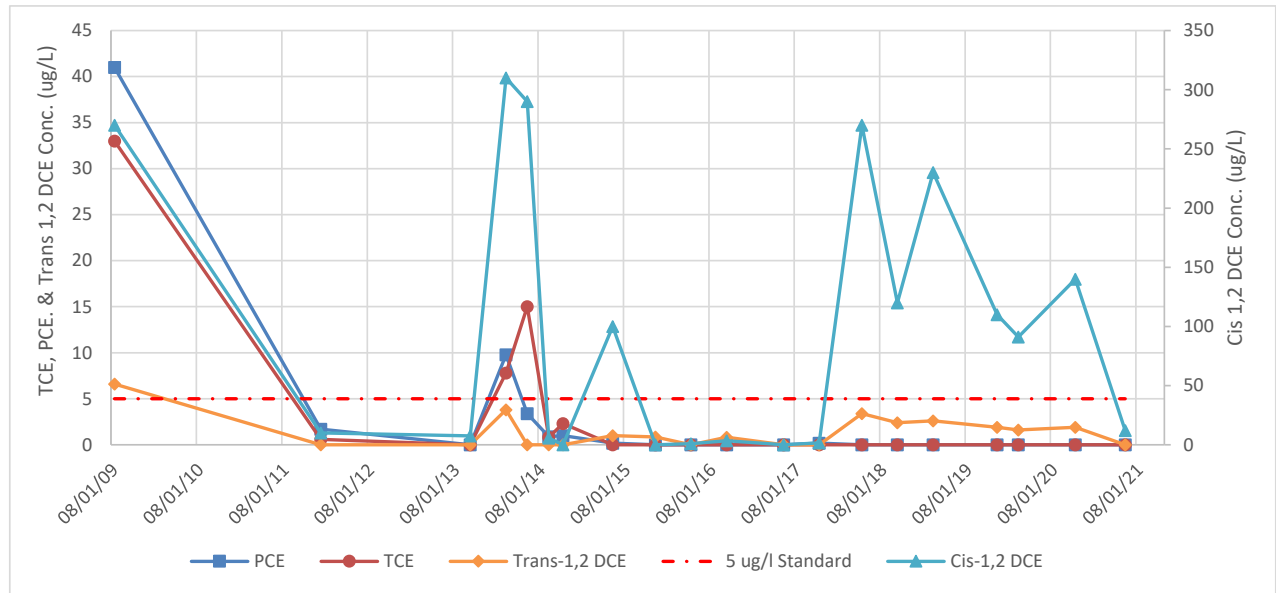
- DIndicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.
- JIndicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Data Usability Summary Report (DUSR) Qualifiers:

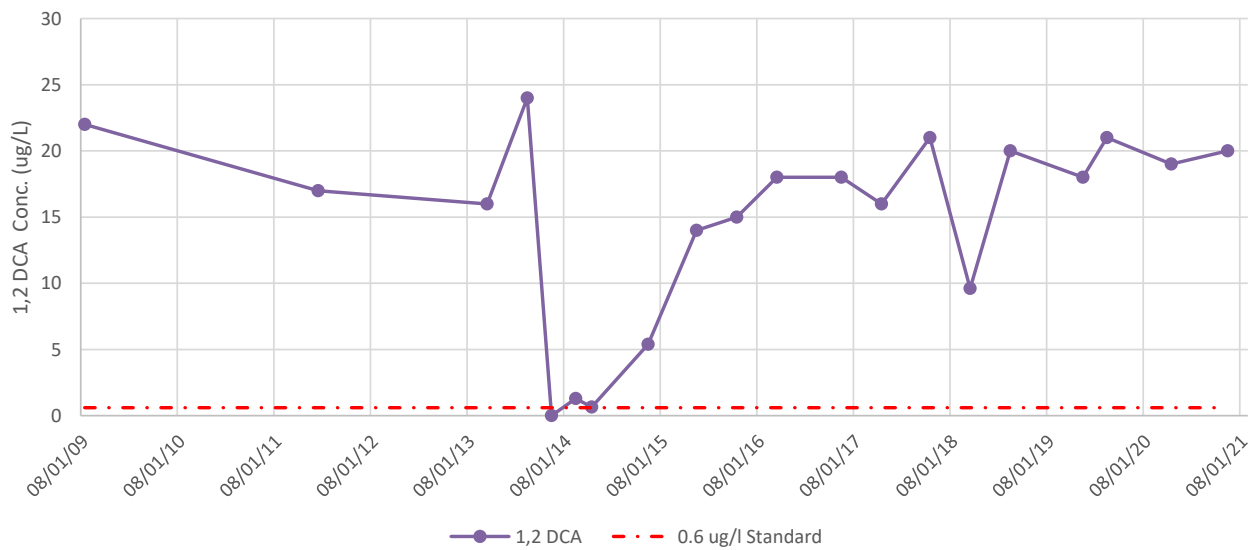
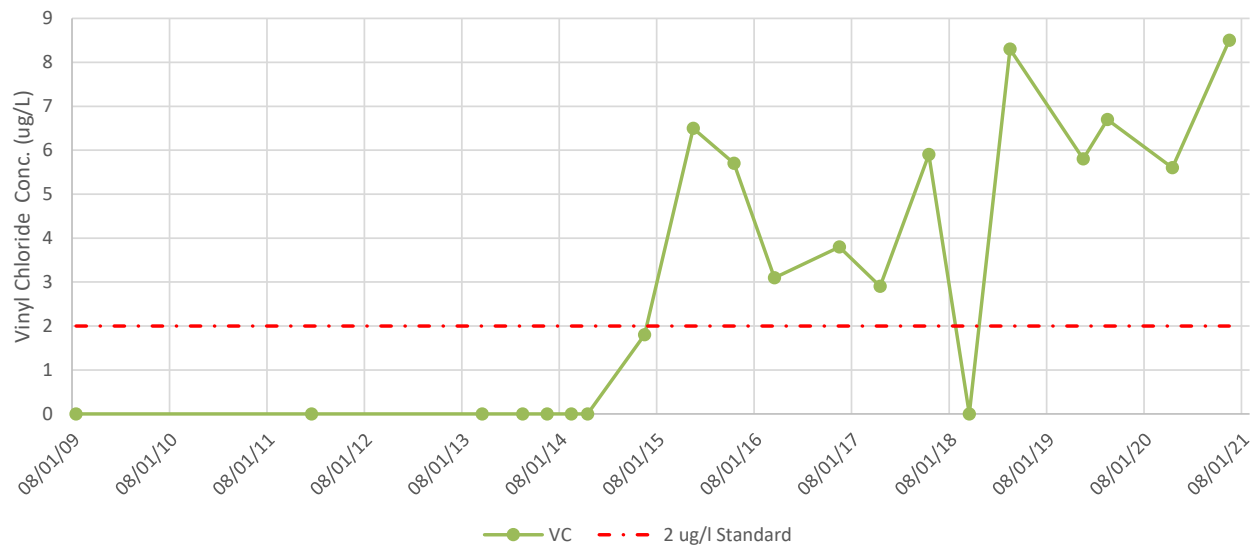
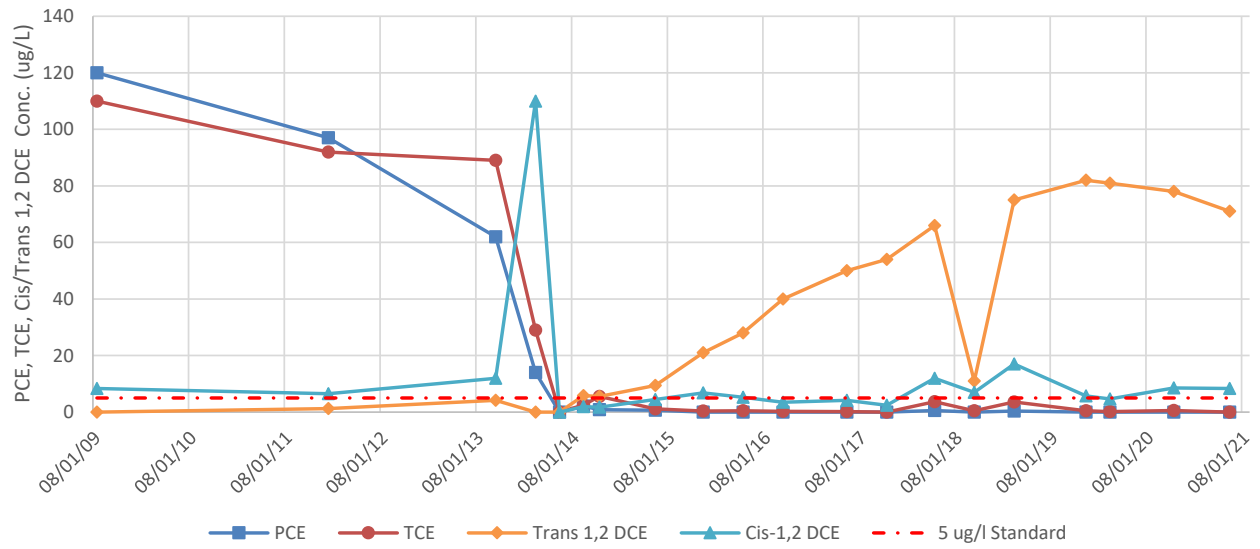
- jReported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UNot detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- 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.
- UJThe analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

DATA TREND GRAPHS

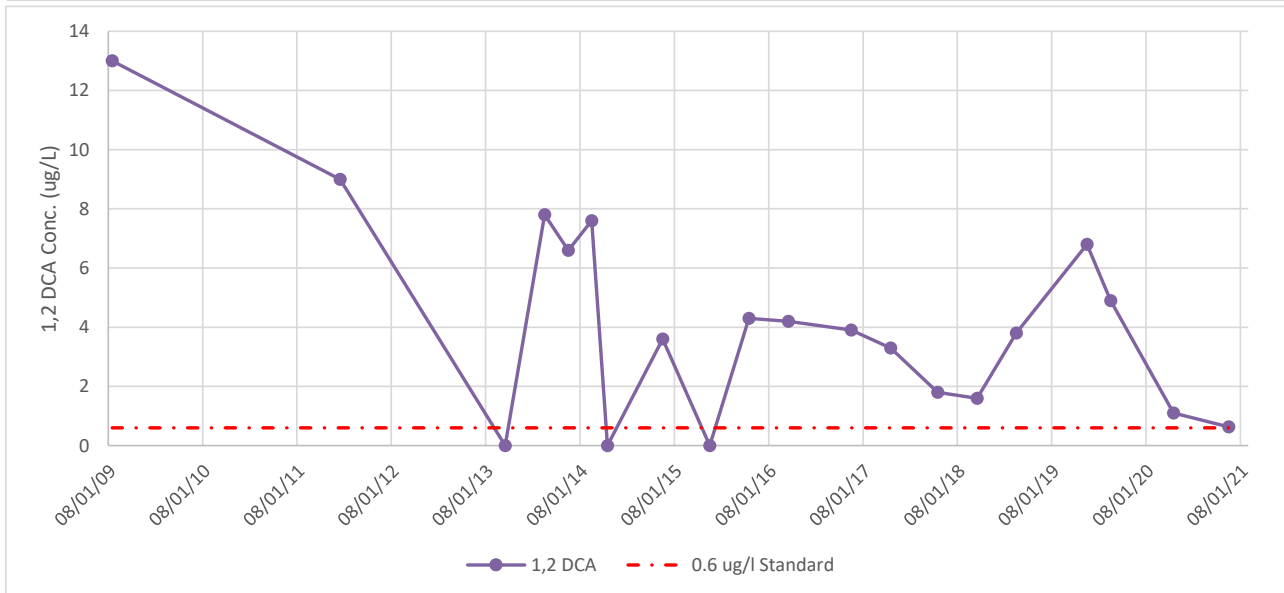
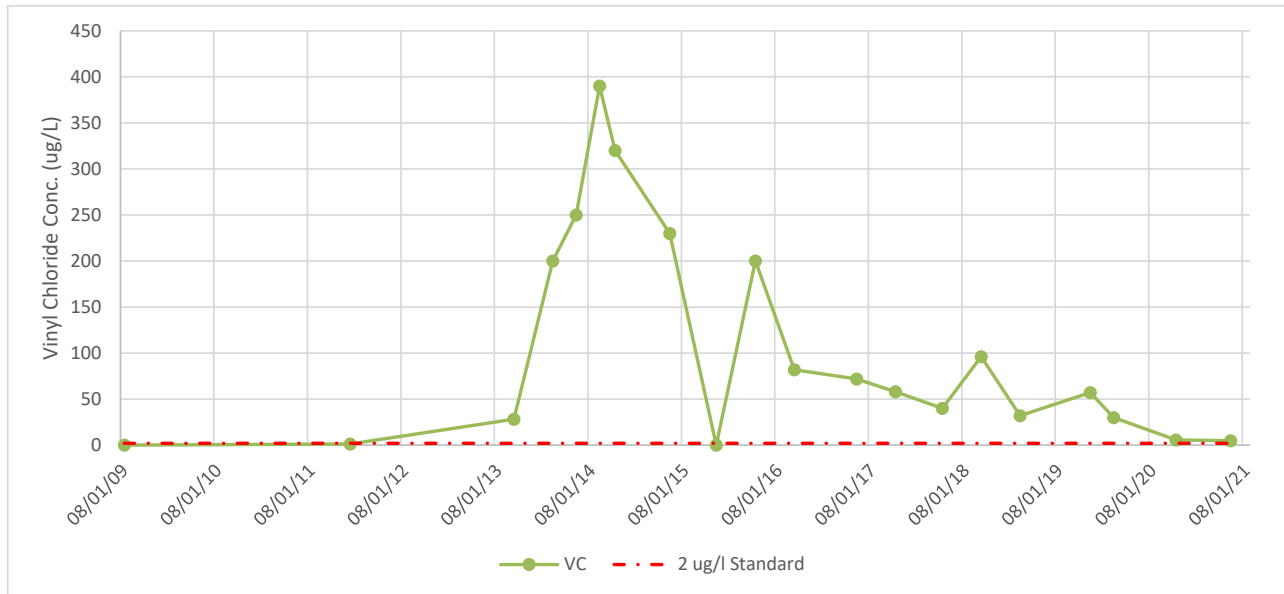
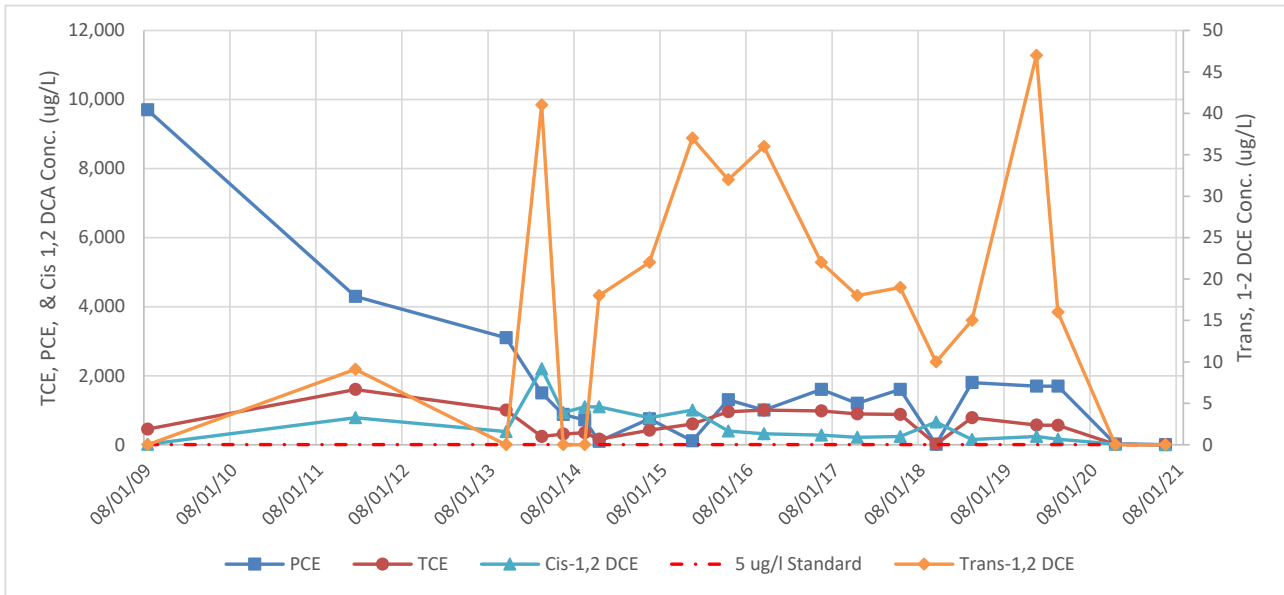
**Groundwater Quality Trends
Monitoring Well GZ-21D
441 and 442 Waverly Avenue**



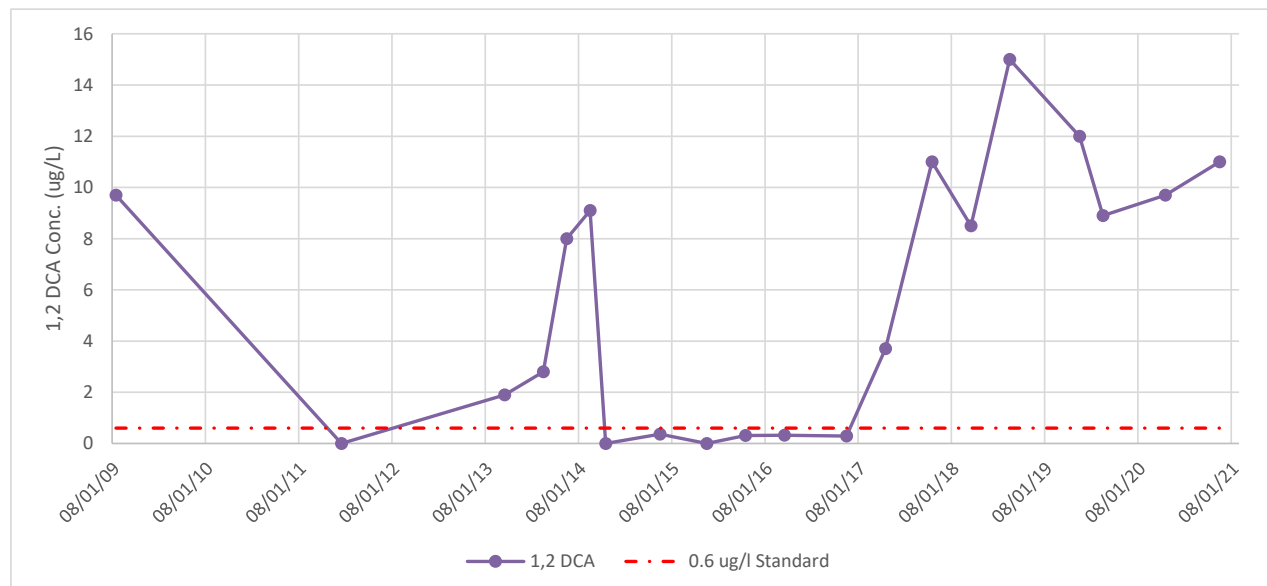
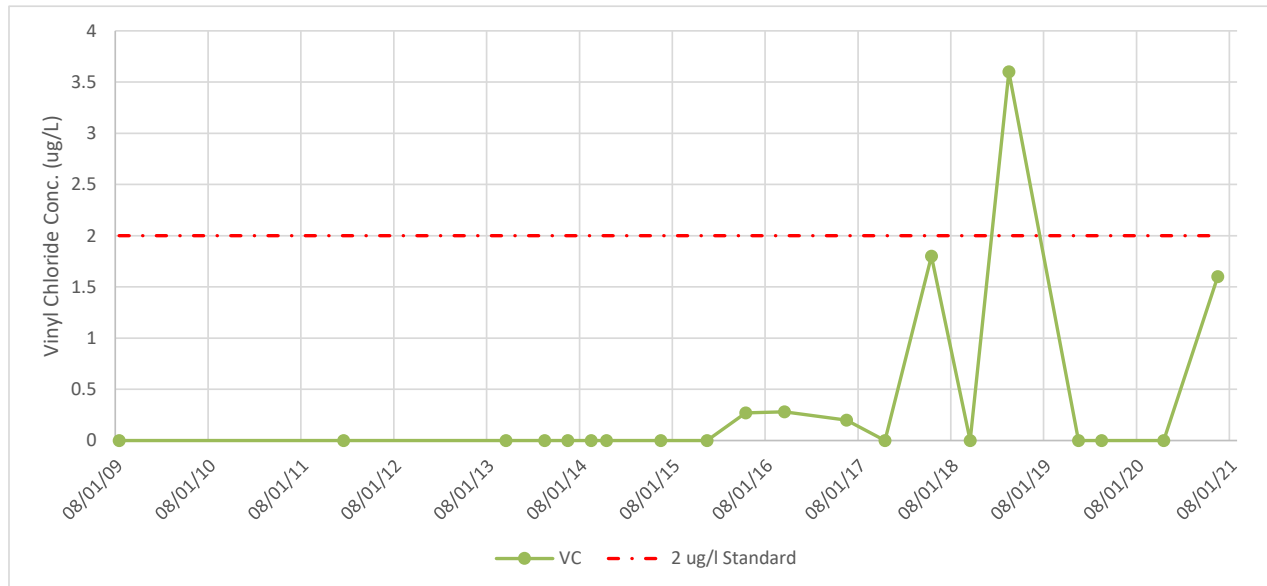
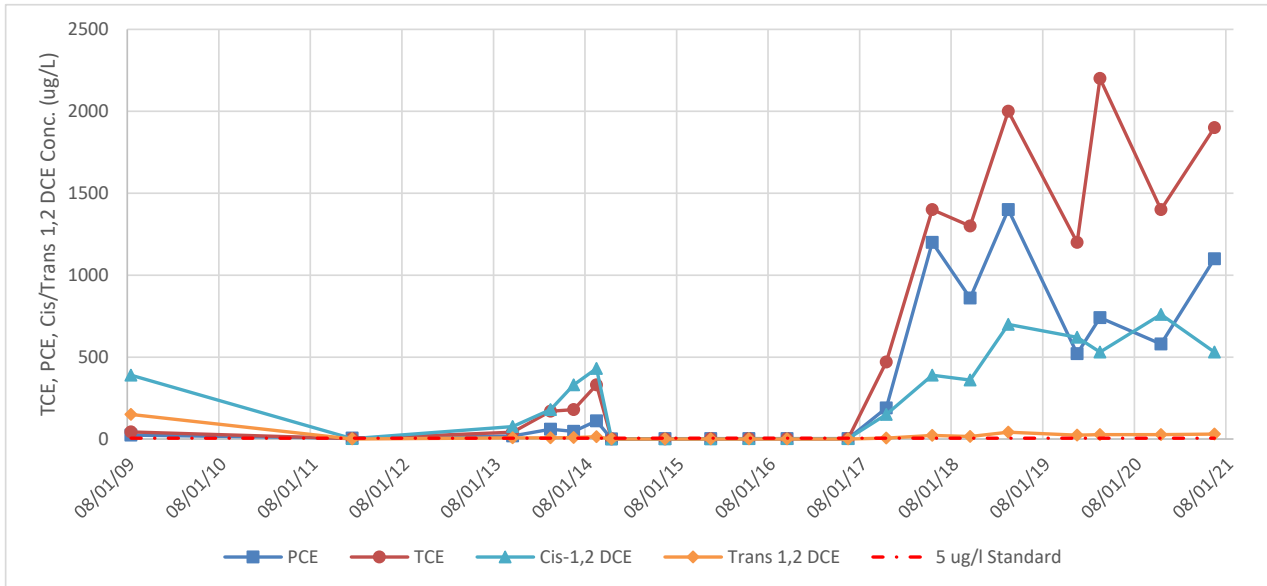
Groundwater Quality Trends
Monitoring Well GZ-22D
441 and 442 Waverly Avenue



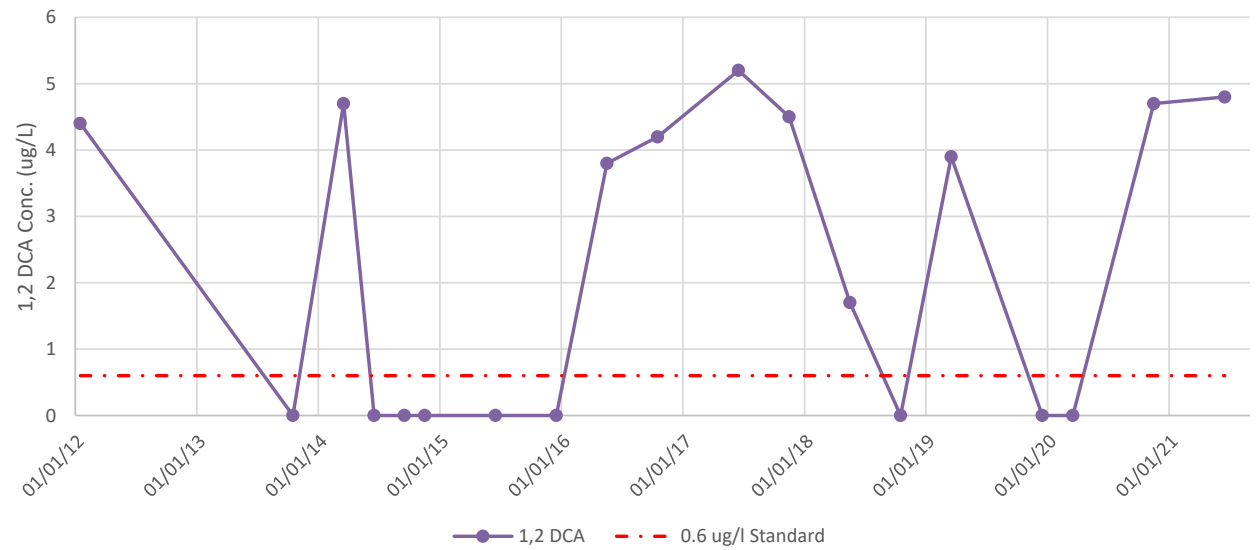
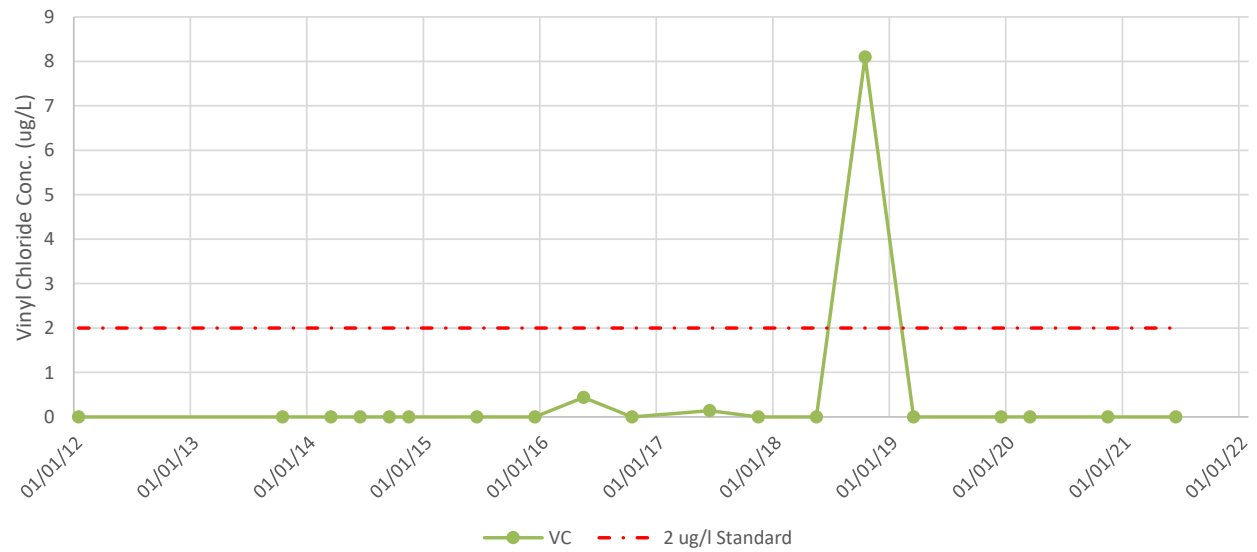
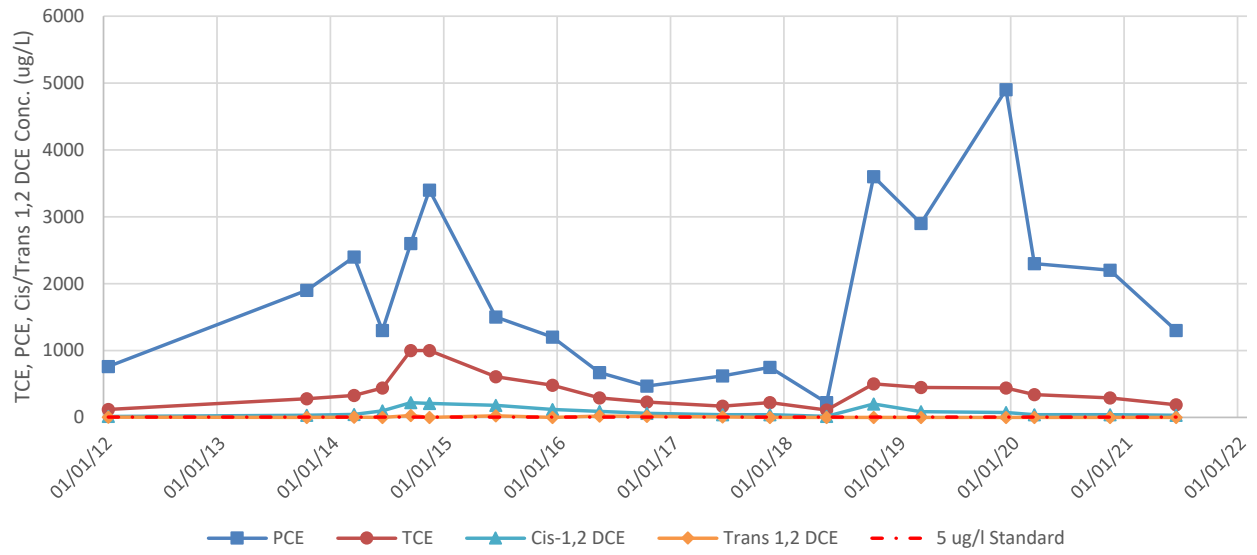
**Groundwater Quality Trends
Monitoring Well GZ-23D
441 and 442 Waverly Avenue**



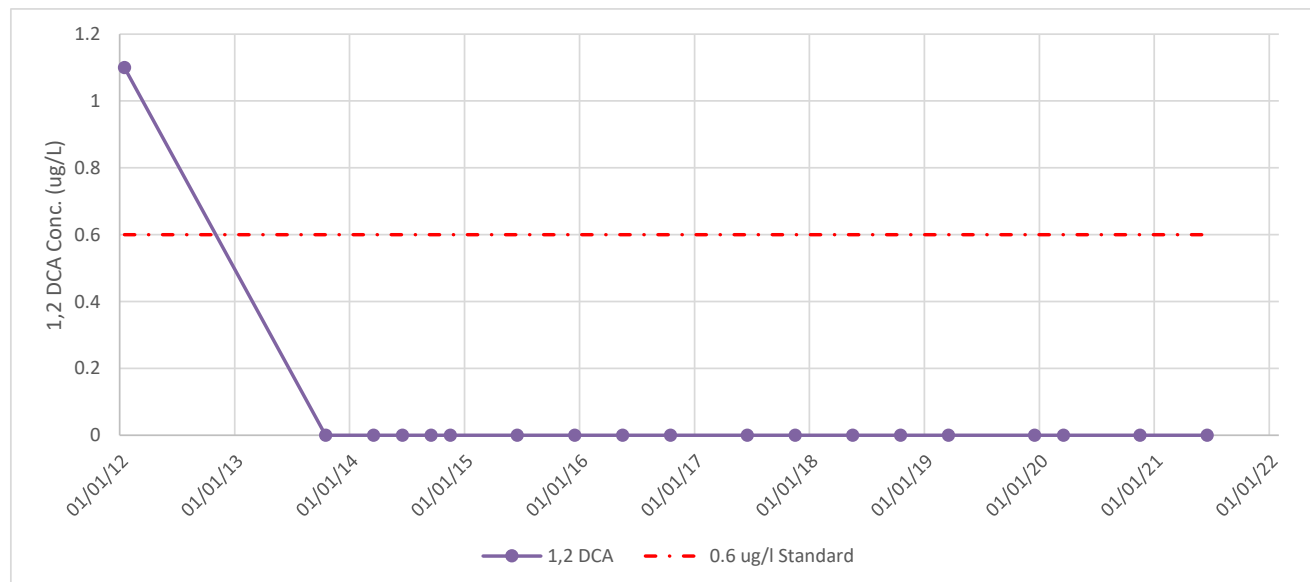
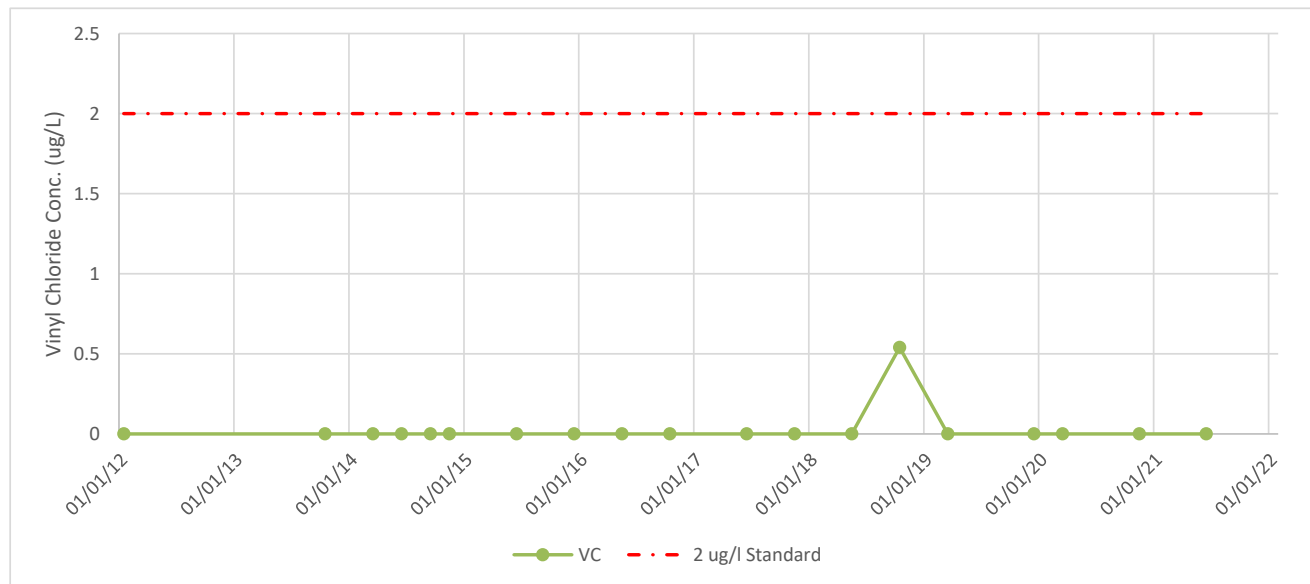
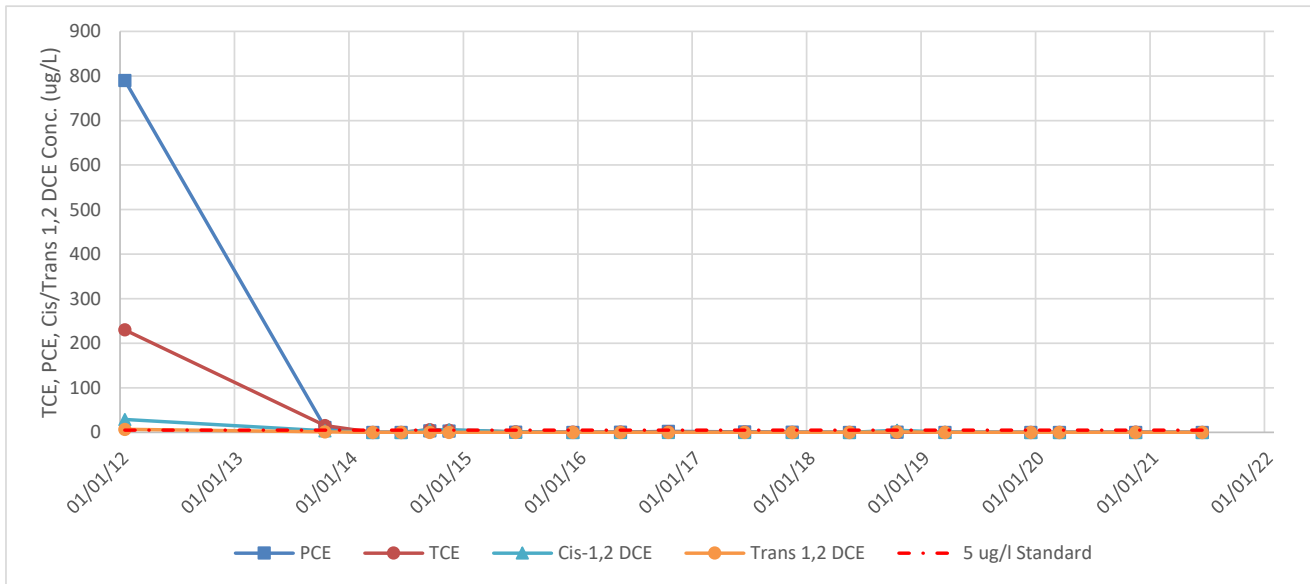
**Groundwater Quality Trends
Monitoring Well B6-OWD
441 and 442 Waverly Avenue**



**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: 6-17-2021

Location: Mamaroneck, NY

Personnel: PWS - Paul Scheler

Weather: 80°F Sunny

TBC - Tim Clark

Work Description:

1030 - PWS + TBC onsite; begin DTW at monitoring wells.

1100 - PWS and TBC set up at OSMW-4

1155 - PWS and TBC sample OSMW-4, Decon Equipment

1210 - Set up at ~~OSMW~~ GZ-22D

1245 - Sample GZ-22D; decon. equipment, Relocate to GZ-21D

1335 - Sample GZ-21D; decon. equipment, Relocate to GZ-23D

~~1415~~ 1415 - Sample GZ-23D; sweet smell red color during purging
(similar odor to OSMW-4)

1455 - Sample OSMW-3

1500 - Sample OSMW-3 MS

1505 - Sample OSMW-3 MSD Decon Equipment
move to B6-OWD

1550 - Sample B6-OWD; DUP06172021 collected at B6-OWD

1600 - PWS + TBC cleanup, Perform Bottlecheck.

1615 - Sterling offsite

Signature: 

441/442 Waverly Avenue –Semiannual Groundwater Sampling Event

Name: Paul Scholar

Date: 6/17/2021

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	8.95	22.32	Light Brown	Sweet	None
GZ-21D	44.21	29.79	7.78	22.01	Clear	None	None
GZ-22D	46.04	30.87	8.90	21.97	Clear	None	None
B6-OWD	35.30	30.15	9.30	20.85	Clear	None	None
OSMW-3	39.40	30.88	8.62	22.26	Light Orange	None	None
GZ-23D*	44.86	31.41	9.62	21.79	Clear	Sweet	None
OSMW-1	36.24	31.05	8.82	22.23	NA	NA	NA
OSMW-2	40.84	31.29	8.89	22.40	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

Well Sampling Data Sheet

Project: 441 & 442 Waverly Avenue
 Site: Mamaroneck, NY
 Date: 6-17-2021
 Sampling Personnel: PWS+TRC
 Sampling Device: Bailer
 Static Water Level: 8.95'
 Measuring Point: Top of PVC
 Total Volume Purged: 3 gallons

Well No.: OSMW-4
 Sample Time: 1155
 Well Depth: 35.62'
 Well Diameter: 1"
 Screen Length: 5'
 Casing Type: Steel
 Tubing Type: NA
 Other Info: NA

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown ($< 1\text{m}$)	pH (± 0.1)	Temp. ($^{\circ}\text{C}$) ($\pm 3\%$)	SC (mS/cm) ($\pm 3\%$)	ORP (mV) (± 10)	DO (mg/L) ($\pm 10\%$)	Turbidity (nTu) ($\pm 10\%$)
1135	NA	NA	NA	6.71	16.3	1.284	-28.4	4.93	469.14
1140	NA	NA	NA	6.72	16.9	0.583	-36.8	4.22	377.71
1155	NA	NA	NA	6.81	16.3	1.215	-64.0	5.60	291.80

Notes: Lt Brn Sweet Smell; No Shoen

Types of Samples Collected:

VOCs

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $\text{Vol}_{\text{cyl}} = \pi r^2 h$, 1 ft³ = 7.48 gal./28.31L

Well Sampling Data Sheet

Project: 441 & 442 Waverly Avenue
 Site: Mamaroneck, NY
 Date: 6-17-2021
 Sampling Personnel: PWS + TBL
 Sampling Device: Bladder Pump
 Static Water Level: 8.90'
 Measuring Point: Top of PVC
 Total Volume Purged: 6L

Well No.: GZ-22D
 Sample Time: 1245
 Well Depth: 46.0'
 Well Diameter: 2"
 Screen Length: 5'
 Casing Type: Steel
 Tubing Type: 1/4 LDPE
 Other Info: NA

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%)
1220	0.200	8.90	NA	7.02	18.6	0.915	-102.2	1.15	66.21
1225	0.200	8.96	0.06	7.01	19.0	0.921	-116.2	0.54	132.64
1230	0.200	8.96	0.00	7.01	19.0	0.925	-120.8	0.41	141.00
1235	0.200	8.94	-0.02	7.01	20.0	0.924	-122.5	0.39	99.65
1240	0.200	8.95	0.01	7.01	20.1	0.932	-124.0	0.40	90.74
1245	0.200	8.95	0.00	7.03	20.2	0.932	-123.1	0.42	95.13

Notes: Clear; No Odor; No Screen

Types of Samples Collected:

VOCs

Sampled at 1245

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., Vol_{eyl} = π r²h, 1 ft³ = 7.48 gal./28.31L

Well Sampling Data Sheet

Project: 441 & 442 Waverly Avenue
 Site: Mamaroneck, NY
 Date: 6-17-2021
 Sampling Personnel: PWS & TBC
 Sampling Device: Bladder Pump
 Static Water Level: 7.78
 Measuring Point: Top of PVC
 Total Volume Purged: 5L

Well No.: GZ-21D
 Sample Time: 1335
 Well Depth: 44.21'
 Well Diameter: 2"
 Screen Length: 5'
 Casing Type: Steel
 Tubing Type: 1/4" LDPE
 Other Info: NA

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1 m)	pH (± 0.1)	Temp. ($^{\circ}$ C) ($\pm 3\%$)	SC (mS/cm) ($\pm 3\%$)	ORP (mV) (± 10)	DO (mg/L) ($\pm 10\%$)	Turbidity (nTu) ($\pm 10\%$)
1315	0.200	7.78	NA	6.08	15.8	0.064	115.1	6.74	6.97
1320	0.200	8.07	0.29	6.71	15.8	0.064	129.0	6.71	6.44
1325	0.200	8.09	0.02	5.97	15.8	0.063	143.6	6.70	4.68
1330	0.200	8.08	0.01	5.94	15.8	0.063	150.8	6.68	3.40
1335	0.200	8.08	0.00	5.91	16.0	0.066	153.4	6.65	2.61

Notes: Clear; No Odor; No Sheen

Types of Samples Collected:

VOCs

Sampled @ 1335

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $Vol_{cyl} = \pi r^2 h$, 1 ft³ = 7.48 gal./28.31L

Well Sampling Data Sheet

Project: 441 & 442 Waverly Avenue
 Site: Mamaroneck, NY
 Date: 6-17-2021
 Sampling Personnel: PWS + TBC
 Sampling Device: ~~Watera~~ Peristaltic Pump
 Static Water Level: 9.62
 Measuring Point: Top of PVC
 Total Volume Purged: 4L

Well No.: GZ-23D
 Sample Time: 1415
 Well Depth: 44.86'
 Well Diameter: 2"
 Screen Length: 5'
 Casing Type: Steel
 Tubing Type: 1/4" HDPE
 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%)
1400	0.200	9.62	NA	6.58	16.7	0.513	-48.3	1.88	3381.95
1405	0.200	9.62	0.00	6.56	15.7	0.507	-65.0	0.47	18.12
1410	0.200	9.64	0.02	6.55	15.7	0.511	-67.1	0.29	20.04
1415	0.200	9.64	0.00	6.56	15.9	0.515	-68.7	0.29	7.52

Notes: Clear; ~~odorless~~; No Sheen; Sweet odor;
 Water red upon initial sampling.

Types of Samples Collected:

VOLs

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $Vol_{cyl} = \pi r^2 h$, 1 ft³ = 7.48 gal./28.31L

Well Sampling Data Sheet

Project: 441 & 442 Waverly Avenue
 Site: Mamaroneck, NY
 Date: 6-17-2021
 Sampling Personnel: PWS + TBC
 Sampling Device: Bailer
 Static Water Level: 8.62'
 Measuring Point: Top of PVC
 Total Volume Purged: 4 gallons

Well No.: OSMW-3
 Sample Time: 1455
 Well Depth: 39.40'
 Well Diameter: 1"
 Screen Length: 5'
 Casing Type: Steel
 Tubing Type: NA
 Other Info: NA

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1 m)	pH (± 0.1)	Temp. ($^{\circ}\text{C}$) ($\pm 3\%$)	SC (mS/cm) ($\pm 3\%$)	ORP (mV) (± 10)	DO (mg/L) ($\pm 10\%$)	Turbidity (nTu) ($\pm 10\%$)
1435	NA	NA	NA	7.25	16.4	0.804	96.0	7.78	24.86
1445	NA	NA	NA	7.08	16.1	0.839	43.6	5.39	35.00
1455	NA	NA	NA	7.10	16.4	0.843	6.0	5.57	33.89

Notes: Clear, No Odors, No Sheen

Types of Samples Collected:

VOLs

OSMW-3 MS @ 1500
 OSMW-3 MSD @ 1505

Sampled at 1455

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft., $\text{Vol}_{\text{cyl}} = \pi r^2 h$, 1 ft³ = 7.48 gal./28.31L

Well Sampling Data Sheet

Project: 441 & 442 Waverly Avenue
 Site: Mamaroneck, NY
 Date: 6-17-2021
 Sampling Personnel: PWS + TBC
 Sampling Device: Peristaltic Pump
 Static Water Level: 9.30
 Measuring Point: Top of PVC
 Total Volume Purged:

Well No.: B6-OWD
 Sample Time: 1550
 Well Depth: 36.05'
 Well Diameter: 2"
 Screen Length: 5'
 Casing Type: PVC
 Tubing Type: 1/4" HDPE
 Other Info: NA

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 1 m)	pH (± 0.1)	Temp. ($^{\circ}\text{C}$) ($\pm 3\%$)	SC (mS/cm) ($\pm 3\%$)	ORP (mV) (± 10)	DO (mg/L) ($\pm 10\%$)	Turbidity (nTu) ($\pm 10\%$)
1520	0.200	9.30	NA	6.97	16.4	1.707	124.7	4.88	6.53
1525	0.200	9.32	0.02	7.00	16.3	1.711	1.711	4.57	28.57
1530	0.200	9.71	0.39	7.01	16.4	1.723	1.723	4.45	90.54
1535	0.200	9.70	+0.01	7.00	16.1	1.727	1.727	4.43	131.03
1540	0.200	9.67	+0.03	7.00	16.2	1.731	1.731	4.40	116.02
1545	0.200	9.65	+0.02	6.99	16.5	1.750	1.750	4.38	98.86
1550	0.200	9.65	0.00	6.69	16.7	1.755	1.755	4.33	96.27

Notes: Clear; No Odor; No Screen
 DUP06172021 collected at B6-OWD

Types of Samples Collected:

VOL

Sampled at
1550

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

24 Wade Road
Latham, N.Y. 12110

Measuring Device: Depth to Water Meter Solinst 100'

[illegible]

**LABORATORY ANALYSIS REPORT
AND
DATA USABILITY SUMMARY REPORT (DUSR)**



ANALYTICAL REPORT

Lab Number:	L2133145
Client:	Sterling Environmental Engineering 24 Wade Road Latham, NY 12110
ATTN:	Andrew Millspaugh
Phone:	(518) 456-4900
Project Name:	WAVERLY AVE
Project Number:	28012
Report Date:	07/06/21

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

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



Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2133145-01	GZ-21D	WATER	NY	06/17/21 13:35	06/18/21
L2133145-02	GZ-22D	WATER	NY	06/17/21 12:45	06/18/21
L2133145-03	OSMW-3	WATER	NY	06/17/21 14:55	06/18/21
L2133145-04	OSMW-4	WATER	NY	06/17/21 11:55	06/18/21
L2133145-05	B6-OWD	WATER	NY	06/17/21 15:50	06/18/21
L2133145-06	GZ-23D	WATER	NY	06/17/21 14:15	06/18/21
L2133145-07	DUP06172021	WATER	NY	06/17/21 00:00	06/18/21
L2133145-08	TB06172021	WATER	NY	06/17/21 00:00	06/18/21

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Case Narrative (continued)

Report Submission

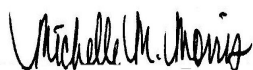
All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

The WG1519380-7 MSD recovery, performed on L2133145-03, is outside the acceptance criteria for tetrachloroethene (0%). The unacceptable percent recovery is attributed to the elevated concentration of target compound present in the native sample.

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

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 07/06/21

ORGANICS

VOLATILES

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-01
Client ID: GZ-21D
Sample Location: NY

Date Collected: 06/17/21 13:35
Date Received: 06/18/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 06/30/21 16:02
Analyst: LAC

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	5.1		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	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: WAVERLY AVE

Lab Number: L2133145

Project Number: 28012

Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-01

Date Collected: 06/17/21 13:35

Client ID: GZ-21D

Date Received: 06/18/21

Sample Location: 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	12		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	109		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	106		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-02
Client ID: GZ-22D
Sample Location: NY

Date Collected: 06/17/21 12:45
Date Received: 06/18/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/01/21 05:32
Analyst: NLK

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	20		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	2.1		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	8.5		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	71		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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-02
Client ID: GZ-22D
Sample Location: NY

Date Collected: 06/17/21 12:45
Date Received: 06/18/21
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	1.2	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	8.4		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	0.84	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	0.47	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-03 D
Client ID: OSMW-3
Sample Location: NY

Date Collected: 06/17/21 14:55
Date Received: 06/18/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/01/21 05:56
Analyst: NLK

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	1300		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	4.8	J	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	ND		ug/l	25	7.0	10
Trichloroethene	190		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

Project Name: WAVERLY AVE

Lab Number: L2133145

Project Number: 28012

Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-03 D

Date Collected: 06/17/21 14:55

Client ID: OSMW-3

Date Received: 06/18/21

Sample Location: 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	32		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	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-04
Client ID: OSMW-4
Sample Location: NY

Date Collected: 06/17/21 11:55
Date Received: 06/18/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 06/30/21 16:59
Analyst: LAC

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: WAVERLY AVE

Lab Number: L2133145

Project Number: 28012

Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-04

Date Collected: 06/17/21 11:55

Client ID: OSMW-4

Date Received: 06/18/21

Sample Location: 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	7.5	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	2.4	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-05 **D**
Client ID: B6-OWD
Sample Location: NY

Date Collected: 06/17/21 15:50
Date Received: 06/18/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 06/30/21 17:27
Analyst: LAC

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	1100		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	11		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	8.8	J	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	1.6	J	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	30	J	ug/l	50	14.	20
Trichloroethene	1900		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20

Project Name: WAVERLY AVE

Lab Number: L2133145

Project Number: 28012

Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-05 D

Date Collected: 06/17/21 15:50

Client ID: B6-OWD

Date Received: 06/18/21

Sample Location: 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	530		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	107		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-06
Client ID: GZ-23D
Sample Location: NY

Date Collected: 06/17/21 14:15
Date Received: 06/18/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 06/30/21 17:55
Analyst: LAC

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	0.63		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	14		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	4.8		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	0.45	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: WAVERLY AVE

Lab Number: L2133145

Project Number: 28012

Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-06

Date Collected: 06/17/21 14:15

Client ID: GZ-23D

Date Received: 06/18/21

Sample Location: 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	1.6	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	5.2		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	0.45	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	0.40	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	103		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-07 D
Client ID: DUP06172021
Sample Location: NY

Date Collected: 06/17/21 00:00
Date Received: 06/18/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 06/30/21 23:05
Analyst: NLK

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	800		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	8.0	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	5.2	J	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	1.7	J	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	22	J	ug/l	50	14.	20
Trichloroethene	1700		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20

Project Name: WAVERLY AVE

Lab Number: L2133145

Project Number: 28012

Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-07 D

Date Collected: 06/17/21 00:00

Client ID: DUP06172021

Date Received: 06/18/21

Sample Location: 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	480		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	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-08
Client ID: TB06172021
Sample Location: NY

Date Collected: 06/17/21 00:00
Date Received: 06/18/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/05/21 08:44
Analyst: NLK

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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

SAMPLE RESULTS

Lab ID: L2133145-08
Client ID: TB06172021
Sample Location: NY

Date Collected: 06/17/21 00:00
Date Received: 06/18/21
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	110		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 09:32
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-06 Batch: WG1519073-5					
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
1,1,1,2-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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 09:32
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-06 Batch: WG1519073-5					
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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 09:32
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-06 Batch: WG1519073-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 21:56
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1519326-5					
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
1,1,1,2-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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/30/21 21:56
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1519326-5					
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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 21:56
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1519326-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	99		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 21:31
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1519380-5					
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
1,1,1,2-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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 21:31
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1519380-5					
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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/30/21 21:31
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1519380-5					

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

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 20:57
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1519429-5					
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
1,1,1,2-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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/30/21 20:57
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1519429-5					
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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/30/21 20:57
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1519429-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/05/21 07:51
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1520693-5					
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
1,1,1,2-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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/05/21 07:51
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1520693-5					
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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/05/21 07:51
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1520693-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 Batch: WG1519073-3 WG1519073-4								
Methylene chloride	92		98		70-130	6		20
1,1-Dichloroethane	92		100		70-130	8		20
Chloroform	93		100		70-130	7		20
Carbon tetrachloride	95		99		63-132	4		20
1,2-Dichloropropane	89		95		70-130	7		20
Dibromochloromethane	86		96		63-130	11		20
1,1,2-Trichloroethane	86		92		70-130	7		20
Tetrachloroethene	92		100		70-130	8		20
Chlorobenzene	92		100		75-130	8		20
Trichlorofluoromethane	94		100		62-150	6		20
1,2-Dichloroethane	95		100		70-130	5		20
1,1,1-Trichloroethane	97		100		67-130	3		20
Bromodichloromethane	91		98		67-130	7		20
trans-1,3-Dichloropropene	94		100		70-130	6		20
cis-1,3-Dichloropropene	94		100		70-130	6		20
Bromoform	84		90		54-136	7		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	95		100		70-130	5		20
Toluene	90		100		70-130	11		20
Ethylbenzene	93		99		70-130	6		20
Chloromethane	89		95		64-130	7		20
Bromomethane	130		140	Q	39-139	7		20
Vinyl chloride	82		89		55-140	8		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 Batch: WG1519073-3 WG1519073-4								
Chloroethane	110		130		55-138	17		20
1,1-Dichloroethene	93		100		61-145	7		20
trans-1,2-Dichloroethene	94		98		70-130	4		20
Trichloroethene	81		87		70-130	7		20
1,2-Dichlorobenzene	93		99		70-130	6		20
1,3-Dichlorobenzene	95		100		70-130	5		20
1,4-Dichlorobenzene	94		100		70-130	6		20
Methyl tert butyl ether	92		97		63-130	5		20
p/m-Xylene	95		100		70-130	5		20
o-Xylene	95		100		70-130	5		20
cis-1,2-Dichloroethene	89		96		70-130	8		20
Styrene	90		100		70-130	11		20
Dichlorodifluoromethane	86		94		36-147	9		20
Acetone	80		92		58-148	14		20
Carbon disulfide	94		100		51-130	6		20
2-Butanone	89		83		63-138	7		20
4-Methyl-2-pentanone	77		88		59-130	13		20
2-Hexanone	84		96		57-130	13		20
Bromochloromethane	96		100		70-130	4		20
1,2-Dibromoethane	91		100		70-130	9		20
1,2-Dibromo-3-chloropropane	88		98		41-144	11		20
Isopropylbenzene	95		100		70-130	5		20
1,2,3-Trichlorobenzene	88		94		70-130	7		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-06 Batch: WG1519073-3 WG1519073-4								
1,2,4-Trichlorobenzene	91		95		70-130	4		20
Methyl Acetate	88		100		70-130	13		20
Cyclohexane	89		95		70-130	7		20
1,4-Dioxane	94		100		56-162	6		20
Freon-113	100		110		70-130	10		20
Methyl cyclohexane	93		99		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		109		70-130
Toluene-d8	98		100		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	107		104		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1519326-3 WG1519326-4								
Methylene chloride	98		97		70-130	1		20
1,1-Dichloroethane	98		100		70-130	2		20
Chloroform	97		97		70-130	0		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	96		98		70-130	2		20
Dibromochloromethane	90		92		63-130	2		20
1,1,2-Trichloroethane	90		92		70-130	2		20
Tetrachloroethene	91		96		70-130	5		20
Chlorobenzene	90		94		75-130	4		20
Trichlorofluoromethane	100		110		62-150	10		20
1,2-Dichloroethane	99		100		70-130	1		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	96		97		67-130	1		20
trans-1,3-Dichloropropene	88		91		70-130	3		20
cis-1,3-Dichloropropene	93		94		70-130	1		20
Bromoform	84		85		54-136	1		20
1,1,2,2-Tetrachloroethane	92		94		67-130	2		20
Benzene	95		96		70-130	1		20
Toluene	88		93		70-130	6		20
Ethylbenzene	89		94		70-130	5		20
Chloromethane	93		92		64-130	1		20
Bromomethane	69		82		39-139	17		20
Vinyl chloride	100		100		55-140	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1519326-3 WG1519326-4								
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	99		100		61-145	1		20
trans-1,2-Dichloroethene	97		100		70-130	3		20
Trichloroethene	96		99		70-130	3		20
1,2-Dichlorobenzene	88		91		70-130	3		20
1,3-Dichlorobenzene	87		92		70-130	6		20
1,4-Dichlorobenzene	88		92		70-130	4		20
Methyl tert butyl ether	92		93		63-130	1		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	85		90		70-130	6		20
cis-1,2-Dichloroethene	96		98		70-130	2		20
Styrene	85		85		70-130	0		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	100		81		58-148	21	Q	20
Carbon disulfide	98		100		51-130	2		20
2-Butanone	88		85		63-138	3		20
4-Methyl-2-pentanone	87		88		59-130	1		20
2-Hexanone	82		83		57-130	1		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	90		93		70-130	3		20
1,2-Dibromo-3-chloropropane	85		91		41-144	7		20
Isopropylbenzene	89		94		70-130	5		20
1,2,3-Trichlorobenzene	92		96		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1519326-3 WG1519326-4								
1,2,4-Trichlorobenzene	92		99		70-130	7		20
Methyl Acetate	93		90		70-130	3		20
Cyclohexane	100		100		70-130	0		20
1,4-Dioxane	96		92		56-162	4		20
Freon-113	100		110		70-130	10		20
Methyl cyclohexane	97		100		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		103		70-130
Toluene-d8	98		100		70-130
4-Bromofluorobenzene	101		102		70-130
Dibromofluoromethane	103		101		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1519380-3 WG1519380-4								
Methylene chloride	91		92		70-130	1		20
1,1-Dichloroethane	98		100		70-130	2		20
Chloroform	95		98		70-130	3		20
Carbon tetrachloride	94		97		63-132	3		20
1,2-Dichloropropane	96		99		70-130	3		20
Dibromochloromethane	88		92		63-130	4		20
1,1,2-Trichloroethane	87		93		70-130	7		20
Tetrachloroethene	89		91		70-130	2		20
Chlorobenzene	94		97		75-130	3		20
Trichlorofluoromethane	99		100		62-150	1		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	95		99		67-130	4		20
Bromodichloromethane	93		96		67-130	3		20
trans-1,3-Dichloropropene	94		99		70-130	5		20
cis-1,3-Dichloropropene	94		99		70-130	5		20
Bromoform	83		87		54-136	5		20
1,1,2,2-Tetrachloroethane	92		97		67-130	5		20
Benzene	96		98		70-130	2		20
Toluene	92		96		70-130	4		20
Ethylbenzene	96		99		70-130	3		20
Chloromethane	82		83		64-130	1		20
Bromomethane	78		77		39-139	1		20
Vinyl chloride	100		100		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1519380-3 WG1519380-4								
Chloroethane	120		120		55-138	0		20
1,1-Dichloroethene	89		92		61-145	3		20
trans-1,2-Dichloroethene	92		94		70-130	2		20
Trichloroethene	89		92		70-130	3		20
1,2-Dichlorobenzene	95		98		70-130	3		20
1,3-Dichlorobenzene	94		97		70-130	3		20
1,4-Dichlorobenzene	96		98		70-130	2		20
Methyl tert butyl ether	89		95		63-130	7		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	95		94		70-130	1		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	85		88		36-147	3		20
Acetone	100		100		58-148	0		20
Carbon disulfide	95		96		51-130	1		20
2-Butanone	88		82		63-138	7		20
4-Methyl-2-pentanone	78		86		59-130	10		20
2-Hexanone	87		93		57-130	7		20
Bromochloromethane	94		98		70-130	4		20
1,2-Dibromoethane	90		95		70-130	5		20
1,2-Dibromo-3-chloropropane	82		89		41-144	8		20
Isopropylbenzene	98		98		70-130	0		20
1,2,3-Trichlorobenzene	89		92		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1519380-3 WG1519380-4								
1,2,4-Trichlorobenzene	89		93		70-130	4		20
Methyl Acetate	83		96		70-130	15		20
Cyclohexane	94		96		70-130	2		20
1,4-Dioxane	98		104		56-162	6		20
Freon-113	95		96		70-130	1		20
Methyl cyclohexane	90		91		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		103		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	99		99		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1519429-3 WG1519429-4								
Methylene chloride	87		99		70-130	13		20
1,1-Dichloroethane	85		98		70-130	14		20
Chloroform	90		100		70-130	11		20
Carbon tetrachloride	87		97		63-132	11		20
1,2-Dichloropropane	84		94		70-130	11		20
Dibromochloromethane	85		98		63-130	14		20
1,1,2-Trichloroethane	84		92		70-130	9		20
Tetrachloroethene	86		99		70-130	14		20
Chlorobenzene	88		98		75-130	11		20
Trichlorofluoromethane	86		98		62-150	13		20
1,2-Dichloroethane	92		100		70-130	8		20
1,1,1-Trichloroethane	87		100		67-130	14		20
Bromodichloromethane	88		99		67-130	12		20
trans-1,3-Dichloropropene	95		99		70-130	4		20
cis-1,3-Dichloropropene	89		100		70-130	12		20
Bromoform	86		94		54-136	9		20
1,1,2,2-Tetrachloroethane	100		120		67-130	18		20
Benzene	86		100		70-130	15		20
Toluene	87		97		70-130	11		20
Ethylbenzene	88		98		70-130	11		20
Chloromethane	81		94		64-130	15		20
Bromomethane	110		130		39-139	17		20
Vinyl chloride	77		87		55-140	12		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1519429-3 WG1519429-4								
Chloroethane	82		98		55-138	18		20
1,1-Dichloroethene	78		96		61-145	21	Q	20
trans-1,2-Dichloroethene	83		96		70-130	15		20
Trichloroethene	79		90		70-130	13		20
1,2-Dichlorobenzene	90		98		70-130	9		20
1,3-Dichlorobenzene	90		98		70-130	9		20
1,4-Dichlorobenzene	92		98		70-130	6		20
Methyl tert butyl ether	90		99		63-130	10		20
p/m-Xylene	90		100		70-130	11		20
o-Xylene	85		100		70-130	16		20
cis-1,2-Dichloroethene	86		98		70-130	13		20
Styrene	90		100		70-130	11		20
Dichlorodifluoromethane	77		89		36-147	14		20
Acetone	92		110		58-148	18		20
Carbon disulfide	87		100		51-130	14		20
2-Butanone	93		99		63-138	6		20
4-Methyl-2-pentanone	84		95		59-130	12		20
2-Hexanone	94		110		57-130	16		20
Bromochloromethane	90		100		70-130	11		20
1,2-Dibromoethane	91		100		70-130	9		20
1,2-Dibromo-3-chloropropane	92		96		41-144	4		20
Isopropylbenzene	89		100		70-130	12		20
1,2,3-Trichlorobenzene	92		98		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1519429-3 WG1519429-4								
1,2,4-Trichlorobenzene	92		97		70-130	5		20
Methyl Acetate	90		100		70-130	11		20
Cyclohexane	80		93		70-130	15		20
1,4-Dioxane	98		108		56-162	10		20
Freon-113	90		100		70-130	11		20
Methyl cyclohexane	86		96		70-130	11		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		110		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	101		99		70-130
Dibromofluoromethane	102		106		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1520693-3 WG1520693-4								
Methylene chloride	93		94		70-130	1		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	96		99		70-130	3		20
Carbon tetrachloride	96		100		63-132	4		20
1,2-Dichloropropane	98		100		70-130	2		20
Dibromochloromethane	91		90		63-130	1		20
1,1,2-Trichloroethane	90		92		70-130	2		20
Tetrachloroethene	87		89		70-130	2		20
Chlorobenzene	95		98		75-130	3		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	96		100		67-130	4		20
Bromodichloromethane	97		96		67-130	1		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	88		86		54-136	2		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	97		100		70-130	3		20
Toluene	96		98		70-130	2		20
Ethylbenzene	98		100		70-130	2		20
Chloromethane	90		91		64-130	1		20
Bromomethane	140	Q	140	Q	39-139	0		20
Vinyl chloride	120		120		55-140	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1520693-3 WG1520693-4								
Chloroethane	140	Q	140	Q	55-138	0		20
1,1-Dichloroethene	93		97		61-145	4		20
trans-1,2-Dichloroethene	95		97		70-130	2		20
Trichloroethene	87		90		70-130	3		20
1,2-Dichlorobenzene	96		98		70-130	2		20
1,3-Dichlorobenzene	96		99		70-130	3		20
1,4-Dichlorobenzene	97		98		70-130	1		20
Methyl tert butyl ether	93		93		63-130	0		20
p/m-Xylene	95		100		70-130	5		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	94		100		70-130	6		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	83		90		36-147	8		20
Acetone	94		91		58-148	3		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	90		86		63-138	5		20
4-Methyl-2-pentanone	85		78		59-130	9		20
2-Hexanone	92		91		57-130	1		20
Bromochloromethane	94		98		70-130	4		20
1,2-Dibromoethane	92		95		70-130	3		20
1,2-Dibromo-3-chloropropane	86		81		41-144	6		20
Isopropylbenzene	99		100		70-130	1		20
1,2,3-Trichlorobenzene	89		88		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1520693-3 WG1520693-4								
1,2,4-Trichlorobenzene	88		92		70-130	4		20
Methyl Acetate	95		92		70-130	3		20
Cyclohexane	98		100		70-130	2		20
1,4-Dioxane	100		100		56-162	0		20
Freon-113	100		100		70-130	0		20
Methyl cyclohexane	94		98		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		109		70-130
Toluene-d8	102		105		70-130
4-Bromofluorobenzene	101		99		70-130
Dibromofluoromethane	99		99		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

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): 03 QC Batch ID: WG1519380-6 WG1519380-7 QC Sample: L2133145-03 Client ID: OSMW-3												
Methylene chloride	ND	100	98	98		87	87		70-130	12		20
1,1-Dichloroethane	ND	100	110	110		94	94		70-130	16		20
Chloroform	ND	100	100	100		89	89		70-130	12		20
Carbon tetrachloride	ND	100	100	100		91	91		63-132	9		20
1,2-Dichloropropane	ND	100	100	100		89	89		70-130	12		20
Dibromochloromethane	ND	100	90	90		81	81		63-130	11		20
1,1,2-Trichloroethane	ND	100	92	92		81	81		70-130	13		20
Tetrachloroethene	1300	100	1400	100		1300	0	Q	70-130	7		20
Chlorobenzene	ND	100	99	99		86	86		75-130	14		20
Trichlorofluoromethane	ND	100	110	110		95	95		62-150	15		20
1,2-Dichloroethane	4.8J	100	110	110		94	94		70-130	16		20
1,1,1-Trichloroethane	ND	100	100	100		92	92		67-130	8		20
Bromodichloromethane	ND	100	96	96		84	84		67-130	13		20
trans-1,3-Dichloropropene	ND	100	95	95		83	83		70-130	13		20
cis-1,3-Dichloropropene	ND	100	94	94		84	84		70-130	11		20
Bromoform	ND	100	81	81		73	73		54-136	10		20
1,1,2,2-Tetrachloroethane	ND	100	94	94		84	84		67-130	11		20
Benzene	ND	100	100	100		91	91		70-130	9		20
Toluene	ND	100	100	100		88	88		70-130	13		20
Ethylbenzene	ND	100	100	100		90	90		70-130	11		20
Chloromethane	ND	100	93	93		83	83		64-130	11		20
Bromomethane	ND	100	79	79		77	77		39-139	3		20
Vinyl chloride	ND	100	110	110		100	100		55-140	10		20

Matrix Spike Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

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): 03 QC Batch ID: WG1519380-6 WG1519380-7 QC Sample: L2133145-03 Client ID: OSMW-3												
Chloroethane	ND	100	140	140	Q	120	120		55-138	15		20
1,1-Dichloroethene	ND	100	99	99		91	91		61-145	8		20
trans-1,2-Dichloroethene	ND	100	110	110		97	97		70-130	13		20
Trichloroethene	190	100	270	80		260	70		70-130	4		20
1,2-Dichlorobenzene	ND	100	97	97		85	85		70-130	13		20
1,3-Dichlorobenzene	ND	100	97	97		86	86		70-130	12		20
1,4-Dichlorobenzene	ND	100	97	97		85	85		70-130	13		20
Methyl tert butyl ether	ND	100	87	87		79	79		63-130	10		20
p/m-Xylene	ND	200	200	100		170	85		70-130	16		20
o-Xylene	ND	200	200	100		170	85		70-130	16		20
cis-1,2-Dichloroethene	32	100	130	98		120	88		70-130	8		20
Styrene	ND	200	190	95		170	85		70-130	11		20
Dichlorodifluoromethane	ND	100	99	99		87	87		36-147	13		20
Acetone	ND	100	90	90		87	87		58-148	3		20
Carbon disulfide	ND	100	100	100		93	93		51-130	7		20
2-Butanone	ND	100	75	75		72	72		63-138	4		20
4-Methyl-2-pentanone	ND	100	85	85		79	79		59-130	7		20
2-Hexanone	ND	100	79	79		72	72		57-130	9		20
Bromochloromethane	ND	100	97	97		86	86		70-130	12		20
1,2-Dibromoethane	ND	100	91	91		82	82		70-130	10		20
1,2-Dibromo-3-chloropropane	ND	100	76	76		70	70		41-144	8		20
Isopropylbenzene	ND	100	100	100		90	90		70-130	11		20
1,2,3-Trichlorobenzene	ND	100	84	84		78	78		70-130	7		20

Matrix Spike Analysis

Batch Quality Control

Project Name: WAVERLY AVE

Project Number: 28012

Lab Number: L2133145

Report Date: 07/06/21

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): 03 QC Batch ID: WG1519380-6 WG1519380-7 QC Sample: L2133145-03 Client ID: OSMW-3												
1,2,4-Trichlorobenzene	ND	100	88	88		80	80		70-130	10		20
Methyl Acetate	ND	100	83	83		80	80		70-130	4		20
Cyclohexane	ND	100	100	100		89J	89		70-130	12		20
1,4-Dioxane	ND	5000	3700	74		3900	78		56-162	5		20
Freon-113	ND	100	100	100		90	90		70-130	11		20
Methyl cyclohexane	ND	100	98J	98		85J	85		70-130	14		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		101		70-130
4-Bromofluorobenzene	103		101		70-130
Dibromofluoromethane	97		97		70-130
Toluene-d8	102		101		70-130

Project Name: WAVERLY AVE
Project Number: 28012

Serial_No:07062111:53
Lab Number: L2133145
Report Date: 07/06/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2133145-01A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-01B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-01C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-02A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-02B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-02C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03A1	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03A2	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03B1	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03B2	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03C1	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-03C2	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-04A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-04B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-04C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-05A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-05B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-05C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-06A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-06B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)

Project Name: WAVERLY AVE
Project Number: 28012

Serial_No:07062111:53
Lab Number: L2133145
Report Date: 07/06/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2133145-06C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-07A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-07B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-07C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-08A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)
L2133145-08B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYTCL-8260-R2(14)

Project Name: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

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

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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

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: WAVERLY AVE
Project Number: 28012

Lab Number: L2133145
Report Date: 07/06/21

REFERENCES

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

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

Page 1 of 1

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 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-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, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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

Page 63 of 64

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

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

Email:

Rush (only if pre approved) ☐ # of Days:

Please specify Metals or TAL.

ALPHA Job # 62133145

☐ NJ ☐ NY
☐ Other: ☐ NA

Sample Specific Comments
1. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 2. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 3. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 4. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 5. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 6. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 7. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 8. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 9. The student has a good understanding of the concept of a function and can apply it to a variety of problems. 10. The student has a good understanding of the concept of a function and can apply it to a variety of problems.

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ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
33145-01	GZ-21D	6-17-21	1335	GW	pws
02	GZ-22D	6-17-21	1245		
03	GZ-22D MSD OSMW-3 MS	6-17-21	1500		
04	GZ-22D MSD OSMW-3 MSD	6-17-21	1505		
05	OSMW-3	6-17-21	1455		
06	OSMW-4	6-17-21	1155		
07	B6-OWD	6-17-21	1550		
08	GZ-23D	6-17-21	1415		
09	DUP 06172021	6-17-21	-	↓	↓
10	TRIP BLANK TBO6172021	6-17-21	-	LW	✓

Sigured Storage
Chris 2/27/70

Page 64 of 64



Geology

Hydrology

Remediation

Water Supply

July 20, 2021

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)
June 2021 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: L2133145 are acceptable with some minor issues identified and discussed in the DUSR and validation summary. There are no volatile data that are qualified as rejected, unusable (R) in the data pack.

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

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Geology

Hydrology

Remediation

Water Supply

**Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L2133145**

**6 Ground Water Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected June 17, 2021**

Prepared by: Donald Anné
July 20, 2021

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.

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 results for tetrachloroethene were qualified as estimated (J) in samples B6-OWD and DUP06172021 because the relative percent difference for tetrachloroethene was above allowable maximum in the aqueous field duplicate pair B6-OWD/DUP06172021.

All data estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

Qualified Data Section

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Lab ID : L2133145-01
 Client ID : GZ-21D
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A19
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 13:35
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 16:02
 Dilution Factor : 1
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	5.1	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	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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-01
 Client ID : GZ-21D
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A19
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 13:35
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 16:02
 Dilution Factor : 1
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	12	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	: L2133145
Project Name	: WAVERLY AVE	Project Number	: 28012
Lab ID	: L2133145-01	Date Collected	: 06/17/21 13:35
Client ID	: GZ-21D	Date Received	: 06/18/21
Sample Location	: NY	Date Analyzed	: 06/30/21 16:02
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: LAC
Lab File ID	: VG210630A19	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-02
 Client ID : GZ-22D
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630N23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 12:45
 Date Received : 06/18/21
 Date Analyzed : 07/01/21 05:32
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	20	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	2.1	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	8.5	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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-02
 Client ID : GZ-22D
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630N23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 12:45
 Date Received : 06/18/21
 Date Analyzed : 07/01/21 05:32
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	71	2.5	0.70	
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	1.2	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	8.4	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	0.84	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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-02
 Client ID : GZ-22D
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630N23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 12:45
 Date Received : 06/18/21
 Date Analyzed : 07/01/21 05:32
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	0.47	10	0.40	J



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Lab ID : L2133145-03D
 Client ID : OSMW-3
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V22210630N24
 Sample Amount : 1 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 14:55
 Date Received : 06/18/21
 Date Analyzed : 07/01/21 05:56
 Dilution Factor : 10
 Analyst : NLK
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	1300	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	4.8	5.0	1.3	J
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-03D
 Client ID : OSMW-3
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V22210630N24
 Sample Amount : 1 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 14:55
 Date Received : 06/18/21
 Date Analyzed : 07/01/21 05:56
 Dilution Factor : 10
 Analyst : NLK
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	25	7.0	U
79-01-6	Trichloroethene	190	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	32	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Lab ID : L2133145-03D
 Client ID : OSMW-3
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V22210630N24
 Sample Amount : 1 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 14:55
 Date Received : 06/18/21
 Date Analyzed : 07/01/21 05:56
 Dilution Factor : 10
 Analyst : NLK
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-04
 Client ID : OSMW-4
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A21
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 11:55
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 16:59
 Dilution Factor : 1
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-04
 Client ID : OSMW-4
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A21
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 11:55
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 16:59
 Dilution Factor : 1
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	7.5	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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-04
 Client ID : OSMW-4
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A21
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 11:55
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 16:59
 Dilution Factor : 1
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	2.4	10	0.40	J



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Lab ID : L2133145-05D
 Client ID : B6-OWD
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A22
 Sample Amount : 0.5 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 15:50
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 17:27
 Dilution Factor : 20
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	1100	10	3.6	J
108-90-7	Chlorobenzene	ND	50	14.	U
75-69-4	Trichlorofluoromethane	ND	50	14.	U
107-06-2	1,2-Dichloroethane	11	10	2.6	
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	8.8	10	3.2	J
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	1.6	20	1.4	J
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-05D
 Client ID : B6-OWD
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A22
 Sample Amount : 0.5 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 15:50
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 17:27
 Dilution Factor : 20
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	30	50	14.	J
79-01-6	Trichloroethene	1900	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	530	50	14.	
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



Results Summary

Form 1

Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2133145
Project Name	: WAVERLY AVE	Project Number	: 28012
Lab ID	: L2133145-05D	Date Collected	: 06/17/21 15:50
Client ID	: B6-OWD	Date Received	: 06/18/21
Sample Location	: NY	Date Analyzed	: 06/30/21 17:27
Sample Matrix	: WATER	Dilution Factor	: 20
Analytical Method	: 1,8260C	Analyst	: LAC
Lab File ID	: VG210630A22	Instrument ID	: GONZO
Sample Amount	: 0.5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-06
 Client ID : GZ-23D
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 14:15
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 17:55
 Dilution Factor : 1
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	0.63	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	14	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	4.8	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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-06
 Client ID : GZ-23D
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 14:15
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 17:55
 Dilution Factor : 1
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.45	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	1.6	2.5	0.70	J
156-59-2	cis-1,2-Dichloroethene	5.2	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	0.45	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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-06
 Client ID : GZ-23D
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG210630A23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 14:15
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 17:55
 Dilution Factor : 1
 Analyst : LAC
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Lab ID : L2133145-07D
 Client ID : DUP06172021
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V01210630N07
 Sample Amount : 0.5 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 00:00
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 23:05
 Dilution Factor : 20
 Analyst : NLK
 Instrument ID : VOA101
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	800	10	3.6	J
108-90-7	Chlorobenzene	ND	50	14.	U
75-69-4	Trichlorofluoromethane	ND	50	14.	U
107-06-2	1,2-Dichloroethane	8.0	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	5.2	10	3.2	J
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	1.7	20	1.4	J
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-07D
 Client ID : DUP06172021
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V01210630N07
 Sample Amount : 0.5 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 00:00
 Date Received : 06/18/21
 Date Analyzed : 06/30/21 23:05
 Dilution Factor : 20
 Analyst : NLK
 Instrument ID : VOA101
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	22	50	14.	J
79-01-6	Trichloroethene	1700	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	480	50	14.	
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



Results Summary

Form 1

Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2133145
Project Name	: WAVERLY AVE	Project Number	: 28012
Lab ID	: L2133145-07D	Date Collected	: 06/17/21 00:00
Client ID	: DUP06172021	Date Received	: 06/18/21
Sample Location	: NY	Date Analyzed	: 06/30/21 23:05
Sample Matrix	: WATER	Dilution Factor	: 20
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V01210630N07	Instrument ID	: VOA101
Sample Amount	: 0.5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-08
 Client ID : TB06172021
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V22210705A06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 00:00
 Date Received : 06/18/21
 Date Analyzed : 07/05/21 08:44
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
 Project Name : WAVERLY AVE
 Lab ID : L2133145-08
 Client ID : TB06172021
 Sample Location : NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V22210705A06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2133145
 Project Number : 28012
 Date Collected : 06/17/21 00:00
 Date Received : 06/18/21
 Date Analyzed : 07/05/21 08:44
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	: L2133145
Project Name	: WAVERLY AVE	Project Number	: 28012
Lab ID	: L2133145-08	Date Collected	: 06/17/21 00:00
Client ID	: TB06172021	Date Received	: 06/18/21
Sample Location	: NY	Date Analyzed	: 07/05/21 08:44
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V22210705A06	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

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

VOC Data Section



**QA/QC Review of Method 8260C Volatiles Data
for Alpha Analytical, SDG Number: L2133145**

**6 Ground Water Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected June 17, 2021**

Prepared by: Donald Anné
July 20, 2021

Geology

Hydrology

Remediation

Water Supply

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 acetone, 2-butanone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 for VOA101 on 06-24-21. The average RRFs for bromomethane, chloroethane, acetone, 2-butanone, and trichloroethene were below the method minimums, but not below 0.010 for GONZO on 06-25-21. The average RRFs for acetone, methyl acetate, 2-butanone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 for VOA122 on 06-26-21. 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 chloroethane, acetone, 2-butanone, trichloroethene, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 on 06-30-21 (VG210630A01). The RRFs for chloroethane, acetone, 2-butanone, and trichloroethene were below the method minimums, but not below 0.010 on 06-30-21 (VG210630N01). The RRFs for acetone, methyl acetate, 2-butanone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 on 06-30-21 (V22210630N01). The RRFs for 2-butanone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 on 06-30-21 (V01210630N01). The RRFs for acetone, methyl acetate, 2-butanone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 on 07-05-21 (V22210705A01). The %Ds for bromomethane, acetone, and 4-methyl-2-pentanone were above the method maximum on 06-30-21 (VG210630A01). The %Ds for dichlorodifluoromethane, vinyl chloride, 1,1-dichloroethene, and cyclohexane were above the method maximum on 06-30-21 (VG210630N01). The %Ds for bromomethane, chloroethane, and 4-methyl-2-pentanone were above the method maximum on 06-30-21

(V22210630N01). The %D for bromomethane was above the method maximum on 06-30-21 (V01210630N01). The %Ds for bromomethane and chloroethane were above the method maximum on 07-05-21 (V22210705A01). 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.

The %D for bromomethane was above the allowable maximum (25%) on 06-30-21 (VG210630A01). The %D for bromomethane was above the allowable maximum (25%) on 06-30-21 (V01210630N01). The %Ds for bromomethane and chloroethane were above the allowable maximum (25%) on 07-05-21 (V22210705A01). 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, but 1 of 2 percent recoveries for chloroethane was above QC limits for aqueous MS/MSD sample OSMW-3. Sample OSMW-3 reported chloroethane as “not detected”; therefore, no action is taken.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples WG1519380-3/4.

The %Rs for target compounds were within QC limits, but the RPD for acetone was above the allowable maximum for aqueous samples WG1519326-3/4. The %Rs for target compounds were within QC limits, but the RPD for 1,1-dichloroethene was above the allowable maximum for aqueous samples WG1519429-3/4. Positive results for these compounds should be considered estimated (J) in associated aqueous samples.

The RPDs for target compounds were below the allowable maximum, 1 of 2 %Rs for bromomethane was above QC limits for aqueous samples WG1519073-3/4. The RPDs for target compounds were below the allowable maximum, 2 of 2 %Rs for bromomethane and chloroethane were above QC limits for aqueous samples WG1520693-3/4. Positive results for these compounds should be considered estimated, biased high (J+) in associated aqueous samples.

Field Duplicates: The relative percent difference for tetrachloroethene was above the allowable maximum (20%) for aqueous field duplicate pair B6-OWD/DUP06172021 (attached table). Positive results for tetrachloroethene should be considered estimated (J) in samples B6-OWD and DUP06172021.

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.

Laboratory Control Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering Lab Number : L2133145
 Project Name : WAVERLY AVE Project Number : 28012
 Matrix : WATER
 LCS Sample ID : WG1519073-3 Analysis Date : 06/30/21 07:42 File ID : VG210630A01
 LCSD Sample ID : WG1519073-4 Analysis Date : 06/30/21 08:09 File ID : VG210630A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	9.2	92	10	9.8	98	6	70-130	20
1,1-Dichloroethane	10	9.2	92	10	10	100	8	70-130	20
Chloroform	10	9.3	93	10	10	100	7	70-130	20
Carbon tetrachloride	10	9.5	95	10	9.9	99	4	63-132	20
1,2-Dichloropropane	10	8.9	89	10	9.5	95	7	70-130	20
Dibromochloromethane	10	8.6	86	10	9.6	96	11	63-130	20
1,1,2-Trichloroethane	10	8.6	86	10	9.2	92	7	70-130	20
Tetrachloroethene	10	9.2	92	10	10	100	8	70-130	20
Chlorobenzene	10	9.2	92	10	10	100	8	75-130	20
Trichlorofluoromethane	10	9.4	94	10	10	100	6	62-150	20
1,2-Dichloroethane	10	9.5	95	10	10	100	5	70-130	20
1,1,1-Trichloroethane	10	9.7	97	10	10	100	3	67-130	20
Bromodichloromethane	10	9.1	91	10	9.8	98	7	67-130	20
trans-1,3-Dichloropropene	10	9.4	94	10	10	100	6	70-130	20
cis-1,3-Dichloropropene	10	9.4	94	10	10	100	6	70-130	20
Bromoform	10	8.4	84	10	9.0	90	7	54-136	20
1,1,2,2-Tetrachloroethane	10	10	100	10	11	110	10	67-130	20
Benzene	10	9.5	95	10	10	100	5	70-130	20
Toluene	10	9.0	90	10	10	100	11	70-130	20
Ethylbenzene	10	9.3	93	10	9.9	99	6	70-130	20
Chloromethane	10	8.9	89	10	9.5	95	7	64-130	20
Bromomethane	10	13	130	10	14	140 Q	7	39-139	20
Vinyl chloride	10	8.2	82	10	8.9	89	8	55-140	20
Chloroethane	10	11	110	10	13	130	17	55-138	20
1,1-Dichloroethene	10	9.3	93	10	10	100	7	61-145	20
trans-1,2-Dichloroethene	10	9.4	94	10	9.8	98	4	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering **Lab Number** : L2133145
Project Name : WAVERLY AVE **Project Number** : 28012
Matrix : WATER
LCS Sample ID : WG1519073-3 **Analysis Date** : 06/30/21 07:42 **File ID** : VG210630A01
LCSD Sample ID : WG1519073-4 **Analysis Date** : 06/30/21 08:09 **File ID** : VG210630A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Trichloroethene	10	8.1	81	10	8.7	87	7	70-130	20
1,2-Dichlorobenzene	10	9.3	93	10	9.9	99	6	70-130	20
1,3-Dichlorobenzene	10	9.5	95	10	10	100	5	70-130	20
1,4-Dichlorobenzene	10	9.4	94	10	10	100	6	70-130	20
Methyl tert butyl ether	10	9.2	92	10	9.7	97	5	63-130	20
p/m-Xylene	20	19	95	20	20	100	5	70-130	20
o-Xylene	20	19	95	20	20	100	5	70-130	20
cis-1,2-Dichloroethene	10	8.9	89	10	9.6	96	8	70-130	20
Styrene	20	18	90	20	20	100	11	70-130	20
Dichlorodifluoromethane	10	8.6	86	10	9.4	94	9	36-147	20
Acetone	10	8.0	80	10	9.2	92	14	58-148	20
Carbon disulfide	10	9.4	94	10	10	100	6	51-130	20
2-Butanone	10	8.9	89	10	8.3	83	7	63-138	20
4-Methyl-2-pentanone	10	7.7	77	10	8.8	88	13	59-130	20
2-Hexanone	10	8.4	84	10	9.6	96	13	57-130	20
Bromochloromethane	10	9.6	96	10	10	100	4	70-130	20
1,2-Dibromoethane	10	9.1	91	10	10	100	9	70-130	20
1,2-Dibromo-3-chloropropane	10	8.8	88	10	9.8	98	11	41-144	20
Isopropylbenzene	10	9.5	95	10	10	100	5	70-130	20
1,2,3-Trichlorobenzene	10	8.8	88	10	9.4	94	7	70-130	20
1,2,4-Trichlorobenzene	10	9.1	91	10	9.5	95	4	70-130	20
Methyl Acetate	10	8.8	88	10	10	100	13	70-130	20
Cyclohexane	10	8.9	89	10	9.5	95	7	70-130	20
1,4-Dioxane	500	470	94	500	500	100	6	56-162	20
Freon-113	10	10	100	10	11	110	10	70-130	20
Methyl cyclohexane	10	9.3	93	10	9.9	99	6	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering **Lab Number** : L2133145
Project Name : WAVERLY AVE **Project Number** : 28012
Matrix : WATER
LCS Sample ID : WG1519326-3 **Analysis Date** : 06/30/21 20:46 **File ID** : V01210630N01
LCSD Sample ID : WG1519326-4 **Analysis Date** : 06/30/21 21:09 **File ID** : V01210630N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	9.8	98	10	9.7	97	1	70-130	20
1,1-Dichloroethane	10	9.8	98	10	10	100	2	70-130	20
Chloroform	10	9.7	97	10	9.7	97	0	70-130	20
Carbon tetrachloride	10	10	100	10	10	100	0	63-132	20
1,2-Dichloropropane	10	9.6	96	10	9.8	98	2	70-130	20
Dibromochloromethane	10	9.0	90	10	9.2	92	2	63-130	20
1,1,2-Trichloroethane	10	9.0	90	10	9.2	92	2	70-130	20
Tetrachloroethene	10	9.1	91	10	9.6	96	5	70-130	20
Chlorobenzene	10	9.0	90	10	9.4	94	4	75-130	20
Trichlorofluoromethane	10	10	100	10	11	110	10	62-150	20
1,2-Dichloroethane	10	9.9	99	10	10	100	1	70-130	20
1,1,1-Trichloroethane	10	10	100	10	10	100	0	67-130	20
Bromodichloromethane	10	9.6	96	10	9.7	97	1	67-130	20
trans-1,3-Dichloropropene	10	8.8	88	10	9.1	91	3	70-130	20
cis-1,3-Dichloropropene	10	9.3	93	10	9.4	94	1	70-130	20
Bromoform	10	8.4	84	10	8.5	85	1	54-136	20
1,1,2,2-Tetrachloroethane	10	9.2	92	10	9.4	94	2	67-130	20
Benzene	10	9.5	95	10	9.6	96	1	70-130	20
Toluene	10	8.8	88	10	9.3	93	6	70-130	20
Ethylbenzene	10	8.9	89	10	9.4	94	5	70-130	20
Chloromethane	10	9.3	93	10	9.2	92	1	64-130	20
Bromomethane	10	6.9	69	10	8.2	82	17	39-139	20
Vinyl chloride	10	10	100	10	10	100	0	55-140	20
Chloroethane	10	10	100	10	10	100	0	55-138	20
1,1-Dichloroethene	10	9.9	99	10	10	100	1	61-145	20
trans-1,2-Dichloroethene	10	9.7	97	10	10	100	3	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering Lab Number : L2133145
 Project Name : WAVERLY AVE Project Number : 28012
 Matrix : WATER
 LCS Sample ID : WG1519326-3 Analysis Date : 06/30/21 20:46 File ID : V01210630N01
 LCSD Sample ID : WG1519326-4 Analysis Date : 06/30/21 21:09 File ID : V01210630N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Trichloroethene	10	9.6	96	10	9.9	99	3	70-130	20
1,2-Dichlorobenzene	10	8.8	88	10	9.1	91	3	70-130	20
1,3-Dichlorobenzene	10	8.7	87	10	9.2	92	6	70-130	20
1,4-Dichlorobenzene	10	8.8	88	10	9.2	92	4	70-130	20
Methyl tert butyl ether	10	9.2	92	10	9.3	93	1	63-130	20
p/m-Xylene	20	18	90	20	18	90	0	70-130	20
o-Xylene	20	17	85	20	18	90	6	70-130	20
cis-1,2-Dichloroethene	10	9.6	96	10	9.8	98	2	70-130	20
Styrene	20	17	85	20	17	85	0	70-130	20
Dichlorodifluoromethane	10	11	110	10	11	110	0	36-147	20
Acetone	10	10	100	10	8.1	81	21 Q	58-148	20
Carbon disulfide	10	9.8	98	10	10	100	2	51-130	20
2-Butanone	10	8.8	88	10	8.5	85	3	63-138	20
4-Methyl-2-pentanone	10	8.7	87	10	8.8	88	1	59-130	20
2-Hexanone	10	8.2	82	10	8.3	83	1	57-130	20
Bromochloromethane	10	10	100	10	10	100	0	70-130	20
1,2-Dibromoethane	10	9.0	90	10	9.3	93	3	70-130	20
1,2-Dibromo-3-chloropropane	10	8.5	85	10	9.1	91	7	41-144	20
Isopropylbenzene	10	8.9	89	10	9.4	94	5	70-130	20
1,2,3-Trichlorobenzene	10	9.2	92	10	9.6	96	4	70-130	20
1,2,4-Trichlorobenzene	10	9.2	92	10	9.9	99	7	70-130	20
Methyl Acetate	10	9.3	93	10	9.0	90	3	70-130	20
Cyclohexane	10	10	100	10	10	100	0	70-130	20
1,4-Dioxane	500	480	96	500	460	92	4	56-162	20
Freon-113	10	10	100	10	11	110	10	70-130	20
Methyl cyclohexane	10	9.7	97	10	10	100	3	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering Lab Number : L2133145
 Project Name : WAVERLY AVE Project Number : 28012
 Matrix : WATER
 LCS Sample ID : WG1519429-3 Analysis Date : 06/30/21 19:32 File ID : VG210630N01
 LCSD Sample ID : WG1519429-4 Analysis Date : 06/30/21 20:01 File ID : VG210630N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	8.7	87	10	9.9	99	13	70-130	20
1,1-Dichloroethane	10	8.5	85	10	9.8	98	14	70-130	20
Chloroform	10	9.0	90	10	10	100	11	70-130	20
Carbon tetrachloride	10	8.7	87	10	9.7	97	11	63-132	20
1,2-Dichloropropane	10	8.4	84	10	9.4	94	11	70-130	20
Dibromochloromethane	10	8.5	85	10	9.8	98	14	63-130	20
1,1,2-Trichloroethane	10	8.4	84	10	9.2	92	9	70-130	20
Tetrachloroethene	10	8.6	86	10	9.9	99	14	70-130	20
Chlorobenzene	10	8.8	88	10	9.8	98	11	75-130	20
Trichlorofluoromethane	10	8.6	86	10	9.8	98	13	62-150	20
1,2-Dichloroethane	10	9.2	92	10	10	100	8	70-130	20
1,1,1-Trichloroethane	10	8.7	87	10	10	100	14	67-130	20
Bromodichloromethane	10	8.8	88	10	9.9	99	12	67-130	20
trans-1,3-Dichloropropene	10	9.5	95	10	9.9	99	4	70-130	20
cis-1,3-Dichloropropene	10	8.9	89	10	10	100	12	70-130	20
Bromoform	10	8.6	86	10	9.4	94	9	54-136	20
1,1,2,2-Tetrachloroethane	10	10	100	10	12	120	18	67-130	20
Benzene	10	8.6	86	10	10	100	15	70-130	20
Toluene	10	8.7	87	10	9.7	97	11	70-130	20
Ethylbenzene	10	8.8	88	10	9.8	98	11	70-130	20
Chloromethane	10	8.1	81	10	9.4	94	15	64-130	20
Bromomethane	10	11	110	10	13	130	17	39-139	20
Vinyl chloride	10	7.7	77	10	8.7	87	12	55-140	20
Chloroethane	10	8.2	82	10	9.8	98	18	55-138	20
1,1-Dichloroethene	10	7.8	78	10	9.6	96	21 Q	61-145	20
trans-1,2-Dichloroethene	10	8.3	83	10	9.6	96	15	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering Lab Number : L2133145
 Project Name : WAVERLY AVE Project Number : 28012
 Matrix : WATER
 LCS Sample ID : WG1519429-3 Analysis Date : 06/30/21 19:32 File ID : VG210630N01
 LCSD Sample ID : WG1519429-4 Analysis Date : 06/30/21 20:01 File ID : VG210630N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Trichloroethene	10	7.9	79	10	9.0	90	13	70-130	20
1,2-Dichlorobenzene	10	9.0	90	10	9.8	98	9	70-130	20
1,3-Dichlorobenzene	10	9.0	90	10	9.8	98	9	70-130	20
1,4-Dichlorobenzene	10	9.2	92	10	9.8	98	6	70-130	20
Methyl tert butyl ether	10	9.0	90	10	9.9	99	10	63-130	20
p/m-Xylene	20	18	90	20	20	100	11	70-130	20
o-Xylene	20	17	85	20	20	100	16	70-130	20
cis-1,2-Dichloroethene	10	8.6	86	10	9.8	98	13	70-130	20
Styrene	20	18	90	20	20	100	11	70-130	20
Dichlorodifluoromethane	10	7.7	77	10	8.9	89	14	36-147	20
Acetone	10	9.2	92	10	11	110	18	58-148	20
Carbon disulfide	10	8.7	87	10	10	100	14	51-130	20
2-Butanone	10	9.3	93	10	9.9	99	6	63-138	20
4-Methyl-2-pentanone	10	8.4	84	10	9.5	95	12	59-130	20
2-Hexanone	10	9.4	94	10	11	110	16	57-130	20
Bromochloromethane	10	9.0	90	10	10	100	11	70-130	20
1,2-Dibromoethane	10	9.1	91	10	10	100	9	70-130	20
1,2-Dibromo-3-chloropropane	10	9.2	92	10	9.6	96	4	41-144	20
Isopropylbenzene	10	8.9	89	10	10	100	12	70-130	20
1,2,3-Trichlorobenzene	10	9.2	92	10	9.8	98	6	70-130	20
1,2,4-Trichlorobenzene	10	9.2	92	10	9.7	97	5	70-130	20
Methyl Acetate	10	9.0	90	10	10	100	11	70-130	20
Cyclohexane	10	8.0	80	10	9.3	93	15	70-130	20
1,4-Dioxane	500	490	98	500	540	108	10	56-162	20
Freon-113	10	9.0	90	10	10	100	11	70-130	20
Methyl cyclohexane	10	8.6	86	10	9.6	96	11	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering Lab Number : L2133145
 Project Name : WAVERLY AVE Project Number : 28012
 Matrix : WATER
 LCS Sample ID : WG1520693-3 Analysis Date : 07/05/21 06:32 File ID : V22210705A01
 LCSD Sample ID : WG1520693-4 Analysis Date : 07/05/21 06:58 File ID : V22210705A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	9.3	93	10	9.4	94	1	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	9.6	96	10	9.9	99	3	70-130	20
Carbon tetrachloride	10	9.6	96	10	10	100	4	63-132	20
1,2-Dichloropropane	10	9.8	98	10	10	100	2	70-130	20
Dibromochloromethane	10	9.1	91	10	9.0	90	1	63-130	20
1,1,2-Trichloroethane	10	9.0	90	10	9.2	92	2	70-130	20
Tetrachloroethene	10	8.7	87	10	8.9	89	2	70-130	20
Chlorobenzene	10	9.5	95	10	9.8	98	3	75-130	20
Trichlorofluoromethane	10	10	100	10	10	100	0	62-150	20
1,2-Dichloroethane	10	10	100	10	10	100	0	70-130	20
1,1,1-Trichloroethane	10	9.6	96	10	10	100	4	67-130	20
Bromodichloromethane	10	9.7	97	10	9.6	96	1	67-130	20
trans-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
cis-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
Bromoform	10	8.8	88	10	8.6	86	2	54-136	20
1,1,2,2-Tetrachloroethane	10	10	100	10	10	100	0	67-130	20
Benzene	10	9.7	97	10	10	100	3	70-130	20
Toluene	10	9.6	96	10	9.8	98	2	70-130	20
Ethylbenzene	10	9.8	98	10	10	100	2	70-130	20
Chloromethane	10	9.0	90	10	9.1	91	1	64-130	20
Bromomethane	10	14	140 Q	10	14	140 Q	0	39-139	20
Vinyl chloride	10	12	120	10	12	120	0	55-140	20
Chloroethane	10	14	140 Q	10	14	140 Q	0	55-138	20
1,1-Dichloroethene	10	9.3	93	10	9.7	97	4	61-145	20
trans-1,2-Dichloroethene	10	9.5	95	10	9.7	97	2	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering Lab Number : L2133145
 Project Name : WAVERLY AVE Project Number : 28012
 Matrix : WATER
 LCS Sample ID : WG1520693-3 Analysis Date : 07/05/21 06:32 File ID : V22210705A01
 LCSD Sample ID : WG1520693-4 Analysis Date : 07/05/21 06:58 File ID : V22210705A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Trichloroethene	10	8.7	87	10	9.0	90	3	70-130	20
1,2-Dichlorobenzene	10	9.6	96	10	9.8	98	2	70-130	20
1,3-Dichlorobenzene	10	9.6	96	10	9.9	99	3	70-130	20
1,4-Dichlorobenzene	10	9.7	97	10	9.8	98	1	70-130	20
Methyl tert butyl ether	10	9.3	93	10	9.3	93	0	63-130	20
p/m-Xylene	20	19	95	20	20	100	5	70-130	20
o-Xylene	20	19	95	20	19	95	0	70-130	20
cis-1,2-Dichloroethene	10	9.4	94	10	10	100	6	70-130	20
Styrene	20	19	95	20	19	95	0	70-130	20
Dichlorodifluoromethane	10	8.3	83	10	9.0	90	8	36-147	20
Acetone	10	9.4	94	10	9.1	91	3	58-148	20
Carbon disulfide	10	10	100	10	10	100	0	51-130	20
2-Butanone	10	9.0	90	10	8.6	86	5	63-138	20
4-Methyl-2-pentanone	10	8.5	85	10	7.8	78	9	59-130	20
2-Hexanone	10	9.2	92	10	9.1	91	1	57-130	20
Bromochloromethane	10	9.4	94	10	9.8	98	4	70-130	20
1,2-Dibromoethane	10	9.2	92	10	9.5	95	3	70-130	20
1,2-Dibromo-3-chloropropane	10	8.6	86	10	8.1	81	6	41-144	20
Isopropylbenzene	10	9.9	99	10	10	100	1	70-130	20
1,2,3-Trichlorobenzene	10	8.9	89	10	8.8	88	1	70-130	20
1,2,4-Trichlorobenzene	10	8.8	88	10	9.2	92	4	70-130	20
Methyl Acetate	10	9.5	95	10	9.2	92	3	70-130	20
Cyclohexane	10	9.8	98	10	10	100	2	70-130	20
1,4-Dioxane	500	500	100	500	500	100	0	56-162	20
Freon-113	10	10	100	10	10	100	0	70-130	20
Methyl cyclohexane	10	9.4	94	10	9.8	98	4	70-130	20



Matrix Spike Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Client Sample ID : OSMW-3
 Lab Sample ID : L2133145-03
 Matrix Spike : WG1519380-6
 Matrix Spike Dup : WG1519380-7

Lab Number : L2133145
 Project Number : 28012
 Matrix : WATER
 Analysis Date : 07/01/21 05:56
 MS Analysis Date : 07/01/21 06:22
 MSD Analysis Date : 07/01/21 06:49

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
Methylene chloride	ND	100	98	98	100	87	87	12	70-130	20
1,1-Dichloroethane	ND	100	110	110	100	94	94	16	70-130	20
Chloroform	ND	100	100	100	100	89	89	12	70-130	20
Carbon tetrachloride	ND	100	100	100	100	91	91	9	63-132	20
1,2-Dichloropropane	ND	100	100	100	100	89	89	12	70-130	20
Dibromochloromethane	ND	100	90	90	100	81	81	11	63-130	20
1,1,2-Trichloroethane	ND	100	92	92	100	81	81	13	70-130	20
Tetrachloroethene	1300	100	1400	100	100	1300	0 NA	7	70-130	20
Chlorobenzene	ND	100	99	99	100	86	86	14	75-130	20
Trichlorofluoromethane	ND	100	110	110	100	95	95	15	62-150	20
1,2-Dichloroethane	4.8J	100	110	110	100	94	94	16	70-130	20
1,1,1-Trichloroethane	ND	100	100	100	100	92	92	8	67-130	20
Bromodichloromethane	ND	100	96	96	100	84	84	13	67-130	20
trans-1,3-Dichloropropene	ND	100	95	95	100	83	83	13	70-130	20
cis-1,3-Dichloropropene	ND	100	94	94	100	84	84	11	70-130	20
Bromoform	ND	100	81	81	100	73	73	10	54-136	20
1,1,2,2-Tetrachloroethane	ND	100	94	94	100	84	84	11	67-130	20
Benzene	ND	100	100	100	100	91	91	9	70-130	20
Toluene	ND	100	100	100	100	88	88	13	70-130	20
Ethylbenzene	ND	100	100	100	100	90	90	11	70-130	20
Chloromethane	ND	100	93	93	100	83	83	11	64-130	20
Bromomethane	ND	100	79	79	100	77	77	3	39-139	20

NA - Sample concentration is greater than 4X the spike level; therefore, the %R is not applicable.



Matrix Spike Sample Summary

Form 3

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Client Sample ID : OSMW-3
 Lab Sample ID : L2133145-03
 Matrix Spike : WG1519380-6
 Matrix Spike Dup : WG1519380-7

Lab Number : L2133145
 Project Number : 28012
 Matrix : WATER
 Analysis Date : 07/01/21 05:56
 MS Analysis Date : 07/01/21 06:22
 MSD Analysis Date : 07/01/21 06:49

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
Vinyl chloride	ND	100	110	110	100	100	100	10	55-140	20
Chloroethane	ND	100	140	140 Q	100	120	120	15	55-138	20
1,1-Dichloroethene	ND	100	99	99	100	91	91	8	61-145	20
trans-1,2-Dichloroethene	ND	100	110	110	100	97	97	13	70-130	20
Trichloroethene	190	100	270	80	100	260	70	4	70-130	20
1,2-Dichlorobenzene	ND	100	97	97	100	85	85	13	70-130	20
1,3-Dichlorobenzene	ND	100	97	97	100	86	86	12	70-130	20
1,4-Dichlorobenzene	ND	100	97	97	100	85	85	13	70-130	20
Methyl tert butyl ether	ND	100	87	87	100	79	79	10	63-130	20
p/m-Xylene	ND	200	200	100	200	170	85	16	70-130	20
o-Xylene	ND	200	200	100	200	170	85	16	70-130	20
cis-1,2-Dichloroethene	32	100	130	98	100	120	88	8	70-130	20
Styrene	ND	200	190	95	200	170	85	11	70-130	20
Dichlorodifluoromethane	ND	100	99	99	100	87	87	13	36-147	20
Acetone	ND	100	90	90	100	87	87	3	58-148	20
Carbon disulfide	ND	100	100	100	100	93	93	7	51-130	20
2-Butanone	ND	100	75	75	100	72	72	4	63-138	20
4-Methyl-2-pentanone	ND	100	85	85	100	79	79	7	59-130	20
2-Hexanone	ND	100	79	79	100	72	72	9	57-130	20
Bromochloromethane	ND	100	97	97	100	86	86	12	70-130	20
1,2-Dibromoethane	ND	100	91	91	100	82	82	10	70-130	20
1,2-Dibromo-3-chloropropane	ND	100	76	76	100	70	70	8	41-144	20



Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA101
 Calibration dates : 06/24/21 11:17 06/25/21 00:35

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18085

Calibration Files

L11 =V01210624N04.D L1 =V01210624A05.D L2 =V01210624A07.D L3 =V01210624A08.D L4 =V01210624A09.D
 L6 =V01210624A10.D L8 =V01210624A11.D L10 =V01210624A12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.136	0.183	0.190	0.204	0.208	0.217	0.209	0.193	14.28
3) TP Chloromethane		0.210	0.249	0.245	0.250	0.257	0.271	0.270	0.250	8.12
4) TC Vinyl chloride	0.252	0.189	0.265	0.269	0.274	0.272	0.276	0.270	0.258	11.22
5) TP Bromomethane		0.096	0.115	0.124	0.145	0.177	0.193		*Q	0.9996
6) TP Chloroethane		0.139	0.183	0.176	0.181	0.188	0.188	0.178	0.176	9.77
7) TP Trichlorofluor		0.276	0.363	0.382	0.407	0.407	0.413	0.403	0.379	12.78
8) TP Ethyl ether		0.100	0.116	0.118	0.118	0.116	0.113	0.109	0.113	5.84
10) TC 1,1-Dichloroet		0.173	0.222	0.232	0.241	0.236	0.241	0.242	0.227	10.86
11) TP Carbon disulfide		0.482	0.608	0.617	0.636	0.632	0.656	0.664	0.614	9.99
12) TP Freon-113		0.156	0.217	0.231	0.252	0.246	0.253	0.250	0.229	15.30
13) TP Iodomethane		0.166	0.244	0.280	0.295	0.289	0.278	0.263	0.259	17.12
14) TP Acrolein			0.015	0.016	0.017	0.017	0.017	0.016	0.016#	5.12
15) TP Methylene chlo		0.230	0.254	0.253	0.247	0.243	0.244	0.236	0.244	3.48
16) TP Isopropyl alcohol		0.005	0.008	0.009	0.009	0.009	0.008	0.008	0.008#	16.87
17) TP Acetone			0.074	0.044	0.044	0.046	0.041	0.040	*L	0.9975 ave=0.048
18) TP trans-1,2-Dich		0.187	0.241	0.246	0.246	0.246	0.252	0.250	0.238	9.69
19) TP Methyl acetate		0.130	0.124	0.108	0.112	0.115	0.108	0.104	0.115	8.25
20) TP Methyl tert butyl ether		0.466	0.556	0.570	0.578	0.571	0.549	0.532	0.546	7.05
21) TP tert-Butyl alc		0.010	0.015	0.015	0.015	0.015	0.013	0.013	0.014#	12.91
22) TP Diisopropyl ether		0.650	0.768	0.794	0.819	0.832	0.843	0.822	0.789	8.43
23) TP 1,1-Dichloroet		0.390	0.480	0.498	0.500	0.500	0.504	0.496	0.481	8.51
24) TP Halothane		0.133	0.178	0.188	0.196	0.196	0.200	0.202	0.185	13.04
25) TP Acrylonitrile		0.034	0.052	0.052	0.055	0.054	0.052	0.051	0.050	14.40
26) TP Ethyl tert-but		0.613	0.728	0.746	0.764	0.781	0.782	0.765	0.740	8.00
27) TP Vinyl acetate		0.360	0.405	0.395	0.409	0.399	0.429	0.429	0.404	5.83
28) TP cis-1,2-Dichlo		0.218	0.267	0.282	0.280	0.284	0.287	0.284	0.272	8.98
29) TP 2,2-Dichloropr		0.296	0.377	0.389	0.397	0.390	0.409	0.399	0.380	10.03
30) TP Bromochloromet		0.098	0.121	0.126	0.126	0.119	0.114	0.108	0.116	8.66
31) TP Cyclohexane		0.319	0.423	0.437	0.483	0.478	0.497	0.501	0.448	14.33
32) TC Chloroform		0.387	0.469	0.468	0.469	0.471	0.474	0.467	0.458	6.79
33) TP Ethyl acetate		0.175	0.170	0.160	0.168	0.166	0.153	0.148	0.163	5.94
34) TP Carbon tetrachloride	0.347	0.256	0.331	0.366	0.399	0.400	0.408	0.406	0.364	14.38
35) TP Tetrahydrofuran		0.053	0.054	0.048	0.048	0.046	0.042	0.040	0.047#	11.19
36) S Dibromofluoromethane	0.254	0.253	0.252	0.258	0.258	0.263	0.262	0.262	0.258	1.62
37) TP 1,1,1-Trichlor		0.301	0.398	0.415	0.437	0.436	0.444	0.436	0.410	12.31



Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA101
 Calibration dates : 06/24/21 11:17 06/25/21 00:35

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18085

Calibration Files

L11 =V01210624N04.D L1 =V01210624A05.D L2 =V01210624A07.D L3 =V01210624A08.D L4 =V01210624A09.D
 L6 =V01210624A10.D L8 =V01210624A11.D L10 =V01210624A12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
38) TP 2-Butanol			0.010	0.010	0.011	0.012	0.010	0.010	0.011#	7.49
39) TP 2-Butanone		0.076	0.072	0.066	0.066	0.067	0.062	0.060	0.067#	8.38
40) TP 1,1-Dichloropr		0.251	0.335	0.352	0.366	0.360	0.365	0.360	0.341	12.08
41) TP Benzene	0.985	0.768	0.955	0.988	0.978	0.981	1.005	1.000	0.958	8.17
42) TP Tertiary-Amyl Methyl Ether		0.509	0.615	0.637	0.638	0.640	0.625	0.612	0.611	7.59
43) S 1,2-Dichloroethane-d4	0.274	0.276	0.292	0.291	0.291	0.299	0.288	0.302	0.289	3.44
44) TP 1,2-Dichloroet		0.273	0.321	0.321	0.330	0.331	0.328	0.316	0.317	6.43
46) TP 2-Methyl-2-but		0.008	0.012	0.012	0.013	0.013	0.011	0.011	0.011#	15.05
47) TP Methyl cyclohe		0.298	0.381	0.392	0.424	0.424	0.452	0.446	0.402	13.11
48) TP Trichloroethene	0.229	0.198	0.271	0.288	0.293	0.297	0.302	0.300	0.272	14.12
50) TP Dibromomethane		0.102	0.137	0.139	0.142	0.142	0.139	0.135	0.134	10.52
51) TC 1,2-Dichloropr		0.210	0.256	0.268	0.269	0.269	0.273	0.267	0.259	8.65
52) TP 4-penten-2-ol			0.007	0.008	0.009	0.009	0.008	0.008	0.008#	8.62
53) TP 2-Chloroethyl			0.038	0.036	0.037	0.033	0.026	0.024	0.032#	18.09
54) TP Bromodichlorom		0.262	0.329	0.336	0.353	0.354	0.361	0.350	0.335	10.21
57) TP 1,4-Dioxane		0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001#	9.92
58) TP cis-1,3-Dichloropropene		0.294	0.388	0.407	0.418	0.420	0.427	0.414	0.395	11.73
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.308	1.303	1.303	1.300	1.283	1.253	1.241	1.240	1.279	2.31
61) TC Toluene		0.703	0.824	0.841	0.844	0.845	0.872	0.858	0.827	6.85
62) TP 4-Methyl-2-pen		0.049	0.078	0.084	0.083	0.081	0.075	0.075	0.075#	15.86
63) TP Tetrachloroethene		0.269	0.374	0.380	0.393	0.387	0.405	0.402	0.373	12.64
65) TP trans-1,3-Dichloropropene		0.365	0.432	0.466	0.474	0.468	0.470	0.457	0.447	8.73
66) TP 4-Methyl-2-pen		0.026	0.036	0.039	0.042	0.042	0.036	0.036	0.037#	15.09
67) TP Ethyl methacry		0.243	0.324	0.331	0.338	0.329	0.319	0.313	0.314	10.29
68) TP 1,1,2-Trichlor		0.177	0.209	0.211	0.211	0.207	0.205	0.200	0.203	6.02
69) TP Chlorodibromom		0.203	0.268	0.295	0.316	0.320	0.318	0.310	0.290	14.72
70) TP 1,3-Dichloropr		0.341	0.436	0.435	0.434	0.417	0.408	0.395	0.410	8.26
71) TP 1,2-Dibromoethane		0.171	0.241	0.248	0.254	0.247	0.240	0.231	0.233	12.12
72) TP 2-Hexanone		0.151	0.148	0.142	0.147	0.140	0.128	0.123	0.140	7.53
73) TP Chlorobenzene		0.762	0.930	0.956	0.969	0.974	1.001	0.962	0.936	8.51
74) TC Ethylbenzene		1.254	1.534	1.624	1.666	1.678	1.736	1.672	1.595	10.19
75) TP 1,1,1,2-Tetrac		0.236	0.315	0.344	0.362	0.364	0.369	0.355	0.335	14.15
76) TP p/m Xylene		0.477	0.616	0.653	0.697	0.700	0.714	0.680	0.648	12.74
77) TP o Xylene		0.468	0.580	0.617	0.657	0.666	0.678	0.633	0.614	11.82
78) TP Styrene		0.738	0.929	1.005	1.119	1.123	1.137	1.042	1.013	14.07



Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA101
 Calibration dates : 06/24/21 11:17 06/25/21 00:35

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18085

Calibration Files

L11 =V01210624N04.D L1 =V01210624A05.D L2 =V01210624A07.D L3 =V01210624A08.D L4 =V01210624A09.D
 L6 =V01210624A10.D L8 =V01210624A11.D L10 =V01210624A12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP Bromoform		0.241	0.301	0.333	0.364	0.370	0.363	0.344	0.331	13.98
82) TP Isopropylbenzene		2.375	2.913	3.001	3.096	3.121	3.233	3.030	2.967	9.43
83) S 4-Bromofluorobenzene	0.979	0.990	0.976	0.982	0.943	0.936	0.933	0.918	0.957	2.87
84) TP Bromobenzene		0.586	0.686	0.694	0.693	0.704	0.727	0.678	0.681	6.58
85) TP n-Propylbenzene		2.719	3.395	3.477	3.550	3.586	3.729	3.470	3.418	9.54
86) TP 1,4-Dichlorobu		0.733	0.816	0.830	0.839	0.845	0.812	0.761	0.805	5.21
87) TP 1,1,2,2-Tetrac		0.404	0.500	0.475	0.465	0.456	0.447	0.430	0.454	6.85
88) TP 4-Ethyltoluene		2.162	2.677	2.807	2.888	2.902	3.030	2.817	2.755	10.26
89) TP 2-Chlorotoluene		1.709	2.064	2.053	2.092	2.125	2.192	2.040	2.039	7.58
90) TP 1,3,5-Trimethy		1.834	2.260	2.407	2.493	2.479	2.575	2.402	2.350	10.55
91) TP 1,2,3-Trichlor		0.352	0.430	0.425	0.417	0.415	0.397	0.374	0.401	7.22
92) TP trans-1,4-Dich		0.083	0.136	0.144	0.149	0.150	0.146	0.137	0.135	17.30
93) TP 4-Chlorotoluene		1.754	2.106	2.170	2.188	2.208	2.285	2.134	2.121	8.09
94) TP tert-Butylbenzene		1.510	1.920	2.007	2.085	2.087	2.200	2.050	1.980	11.31
97) TP 1,2,4-Trimethy		1.821	2.218	2.353	2.409	2.402	2.501	2.319	2.289	9.79
98) TP sec-Butylbenzene		1.861	2.302	2.424	2.529	2.515	2.667	2.482	2.397	10.90
99) TP p-Isopropyltol		1.660	2.129	2.300	2.426	2.405	2.549	2.366	2.262	13.03
100) TP 1,3-Dichlorobe		1.058	1.224	1.286	1.339	1.345	1.392	1.295	1.277	8.63
101) TP 1,4-Dichlorobe		1.066	1.265	1.303	1.342	1.347	1.392	1.291	1.287	8.22
102) TP p-Diethylbenzene		0.889	1.148	1.263	1.322	1.309	1.403	1.308	1.235	13.81
103) TP n-Butylbenzene		1.379	1.750	1.828	1.906	1.870	2.007	1.872	1.802	11.21
104) TP 1,2-Dichlorobe		0.891	1.080	1.132	1.162	1.163	1.187	1.107	1.103	9.11
105) TP 1,2,4,5-Tetram		1.251	1.561	1.689	1.749	1.750	1.861	1.740	1.657	12.07
106) TP 1,2-Dibromo-3-		0.034	0.062	0.062	0.068	0.067	0.064	0.062	0.060	19.53
107) TP 1,3,5-Trichlor		0.457	0.575	0.595	0.609	0.595	0.632	0.587	0.579	9.77
108) TP Hexachlorobuta		0.165	0.197	0.200	0.203	0.197	0.219	0.210	0.199	8.40
109) TP 1,2,4-Trichlor		0.361	0.470	0.477	0.487	0.466	0.481	0.461	0.458	9.54
110) TP Naphthalene		0.814	0.986	0.971	1.009	0.968	0.912	0.891	0.936	7.26
111) TP 1,2,3-Trichlor		0.291	0.363	0.343	0.362	0.346	0.339	0.327	0.339	7.25



Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Calibration dates : 06/25/21 16:10 06/25/21 20:09

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18092

Calibration Files

L11 =VG210625N03.D L1 =VG210625N05.D L2 =VG210625N06.D L3 =VG210625N08.D L4 =VG210625N09.D
 L6 =VG210625N10.D L8 =VG210625N11.D L10 =VG210625N12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.114	0.150	0.112	0.114	0.112	0.118	0.119	0.120	11.18
3) TP Chloromethane		0.259	0.262	0.226	0.228	0.228	0.244	0.245	0.242	6.14
4) TC Vinyl chloride	0.284	0.171	0.226	0.196	0.194	0.196	0.208	0.214	0.211	15.86
5) TP Bromomethane		0.063	0.050	0.047	0.058	0.069	0.082		*Q	0.9997
6) TP Chloroethane		0.058	0.073	0.071	0.064	0.052	0.056	0.052	0.061#	14.18
7) TP Trichlorofluor		0.164	0.222	0.192	0.196	0.214	0.227	0.231	0.207	11.50
8) TP Ethyl ether		0.068	0.078	0.082	0.080	0.080	0.082	0.083	0.079	6.29
10) TC 1,1-Dichloroet		0.133	0.165	0.126	0.141	0.141	0.152	0.152	0.144	9.13
11) TP Carbon disulfide		0.366	0.470	0.409	0.400	0.402	0.429	0.435	0.416	7.89
12) TP Freon-113		0.112	0.137	0.130	0.133	0.131	0.138	0.140	0.132	7.20
13) TP Iodomethane			0.112	0.136	0.159	0.161	0.169	0.169	0.151	15.16
14) TP Acrolein			0.026	0.018	0.015	0.017	0.017	0.018	*L	0.9978
15) TP Methylene chlo		0.169	0.167	0.151	0.152	0.150	0.156	0.156	0.157	4.94
17) TP Acetone			0.074	0.062	0.056	0.059	0.059	0.060	0.062#	10.57
18) TP trans-1,2-Dich		0.143	0.179	0.145	0.146	0.145	0.152	0.155	0.152	8.33
19) TP Methyl acetate			0.154	0.143	0.140	0.137	0.135	0.134	0.141	5.16
20) TP Methyl tert butyl ether		0.428	0.446	0.422	0.415	0.422	0.432	0.434	0.429	2.36
21) TP tert-Butyl alc			0.024	0.020	0.022	0.023	0.023	0.023	0.022#	6.14
22) TP Diisopropyl ether		0.704	0.778	0.726	0.727	0.716	0.742	0.737	0.733	3.22
23) TP 1,1-Dichloroet		0.330	0.384	0.365	0.360	0.357	0.377	0.370	0.363	4.84
24) TP Halothane		0.099	0.123	0.112	0.113	0.114	0.119	0.119	0.114	6.77
25) TP Acrylonitrile		0.126	0.088	0.079	0.078	0.081	0.080	0.082	0.088	19.83
26) TP Ethyl tert-but		0.695	0.721	0.689	0.687	0.683	0.704	0.709	0.698	1.95
27) TP Vinyl acetate		0.260	0.318	0.333	0.309	0.259	0.276	0.264	0.288	10.67
28) TP cis-1,2-Dichlo		0.193	0.201	0.177	0.175	0.170	0.179	0.181	0.182	5.87
29) TP 2,2-Dichloropr		0.214	0.226	0.199	0.207	0.200	0.207	0.207	0.208	4.38
30) TP Bromochloromet		0.076	0.080	0.072	0.069	0.065	0.068	0.067	0.071	7.55
31) TP Cyclohexane		0.373	0.449	0.415	0.417	0.412	0.431	0.433	0.419	5.70
32) TC Chloroform		0.299	0.279	0.264	0.276	0.274	0.288	0.285	0.281	3.96
33) TP Ethyl acetate		0.219	0.225	0.192	0.194	0.196	0.195	0.198	0.203	6.58
34) TP Carbon tetrachloride		0.210	0.231	0.206	0.212	0.211	0.222	0.222	0.216	4.00
35) TP Tetrahydrofuran		0.069	0.068	0.063	0.060	0.063	0.060	0.062	0.064	5.62
36) S Dibromofluoromethane	0.217	0.217	0.220	0.221	0.223	0.217	0.217	0.220	0.219	1.09
37) TP 1,1,1-Trichlor		0.285	0.279	0.257	0.260	0.256	0.268	0.269	0.268	4.19
39) TP 2-Butanone		0.094	0.108	0.092	0.092	0.094	0.096	0.096	0.096#	5.91



Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Calibration dates : 06/25/21 16:10 06/25/21 20:09

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18092

Calibration Files

L11 =VG210625N03.D L1 =VG210625N05.D L2 =VG210625N06.D L3 =VG210625N08.D L4 =VG210625N09.D
 L6 =VG210625N10.D L8 =VG210625N11.D L10 =VG210625N12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP 1,1-Dichloropr		0.204	0.228	0.208	0.214	0.210	0.221	0.222	0.215	4.00
41) TP Benzene		0.570	0.671	0.619	0.630	0.619	0.651	0.653	0.631	5.21
42) TP Tertiary-Amyl Methyl Ether		0.473	0.463	0.442	0.442	0.449	0.458	0.461	0.455	2.55
43) S 1,2-Dichloroethane-d4	0.321	0.334	0.319	0.332	0.317	0.315	0.313	0.326	0.322	2.42
44) TP 1,2-Dichloroet		0.267	0.276	0.261	0.257	0.253	0.260	0.260	0.262	2.92
47) TP Methyl cyclohe		0.291	0.323	0.287	0.286	0.277	0.290	0.293	0.293	4.94
48) TP Trichloroethene		0.199	0.211	0.187	0.184	0.187	0.194	0.194	0.194#	4.70
50) TP Dibromomethane		0.100	0.106	0.092	0.094	0.092	0.095	0.095	0.096	5.22
51) TC 1,2-Dichloropr		0.196	0.220	0.201	0.206	0.204	0.211	0.210	0.207	3.87
53) TP 2-Chloroethyl		0.120	0.140	0.128	0.133	0.133	0.135	0.138	0.133	5.21
54) TP Bromodichlorom		0.237	0.247	0.219	0.221	0.217	0.227	0.228	0.228	4.78
57) TP 1,4-Dioxane		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002#	8.94
58) TP cis-1,3-Dichloropropene		0.250	0.273	0.267	0.263	0.259	0.269	0.270	0.264	2.95
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.371	1.360	1.361	1.354	1.340	1.356	1.375	1.377	1.362	0.91
61) TC Toluene		0.563	0.631	0.591	0.568	0.565	0.604	0.591	0.588	4.23
62) TP 4-Methyl-2-pen			0.143	0.124	0.115	0.119	0.120	0.119	0.123	8.07
63) TP Tetrachloroethene		0.208	0.252	0.237	0.235	0.236	0.254	0.250	0.239	6.52
65) TP trans-1,3-Dichloropropene		0.331	0.355	0.345	0.346	0.346	0.365	0.360	0.350	3.24
67) TP Ethyl methacry		0.339	0.328	0.287	0.284	0.286	0.295	0.294	0.302	7.39
68) TP 1,1,2-Trichlor		0.221	0.189	0.166	0.160	0.161	0.168	0.167	0.176	12.57
69) TP Chlorodibromom		0.214	0.220	0.217	0.216	0.218	0.232	0.230	0.221	3.15
70) TP 1,3-Dichloropr		0.339	0.353	0.326	0.327	0.330	0.346	0.345	0.338	3.13
71) TP 1,2-Dibromoethane		0.186	0.193	0.189	0.188	0.191	0.201	0.201	0.193	3.06
72) TP 2-Hexanone			0.203	0.196	0.190	0.193	0.197	0.198	0.196	2.27
73) TP Chlorobenzene		0.559	0.668	0.619	0.601	0.595	0.637	0.627	0.615	5.63
74) TC Ethylbenzene		1.110	1.267	1.141	1.108	1.094	1.176	1.160	1.151	5.14
75) TP 1,1,1,2-Tetrac		0.230	0.241	0.214	0.215	0.216	0.232	0.229	0.225	4.58
76) TP p/m Xylene		0.394	0.474	0.432	0.418	0.414	0.442	0.430	0.429	5.85
77) TP o Xylene		0.389	0.437	0.416	0.401	0.392	0.418	0.406	0.408	4.07
78) TP Styrene		0.614	0.735	0.688	0.686	0.670	0.708	0.689	0.684	5.46
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP Bromoform		0.263	0.287	0.272	0.283	0.290	0.307	0.303	0.286	5.50
82) TP Isopropylbenzene		1.652	1.968	1.865	1.844	1.799	1.957	1.916	1.857	5.87
83) S 4-Bromofluorobenzene	0.964	1.007	0.968	0.985	0.987	0.972	1.001	0.974	0.982	1.59
84) TP Bromobenzene		0.383	0.506	0.447	0.461	0.445	0.475	0.466	0.455	8.30



Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Calibration dates : 06/25/21 16:10 06/25/21 20:09

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18092

Calibration Files

L11 =VG210625N03.D L1 =VG210625N05.D L2 =VG210625N06.D L3 =VG210625N08.D L4 =VG210625N09.D
 L6 =VG210625N10.D L8 =VG210625N11.D L10 =VG210625N12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP n-Propylbenzene	2.303	2.637	2.470	2.415	2.351	2.535	2.480	2.456		4.58
86) TP 1,4-Dichlorobu	0.982	0.995	0.906	0.903	0.892	0.952	0.932	0.938		4.33
87) TP 1,1,2,2-Tetrac	0.616	0.428	0.379	0.369	0.351	0.373	0.369	*L		0.9995
88) TP 4-Ethyltoluene	1.711	2.019	1.882	1.848	1.799	1.952	1.899	1.873		5.37
89) TP 2-Chlorotoluene	1.242	1.551	1.485	1.468	1.426	1.532	1.462	1.452		7.01
90) TP 1,3,5-Trimethy	1.523	1.777	1.671	1.645	1.599	1.720	1.658	1.656		4.94
91) TP 1,2,3-Trichlor	0.453	0.377	0.349	0.362	0.363	0.380	0.369	0.379		9.01
92) TP trans-1,4-Dich	0.268	0.246	0.188	0.188	0.186	0.195	0.190	0.209		16.11
93) TP 4-Chlorotoluene	1.483	1.679	1.522	1.511	1.474	1.593	1.548	1.544		4.63
94) TP tert-Butylbenzene	1.219	1.503	1.387	1.393	1.355	1.454	1.409	1.389		6.41
97) TP 1,2,4-Trimethy	1.538	1.725	1.613	1.595	1.556	1.676	1.651	1.622		4.09
98) TP sec-Butylbenzene	1.689	2.015	1.887	1.879	1.830	1.954	1.922	1.882		5.51
99) TP p-Isopropyltol	1.543	1.891	1.742	1.755	1.706	1.819	1.791	1.749		6.23
100) TP 1,3-Dichlorobe	0.762	0.920	0.859	0.870	0.844	0.904	0.879	0.862		5.94
101) TP 1,4-Dichlorobe	0.815	0.907	0.858	0.874	0.849	0.903	0.882	0.870		3.71
102) TP p-Diethylbenzene	0.889	1.113	1.020	1.012	0.991	1.051	1.050	1.018		6.77
103) TP n-Butylbenzene	1.593	1.764	1.707	1.687	1.642	1.738	1.736	1.695		3.55
104) TP 1,2-Dichlorobe	0.723	0.829	0.806	0.804	0.776	0.820	0.815	0.796		4.57
105) TP 1,2,4,5-Tetram	1.414	1.498	1.424	1.412	1.399	1.501	1.502	1.450		3.29
106) TP 1,2-Dibromo-3-	0.088	0.077	0.078	0.076	0.077	0.082	0.083	0.080		5.61
107) TP 1,3,5-Trichlor	0.510	0.657	0.638	0.626	0.621	0.662	0.658	0.625		8.52
108) TP Hexachlorobuta	0.307	0.359	0.320	0.332	0.331	0.350	0.347	0.335		5.38
109) TP 1,2,4-Trichlor	0.555	0.571	0.549	0.538	0.544	0.576	0.567	0.557		2.61
110) TP Naphthalene	1.471	1.227	1.154	1.181	1.176	1.219	1.225	1.236		8.67
111) TP 1,2,3-Trichlor	0.501	0.477	0.468	0.472	0.474	0.493	0.479	0.481		2.48

Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA122
 Calibration dates : 06/26/21 14:07 06/26/21 18:06

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18094

Calibration Files

L11 =V22210626B03.D L1 =V22210626B05.D L2 =V22210626B07.D L3 =V22210626B08.D L4 =V22210626B09.D
 L6 =V22210626B10.D L8 =V22210626B11.D L10 =V22210626B12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.186	0.232	0.193	0.200	0.194	0.187	0.190	0.197	8.00
3) TP Chloromethane		0.219	0.265	0.220	0.216	0.212	0.211	0.213	0.222	8.60
4) TC Vinyl chloride	0.227	0.217	0.293	0.255	0.256	0.246	0.238	0.240	0.246	9.37
5) TP Bromomethane		0.223	0.177	0.154	0.160	0.170	0.176	0.185	0.178	12.60
6) TP Chloroethane		0.168	0.206	0.178	0.180	0.179	0.174	0.154	0.177	8.83
7) TP Trichlorofluor		0.313	0.425	0.366	0.379	0.366	0.347	0.348	0.363	9.42
8) TP Ethyl ether		0.091	0.111	0.103	0.105	0.101	0.101	0.101	0.102	5.74
10) TC 1,1-Dichloroet		0.207	0.251	0.211	0.212	0.203	0.196	0.200	0.211	8.66
11) TP Carbon disulfide		0.534	0.667	0.567	0.564	0.541	0.539	0.551	0.566	8.16
12) TP Freon-113		0.175	0.254	0.212	0.225	0.216	0.208	0.214	0.215	10.80
13) TP Iodomethane			0.224	0.247	0.279	0.280	0.270	0.257	0.259	8.22
14) TP Acrolein			0.026	0.015	0.014	0.014	0.014	0.014	*L	0.9999
15) TP Methylene chlo		0.260	0.251	0.221	0.215	0.207	0.206	0.205	0.223	10.05
17) TP Acetone		0.042	0.043	0.038	0.037	0.037	0.037	0.036	0.039#	7.12
18) TP trans-1,2-Dich		0.213	0.258	0.221	0.219	0.210	0.207	0.208	0.219	8.21
19) TP Methyl acetate		0.100	0.096	0.088	0.094	0.094	0.096	0.097	0.095#	3.94
21) TP Methyl tert butyl ether		0.416	0.515	0.478	0.496	0.485	0.484	0.482	0.479	6.40
22) TP tert-Butyl alc		0.013	0.015	0.013	0.014	0.014	0.013	0.013	0.014#	5.72
24) TP Diisopropyl ether		0.505	0.595	0.556	0.581	0.577	0.573	0.579	0.566	5.19
25) TP 1,1-Dichloroet		0.368	0.467	0.406	0.401	0.388	0.383	0.387	0.400	8.05
26) TP Halothane		0.152	0.206	0.181	0.186	0.180	0.176	0.179	0.180	8.93
27) TP Acrylonitrile		0.053	0.057	0.050	0.051	0.049	0.049	0.049	0.051	5.24
28) TP Ethyl tert-but		0.511	0.584	0.546	0.580	0.579	0.579	0.587	0.567	4.97
29) TP Vinyl acetate		0.297	0.287	0.286	0.318	0.289	0.290	0.354	0.303	8.20
30) TP cis-1,2-Dichlo		0.273	0.289	0.255	0.248	0.238	0.236	0.236	0.254	8.07
31) TP 2,2-Dichloropr		0.344	0.406	0.342	0.333	0.314	0.311	0.313	0.338	9.85
32) TP Bromochloromet		0.114	0.136	0.121	0.120	0.110	0.106	0.102	0.116	9.72
33) TP Cyclohexane		0.344	0.433	0.360	0.377	0.369	0.355	0.372	0.373	7.71
34) TC Chloroform		0.443	0.493	0.412	0.407	0.391	0.387	0.388	0.417	9.31
35) TP Ethyl acetate		0.111	0.125	0.117	0.127	0.128	0.128	0.129	0.124	5.42
36) TP Carbon tetrachloride	0.305	0.299	0.408	0.357	0.368	0.359	0.350	0.361	0.351	9.97
37) TP Tetrahydrofuran			0.057	0.047	0.048	0.046	0.045	0.046	0.048#	9.16
38) S Dibromofluoromethane	0.292	0.290	0.289	0.274	0.266	0.266	0.263	0.262	0.275	4.71
39) TP 1,1,1-Trichlor		0.370	0.444	0.381	0.385	0.371	0.361	0.369	0.383	7.33
41) TP 2-Butanone		0.090	0.063	0.057	0.060	0.059	0.060	0.060	0.064#	17.74



Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA122
 Calibration dates : 06/26/21 14:07 06/26/21 18:06

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18094

Calibration Files

L11 =V22210626B03.D L1 =V22210626B05.D L2 =V22210626B07.D L3 =V22210626B08.D L4 =V22210626B09.D
 L6 =V22210626B10.D L8 =V22210626B11.D L10 =V22210626B12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
42) TP 1,1-Dichloropr	0.158	0.229	0.204	0.202	0.196	0.191	0.194	0.196	10.72	
44) TP Benzene	0.819	0.730	0.912	0.840	0.856	0.834	0.822	0.828	0.830	6.05
45) TP Tertiary-Amyl Methyl Ether	0.457	0.540	0.506	0.534	0.529	0.530	0.531	0.518	5.60	
46) S 1,2-Dichloroethane-d4	0.276	0.277	0.284	0.266	0.263	0.264	0.269	0.277	0.272	2.88
47) T 1,2-Dichloroet	0.265	0.304	0.267	0.267	0.260	0.257	0.258	0.268	6.10	
50) TP Methyl cyclohe	0.350	0.417	0.372	0.397	0.394	0.381	0.403	0.388	5.75	
51) TP Trichloroethene	0.259	0.232	0.275	0.252	0.260	0.260	0.258	0.256	4.71	
53) TP Dibromomethane	0.137	0.154	0.134	0.148	0.141	0.141	0.142	0.142	4.61	
54) TC 1,2-Dichloropr	0.172	0.229	0.211	0.214	0.211	0.209	0.213	0.208	8.29	
56) TP 2-Chloroethyl	0.088	0.111	0.114	0.121	0.118	0.116	0.115	0.112	9.81	
57) TP Bromodichlorom	0.318	0.348	0.298	0.307	0.305	0.300	0.304	0.311	5.60	
60) TP 1,4-Dioxane	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.001#	8.91	
61) TP cis-1,3-Dichloropropene	0.294	0.279	0.361	0.353	0.369	0.361	0.359	0.362	0.342	10.14
62) I Chlorobenzene-d5	-----ISTD-----									
63) S Toluene-d8	1.241	1.222	1.222	1.240	1.227	1.224	1.232	1.223	1.229	0.63
64) TC Toluene	0.632	0.760	0.709	0.724	0.714	0.710	0.728	0.711	5.47	
65) TP 4-Methyl-2-pen	0.074	0.070	0.063	0.071	0.069	0.070	0.070	0.070#	4.81	
66) TP Tetrachloroethene	0.291	0.382	0.354	0.372	0.360	0.352	0.361	0.353	8.33	
68) TP trans-1,3-Dichloropropene	0.291	0.345	0.400	0.395	0.423	0.420	0.421	0.426	0.390	12.33
70) TP Ethyl methacry	0.356	0.311	0.305	0.286	0.275	0.276	0.274	0.298	9.95	
71) TP 1,1,2-Trichlor	0.197	0.199	0.180	0.191	0.188	0.189	0.191	0.191	3.23	
72) TP Chlorodibromom	0.245	0.323	0.311	0.328	0.325	0.324	0.328	0.312	9.67	
73) TP 1,3-Dichloropr	0.295	0.377	0.373	0.388	0.381	0.381	0.380	0.368	8.80	
74) TP 1,2-Dibromoethane	0.184	0.223	0.229	0.238	0.233	0.234	0.233	0.225	8.18	
76) TP 2-Hexanone	0.130	0.112	0.108	0.114	0.112	0.111	0.109	0.114	6.56	
77) TP Chlorobenzene	0.727	0.894	0.845	0.849	0.836	0.826	0.835	0.830	6.12	
78) TC Ethylbenzene	1.210	1.529	1.415	1.437	1.406	1.380	1.409	1.398	6.84	
79) TP 1,1,1,2-Tetrac	0.239	0.315	0.300	0.316	0.315	0.314	0.317	0.302	9.41	
80) TP p/m Xylene	0.498	0.631	0.585	0.593	0.578	0.574	0.586	0.578	6.90	
81) TP o Xylene	0.484	0.582	0.557	0.558	0.548	0.545	0.557	0.548	5.53	
82) TP Styrene	0.778	0.976	0.918	0.932	0.915	0.911	0.917	0.907	6.72	
83) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
84) TP Bromoform	0.270	0.344	0.339	0.373	0.379	0.380	0.390	0.354	11.69	
86) TP Isopropylbenzene	2.318	2.894	2.656	2.769	2.689	2.624	2.683	2.662	6.62	
87) S 4-Bromofluorobenzene	0.901	0.897	0.888	0.878	0.878	0.870	0.859	0.860	0.879	1.78
88) TP Bromobenzene	0.577	0.693	0.646	0.666	0.647	0.634	0.638	0.643	5.48	



Initial Calibration Summary

Form 6

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA122
 Calibration dates : 06/26/21 14:07 06/26/21 18:06

Lab Number : L2133145
 Project Number : 28012
 Ical Ref : ICAL18094

Calibration Files

L11 =V22210626B03.D L1 =V22210626B05.D L2 =V22210626B07.D L3 =V22210626B08.D L4 =V22210626B09.D
 L6 =V22210626B10.D L8 =V22210626B11.D L10 =V22210626B12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
89) TP n-Propylbenzene	2.827	3.484	3.225	3.356	3.275	3.171	3.231	3.224	6.31	
90) TP 1,4-Dichlorobu	0.648	0.671	0.613	0.646	0.654	0.653	0.681	0.652	3.29	
91) TP 1,1,2,2-Tetrac	0.496	0.487	0.422	0.451	0.430	0.430	0.452	0.453	6.38	
92) TP 4-Ethyltoluene	2.235	2.862	2.620	2.722	2.635	2.559	2.604	2.605	7.35	
93) TP 2-Chlorotoluene	1.971	2.340	2.107	2.175	2.136	2.102	2.160	2.142	5.13	
94) TP 1,3,5-Trimethy	1.982	2.471	2.291	2.378	2.333	2.272	2.324	2.293	6.63	
95) TP 1,2,3-Trichlor	0.364	0.415	0.369	0.402	0.401	0.402	0.414	0.395	5.17	
96) TP trans-1,4-Dich	0.147	0.141	0.119	0.136	0.131	0.132	0.136	0.135	6.52	
97) TP 4-Chlorotoluene	1.822	2.147	1.931	1.989	1.940	1.901	1.954	1.955	5.09	
98) TP tert-Butylbenzene	1.646	2.123	2.306	2.372	2.326	2.231	2.305	2.187	11.52	
101) TP 1,2,4-Trimethy	1.979	2.437	2.247	2.334	2.283	2.234	2.275	2.255	6.19	
102) TP sec-Butylbenzene	2.140	2.708	2.497	2.622	2.544	2.440	2.514	2.495	7.19	
103) TP p-Isopropyltol	1.935	2.592	2.396	2.499	2.438	2.333	2.409	2.372	8.83	
104) TP 1,3-Dichlorobe	1.147	1.443	1.312	1.340	1.296	1.268	1.301	1.301	6.78	
105) TP 1,4-Dichlorobe	1.175	1.428	1.298	1.337	1.295	1.275	1.300	1.301	5.79	
106) TP p-Diethylbenzene	1.082	1.432	1.359	1.425	1.400	1.368	1.433	1.357	9.19	
107) TP n-Butylbenzene	1.611	2.147	2.002	2.100	2.059	2.011	2.087	2.002	8.99	
108) TP 1,2-Dichlorobe	1.020	1.278	1.167	1.204	1.166	1.145	1.177	1.165	6.63	
109) TP 1,2,4,5-Tetram	1.584	1.903	1.801	1.925	1.928	1.926	2.008	1.868	7.46	
110) TP 1,2-Dibromo-3-	0.067	0.097	0.086	0.095	0.094	0.095	0.095	0.090	11.86	
111) TP 1,3,5-Trichlor	0.660	0.850	0.812	0.831	0.808	0.794	0.808	0.795	7.84	
112) TP Hexachlorobuta	0.233	0.291	0.275	0.286	0.274	0.273	0.287	0.274	7.14	
113) TP 1,2,4-Trichlor	0.608	0.719	0.706	0.752	0.723	0.719	0.729	0.708	6.52	
114) TP Naphthalene	1.364	1.569	1.466	1.571	1.554	1.564	1.590	1.525	5.36	
115) TP 1,2,3-Trichlor	0.533	0.663	0.626	0.661	0.638	0.629	0.638	0.627	6.99	



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Lab File ID : VG210630A01
 Sample No : WG1519073-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 07:42
 Init. Calib. Date(s) : 06/25/21 06/25/21
 Init. Calib. Times : 16:10 20:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	114	0
Dichlorodifluoromethane	0.12	0.103	-	14.2	20	105	0
Chloromethane	0.242	0.216	-	10.7	20	109	0
Vinyl chloride	0.211	0.174	-	17.5	20	101	0
Bromomethane	10	13.366	-	-33.7*	20	165	0
Chloroethane	0.061	0.068*	-	-11.5	20	110	0
Trichlorofluoromethane	0.207	0.195	-	5.8	20	116	0
Ethyl ether	0.079	0.075	-	5.1	20	105	0
1,1-Dichloroethene	0.144	0.135	-	6.2	20	122	0
Carbon disulfide	0.416	0.39	-	6.2	20	109	0
Freon-113	0.132	0.134	-	-1.5	20	118	0
Iodomethane	0.151	0.117	-	22.5*	20	99	0
Acrolein	10	10.029	-	-0.3	20	117	0
Methylene chloride	0.157	0.145	-	7.6	20	110	0
Acetone	0.062	0.049*	-	21*	20	91	0
trans-1,2-Dichloroethene	0.152	0.143	-	5.9	20	113	0
Methyl acetate	0.141	0.123	-	12.8	20	99	0
Methyl tert-butyl ether	0.429	0.396	-	7.7	20	107	0
tert-Butyl alcohol	0.022	0.019*	-	13.6	20	106	0
Diisopropyl ether	0.733	0.653	-	10.9	20	103	0
1,1-Dichloroethane	0.363	0.336	-	7.4	20	105	0
Halothane	0.114	0.104	-	8.8	20	106	0
Acrylonitrile	0.088	0.068	-	22.7*	20	98	0
Ethyl tert-butyl ether	0.698	0.62	-	11.2	20	103	0
Vinyl acetate	0.288	0.497	-	-72.6*	20	171	0
cis-1,2-Dichloroethene	0.182	0.162	-	11	20	105	0
2,2-Dichloropropane	0.208	0.257	-	-23.6*	20	148	0
Bromochloromethane	0.071	0.069	-	2.8	20	109	0
Cyclohexane	0.419	0.373	-	11	20	103	0
Chloroform	0.281	0.261	-	7.1	20	113	0
Ethyl acetate	0.203	0.167	-	17.7	20	99	0
Carbon tetrachloride	0.216	0.205	-	5.1	20	114	0
Tetrahydrofuran	0.064	0.055	-	14.1	20	99	0
Dibromofluoromethane	0.219	0.234	-	-6.8	20	121	0
1,1,1-Trichloroethane	0.268	0.261	-	2.6	20	116	0
2-Butanone	0.096	0.085*	-	11.5	20	106	0
1,1-Dichloropropene	0.215	0.207	-	3.7	20	114	0
Benzene	0.631	0.599	-	5.1	20	111	0
tert-Amyl methyl ether	0.455	0.415	-	8.8	20	107	0
1,2-Dichloroethane-d4	0.322	0.346	-	-7.5	20	119	0
1,2-Dichloroethane	0.262	0.249	-	5	20	109	0
Methyl cyclohexane	0.293	0.272	-	7.2	20	108	0
Trichloroethene	0.194	0.157*	-	19.1	20	96	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Lab File ID : VG210630A01
 Sample No : WG1519073-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 07:42
 Init. Calib. Date(s) : 06/25/21 06/25/21
 Init. Calib. Times : 16:10 20:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.096	0.088	-	8.3	20	109	0
1,2-Dichloropropane	0.207	0.184	-	11.1	20	105	0
2-Chloroethyl vinyl ether	0.133	0.114	-	14.3	20	102	0
Bromodichloromethane	0.228	0.208	-	8.8	20	108	0
1,4-Dioxane	0.00182	0.00171*	-	6	20	113	0
cis-1,3-Dichloropropene	0.264	0.25	-	5.3	20	107	0
Chlorobenzene-d5	1	1	-	0	20	117	0
Toluene-d8	1.362	1.341	-	1.5	20	116	0
Toluene	0.588	0.53	-	9.9	20	105	0
4-Methyl-2-pentanone	0.123	0.095*	-	22.8*	20	89	0
Tetrachloroethene	0.239	0.22	-	7.9	20	109	0
trans-1,3-Dichloropropene	0.35	0.328	-	6.3	20	111	0
Ethyl methacrylate	0.302	0.251	-	16.9	20	102	0
1,1,2-Trichloroethane	0.176	0.151	-	14.2	20	107	0
Chlorodibromomethane	0.221	0.19	-	14	20	103	0
1,3-Dichloropropane	0.338	0.306	-	9.5	20	110	0
1,2-Dibromoethane	0.193	0.175	-	9.3	20	108	0
2-Hexanone	0.196	0.165	-	15.8	20	99	0
Chlorobenzene	0.615	0.564	-	8.3	20	107	0
Ethylbenzene	1.151	1.066	-	7.4	20	110	0
1,1,1,2-Tetrachloroethane	0.225	0.2	-	11.1	20	110	0
p/m Xylene	0.429	0.4	-	6.8	20	108	0
o Xylene	0.408	0.387	-	5.1	20	109	0
Styrene	0.684	0.629	-	8	20	107	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	113	0
Bromoform	0.286	0.242	-	15.4	20	101	0
Isopropylbenzene	1.857	1.768	-	4.8	20	108	0
4-Bromofluorobenzene	0.982	0.99	-	-0.8	20	114	0
Bromobenzene	0.455	0.423	-	7	20	107	0
n-Propylbenzene	2.456	2.405	-	2.1	20	110	0
1,4-Dichlorobutane	0.938	0.832	-	11.3	20	104	0
1,1,2,2-Tetrachloroethane	10	10.284	-	-2.8	20	116	0
4-Ethyltoluene	1.873	1.893	-	-1.1	20	114	0
2-Chlorotoluene	1.452	1.425	-	1.9	20	109	0
1,3,5-Trimethylbenzene	1.656	1.679	-	-1.4	20	114	0
1,2,3-Trichloropropane	0.379	0.34	-	10.3	20	110	0
trans-1,4-Dichloro-2-buten	0.209	0.158	-	24.4*	20	95	0
4-Chlorotoluene	1.544	1.462	-	5.3	20	109	0
tert-Butylbenzene	1.389	1.311	-	5.6	20	107	0
1,2,4-Trimethylbenzene	1.622	1.703	-	-5	20	120	0
sec-Butylbenzene	1.882	1.843	-	2.1	20	111	0
p-Isopropyltoluene	1.749	1.704	-	2.6	20	111	0
1,3-Dichlorobenzene	0.862	0.816	-	5.3	20	108	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Lab File ID : VG210630A01
 Sample No : WG1519073-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 07:42
 Init. Calib. Date(s) : 06/25/21 06/25/21
 Init. Calib. Times : 16:10 20:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	0.87	0.82	-	5.7	20	108	0
p-Diethylbenzene	1.018	1.049	-	-3	20	117	0
n-Butylbenzene	1.695	1.7	-	-0.3	20	113	0
1,2-Dichlorobenzene	0.796	0.742	-	6.8	20	104	0
1,2,4,5-Tetramethylbenzene	1.45	1.424	-	1.8	20	113	0
1,2-Dibromo-3-chloropropan	0.08	0.07	-	12.5	20	102	0
1,3,5-Trichlorobenzene	0.625	0.611	-	2.2	20	109	0
Hexachlorobutadiene	0.335	0.318	-	5.1	20	113	0
1,2,4-Trichlorobenzene	0.557	0.508	-	8.8	20	105	0
Naphthalene	1.236	1.195	-	3.3	20	117	0
1,2,3-Trichlorobenzene	0.481	0.424	-	11.9	20	103	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Lab File ID : VG210630N01
 Sample No : WG1519429-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 19:32
 Init. Calib. Date(s) : 06/25/21 06/25/21
 Init. Calib. Times : 16:10 20:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	115	0
Dichlorodifluoromethane	0.12	0.093	-	22.5*	20	95	0
Chloromethane	0.242	0.197	-	18.6	20	100	.01
Vinyl chloride	0.211	0.163	-	22.7*	20	96	0
Bromomethane	10	10.899	-	-9	20	134	0
Chloroethane	0.061	0.05*	-	18	20	81	0
Trichlorofluoromethane	0.207	0.178	-	14	20	107	0
Ethyl ether	0.079	0.073	-	7.6	20	102	0
1,1-Dichloroethene	0.144	0.113	-	21.5*	20	103	0
Carbon disulfide	0.416	0.363	-	12.7	20	102	0
Freon-113	0.132	0.118	-	10.6	20	104	0
Iodomethane	0.151	0.098	-	35.1*	20	83	0
Acrolein	10	10.511	-	-5.1	20	123	0
Methylene chloride	0.157	0.137	-	12.7	20	105	0
Acetone	0.062	0.056*	-	9.7	20	105	0
trans-1,2-Dichloroethene	0.152	0.126	-	17.1	20	100	0
Methyl acetate	0.141	0.127	-	9.9	20	102	0
Methyl tert-butyl ether	0.429	0.387	-	9.8	20	106	0
tert-Butyl alcohol	0.022	0.021*	-	4.5	20	119	0
Diisopropyl ether	0.733	0.629	-	14.2	20	100	0
1,1-Dichloroethane	0.363	0.31	-	14.6	20	98	0
Halothane	0.114	0.095	-	16.7	20	98	0
Acrylonitrile	0.088	0.067	-	23.9*	20	97	0
Ethyl tert-butyl ether	0.698	0.595	-	14.8	20	99	0
Vinyl acetate	0.288	0.439	-	-52.4*	20	152	0
cis-1,2-Dichloroethene	0.182	0.157	-	13.7	20	102	0
2,2-Dichloropropane	0.208	0.221	-	-6.3	20	128	0
Bromochloromethane	0.071	0.064	-	9.9	20	103	0
Cyclohexane	0.419	0.334	-	20.3*	20	93	0
Chloroform	0.281	0.252	-	10.3	20	110	0
Ethyl acetate	0.203	0.19	-	6.4	20	113	0
Carbon tetrachloride	0.216	0.187	-	13.4	20	105	0
Tetrahydrofuran	0.064	0.049*	-	23.4*	20	91	0
Dibromofluoromethane	0.219	0.224	-	-2.3	20	117	0
1,1,1-Trichloroethane	0.268	0.233	-	13.1	20	105	0
2-Butanone	0.096	0.089*	-	7.3	20	111	0
1,1-Dichloropropene	0.215	0.184	-	14.4	20	102	0
Benzene	0.631	0.543	-	13.9	20	101	0
tert-Amyl methyl ether	0.455	0.402	-	11.6	20	105	0
1,2-Dichloroethane-d4	0.322	0.344	-	-6.8	20	119	0
1,2-Dichloroethane	0.262	0.242	-	7.6	20	107	0
Methyl cyclohexane	0.293	0.251	-	14.3	20	101	0
Trichloroethene	0.194	0.153*	-	21.1*	20	95	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Lab File ID : VG210630N01
 Sample No : WG1519429-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 19:32
 Init. Calib. Date(s) : 06/25/21 06/25/21
 Init. Calib. Times : 16:10 20:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.096	0.088	-	8.3	20	110	0
1,2-Dichloropropane	0.207	0.173	-	16.4	20	99	0
2-Chloroethyl vinyl ether	0.133	0.117	-	12	20	105	0
Bromodichloromethane	0.228	0.201	-	11.8	20	105	0
1,4-Dioxane	0.00182	0.00177*	-	2.7	20	118	0
cis-1,3-Dichloropropene	0.264	0.236	-	10.6	20	102	0
Chlorobenzene-d5	1	1	-	0	20	116	0
Toluene-d8	1.362	1.342	-	1.5	20	115	0
Toluene	0.588	0.51	-	13.3	20	100	0
4-Methyl-2-pentanone	0.123	0.104	-	15.4	20	97	0
Tetrachloroethene	0.239	0.206	-	13.8	20	100	0
trans-1,3-Dichloropropene	0.35	0.332	-	5.1	20	111	0
Ethyl methacrylate	0.302	0.265	-	12.3	20	107	0
1,1,2-Trichloroethane	0.176	0.149	-	15.3	20	104	0
Chlorodibromomethane	0.221	0.188	-	14.9	20	100	0
1,3-Dichloropropane	0.338	0.307	-	9.2	20	109	0
1,2-Dibromoethane	0.193	0.176	-	8.8	20	108	0
2-Hexanone	0.196	0.184	-	6.1	20	108	0
Chlorobenzene	0.615	0.539	-	12.4	20	101	0
Ethylbenzene	1.151	1.011	-	12.2	20	103	0
1,1,1,2-Tetrachloroethane	0.225	0.192	-	14.7	20	104	0
p/m Xylene	0.429	0.378	-	11.9	20	101	0
o Xylene	0.408	0.356	-	12.7	20	99	0
Styrene	0.684	0.605	-	11.5	20	102	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	114	0
Bromoform	0.286	0.246	-	14	20	103	0
Isopropylbenzene	1.857	1.647	-	11.3	20	100	0
4-Bromofluorobenzene	0.982	0.995	-	-1.3	20	115	0
Bromobenzene	0.455	0.406	-	10.8	20	103	0
n-Propylbenzene	2.456	2.193	-	10.7	20	101	0
1,4-Dichlorobutane	0.938	0.827	-	11.8	20	104	0
1,1,2,2-Tetrachloroethane	10	10.335	-	-3.4	20	117	0
4-Ethyltoluene	1.873	1.697	-	9.4	20	102	0
2-Chlorotoluene	1.452	1.32	-	9.1	20	101	0
1,3,5-Trimethylbenzene	1.656	1.489	-	10.1	20	101	0
1,2,3-Trichloropropane	0.379	0.345	-	9	20	112	0
trans-1,4-Dichloro-2-buten	0.209	0.158	-	24.4*	20	96	0
4-Chlorotoluene	1.544	1.356	-	12.2	20	101	0
tert-Butylbenzene	1.389	1.223	-	12	20	100	0
1,2,4-Trimethylbenzene	1.622	1.469	-	9.4	20	104	0
sec-Butylbenzene	1.882	1.709	-	9.2	20	103	0
p-Isopropyltoluene	1.749	1.565	-	10.5	20	102	0
1,3-Dichlorobenzene	0.862	0.778	-	9.7	20	103	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : GONZO
 Lab File ID : VG210630N01
 Sample No : WG1519429-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 19:32
 Init. Calib. Date(s) : 06/25/21 06/25/21
 Init. Calib. Times : 16:10 20:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	0.87	0.797	-	8.4	20	106	0
p-Diethylbenzene	1.018	0.932	-	8.4	20	104	0
n-Butylbenzene	1.695	1.623	-	4.2	20	108	0
1,2-Dichlorobenzene	0.796	0.721	-	9.4	20	102	0
1,2,4,5-Tetramethylbenzene	1.45	1.317	-	9.2	20	105	0
1,2-Dibromo-3-chloropropan	0.08	0.074	-	7.5	20	107	0
1,3,5-Trichlorobenzene	0.625	0.581	-	7	20	104	0
Hexachlorobutadiene	0.335	0.301	-	10.1	20	107	0
1,2,4-Trichlorobenzene	0.557	0.511	-	8.3	20	106	0
Naphthalene	1.236	1.138	-	7.9	20	112	0
1,2,3-Trichlorobenzene	0.481	0.441	-	8.3	20	107	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA122
 Lab File ID : V22210630N01
 Sample No : WG1519380-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 19:50
 Init. Calib. Date(s) : 06/26/21 06/26/21
 Init. Calib. Times : 14:07 18:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	78	0
Dichlorodifluoromethane	0.197	0.167	-	15.2	20	68	0
Chloromethane	0.222	0.183	-	17.6	20	65	0
Vinyl chloride	0.246	0.253	-	-2.8	20	78	0
Bromomethane	0.178	0.139	-	21.9*	20	70	0
Chloroethane	0.177	0.22	-	-24.3*	20	97	0
Trichlorofluoromethane	0.363	0.359	-	1.1	20	76	0
Ethyl ether	0.102	0.089	-	12.7	20	67	0
1,1-Dichloroethene	0.211	0.188	-	10.9	20	70	0
Carbon disulfide	0.566	0.536	-	5.3	20	74	0
Freon-113	0.215	0.204	-	5.1	20	75	0
Iodomethane	0.259	0.033*	-	87.3*	20	10	0
Acrolein	10	6.817	-	31.8*	20	59	0
Methylene chloride	0.223	0.204	-	8.5	20	72	0
Acetone	0.039	0.04*	-	-2.6	20	80	0
trans-1,2-Dichloroethene	0.219	0.203	-	7.3	20	72	0
Methyl acetate	0.095	0.079*	-	16.8	20	70	0
Methyl tert-butyl ether	0.479	0.429	-	10.4	20	70	0
tert-Butyl alcohol	0.014	0.011*	-	21.4*	20	66	0
Diisopropyl ether	0.566	0.521	-	8	20	73	0
1,1-Dichloroethane	0.4	0.392	-	2	20	75	0
Halothane	0.18	0.163	-	9.4	20	70	0
Acrylonitrile	0.051	0.043*	-	15.7	20	66	0
Ethyl tert-butyl ether	0.567	0.508	-	10.4	20	73	0
Vinyl acetate	0.303	0.335	-	-10.6	20	91	0
cis-1,2-Dichloroethene	0.254	0.24	-	5.5	20	74	0
2,2-Dichloropropane	0.338	0.339	-	-0.3	20	77	0
Bromochloromethane	0.116	0.108	-	6.9	20	70	0
Cyclohexane	0.373	0.352	-	5.6	20	76	0
Chloroform	0.417	0.395	-	5.3	20	75	0
Ethyl acetate	0.124	0.11	-	11.3	20	73	0
Carbon tetrachloride	0.351	0.33	-	6	20	72	0
Tetrahydrofuran	0.048	0.041*	-	14.6	20	68	0
Dibromofluoromethane	0.275	0.272	-	1.1	20	77	0
1,1,1-Trichloroethane	0.383	0.364	-	5	20	75	0
2-Butanone	0.064	0.056*	-	12.5	20	77	0
1,1-Dichloropropene	0.196	0.197	-	-0.5	20	75	0
Benzene	0.83	0.794	-	4.3	20	74	0
tert-Amyl methyl ether	0.518	0.463	-	10.6	20	71	0
1,2-Dichloroethane-d4	0.272	0.283	-	-4	20	83	0
1,2-Dichloroethane	0.268	0.269	-	-0.4	20	78	0
Methyl cyclohexane	0.388	0.347	-	10.6	20	73	0
Trichloroethene	0.256	0.229	-	10.5	20	71	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA122
 Lab File ID : V22210630N01
 Sample No : WG1519380-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 19:50
 Init. Calib. Date(s) : 06/26/21 06/26/21
 Init. Calib. Times : 14:07 18:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.142	0.123	-	13.4	20	71	0
1,2-Dichloropropane	0.208	0.201	-	3.4	20	74	0
2-Chloroethyl vinyl ether	0.112	0.098	-	12.5	20	67	0
Bromodichloromethane	0.311	0.291	-	6.4	20	76	0
1,4-Dioxane	0.00146	0.00143*	-	2.1	20	75	0
cis-1,3-Dichloropropene	0.342	0.322	-	5.8	20	71	0
Chlorobenzene-d5	1	1	-	0	20	78	0
Toluene-d8	1.229	1.25	-	-1.7	20	79	0
Toluene	0.711	0.656	-	7.7	20	73	0
4-Methyl-2-pentanone	0.07	0.054*	-	22.9*	20	68	0
Tetrachloroethene	0.353	0.316	-	10.5	20	70	0
trans-1,3-Dichloropropene	0.39	0.367	-	5.9	20	73	0
Ethyl methacrylate	0.298	0.241	-	19.1	20	62	0
1,1,2-Trichloroethane	0.191	0.166	-	13.1	20	72	0
Chlorodibromomethane	0.312	0.273	-	12.5	20	69	0
1,3-Dichloropropane	0.368	0.346	-	6	20	73	0
1,2-Dibromoethane	0.225	0.202	-	10.2	20	69	0
2-Hexanone	0.114	0.099*	-	13.2	20	72	0
Chlorobenzene	0.83	0.78	-	6	20	72	0
Ethylbenzene	1.398	1.348	-	3.6	20	75	0
1,1,1,2-Tetrachloroethane	0.302	0.267	-	11.6	20	70	0
p/m Xylene	0.578	0.544	-	5.9	20	73	0
o Xylene	0.548	0.521	-	4.9	20	73	0
Styrene	0.907	0.858	-	5.4	20	73	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	77	0
Bromoform	0.354	0.293	-	17.2	20	66	0
Isopropylbenzene	2.662	2.601	-	2.3	20	75	0
4-Bromofluorobenzene	0.879	0.882	-	-0.3	20	77	0
Bromobenzene	0.643	0.595	-	7.5	20	70	0
n-Propylbenzene	3.224	3.184	-	1.2	20	76	0
1,4-Dichlorobutane	0.652	0.58	-	11	20	72	0
1,1,2,2-Tetrachloroethane	0.453	0.416	-	8.2	20	75	0
4-Ethyltoluene	2.605	2.511	-	3.6	20	73	0
2-Chlorotoluene	2.142	2.114	-	1.3	20	77	0
1,3,5-Trimethylbenzene	2.293	2.225	-	3	20	74	0
1,2,3-Trichloropropane	0.395	0.368	-	6.8	20	76	0
trans-1,4-Dichloro-2-buten	0.135	0.119	-	11.9	20	76	0
4-Chlorotoluene	1.955	1.884	-	3.6	20	75	0
tert-Butylbenzene	2.187	2.219	-	-1.5	20	74	0
1,2,4-Trimethylbenzene	2.255	2.19	-	2.9	20	75	0
sec-Butylbenzene	2.495	2.481	-	0.6	20	76	0
p-Isopropyltoluene	2.372	2.333	-	1.6	20	75	0
1,3-Dichlorobenzene	1.301	1.225	-	5.8	20	71	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
Project Name : WAVERLY AVE
Instrument ID : VOA122
Lab File ID : V22210630N01
Sample No : WG1519380-2
Channel :

Lab Number : L2133145
Project Number : 28012
Calibration Date : 06/30/21 19:50
Init. Calib. Date(s) : 06/26/21 06/26/21
Init. Calib. Times : 14:07 18:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.301	1.243	-	4.5	20	73	0
p-Diethylbenzene	1.357	1.307	-	3.7	20	74	0
n-Butylbenzene	2.002	2.027	-	-1.2	20	78	0
1,2-Dichlorobenzene	1.165	1.11	-	4.7	20	73	0
1,2,4,5-Tetramethylbenzene	1.868	1.754	-	6.1	20	75	0
1,2-Dibromo-3-chloropropan	0.09	0.074	-	17.8	20	66	0
1,3,5-Trichlorobenzene	0.795	0.726	-	8.7	20	68	0
Hexachlorobutadiene	0.274	0.247	-	9.9	20	69	0
1,2,4-Trichlorobenzene	0.708	0.633	-	10.6	20	69	0
Naphthalene	1.525	1.332	-	12.7	20	70	0
1,2,3-Trichlorobenzene	0.627	0.559	-	10.8	20	68	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA101
 Lab File ID : V01210630N01
 Sample No : WG1519326-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 20:46
 Init. Calib. Date(s) : 06/24/21 06/25/21
 Init. Calib. Times : 11:17 00:35

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	79	0
Dichlorodifluoromethane	0.193	0.208	-	-7.8	20	86	0
Chloromethane	0.25	0.233	-	6.8	20	75	0
Vinyl chloride	0.258	0.259	-	-0.4	20	76	0
Bromomethane	10	6.882	-	31.2*	20	57	0
Chloroethane	0.176	0.178	-	-1.1	20	80	0
Trichlorofluoromethane	0.379	0.392	-	-3.4	20	81	0
Ethyl ether	0.113	0.103	-	8.8	20	69	0
1,1-Dichloroethene	0.227	0.224	-	1.3	20	76	0
Carbon disulfide	0.614	0.6	-	2.3	20	77	0
Freon-113	0.229	0.238	-	-3.9	20	81	0
Iodomethane	0.259	0.178	-	31.3*	20	50	0
Acrolein	0.01615	0.00876*	-	45.8*	20	43	0
Methylene chloride	0.244	0.238	-	2.5	20	74	0
Acetone	10	9.962	-	0.4	20	84	0
trans-1,2-Dichloroethene	0.238	0.231	-	2.9	20	74	0
Methyl acetate	0.115	0.107	-	7	20	78	0
Methyl tert-butyl ether	0.546	0.503	-	7.9	20	70	0
tert-Butyl alcohol	0.014	0.013*	-	7.1	20	66	0
Diisopropyl ether	0.789	0.77	-	2.4	20	76	0
1,1-Dichloroethane	0.481	0.471	-	2.1	20	74	0
Halothane	0.185	0.179	-	3.2	20	75	0
Acrylonitrile	0.05	0.047*	-	6	20	71	0
Ethyl tert-butyl ether	0.74	0.695	-	6.1	20	73	0
Vinyl acetate	0.404	0.47	-	-16.3	20	94	0
cis-1,2-Dichloroethene	0.272	0.262	-	3.7	20	73	0
2,2-Dichloropropane	0.38	0.386	-	-1.6	20	78	0
Bromochloromethane	0.116	0.116	-	0	20	73	0
Cyclohexane	0.448	0.453	-	-1.1	20	82	0
Chloroform	0.458	0.443	-	3.3	20	75	0
Ethyl acetate	0.163	0.128	-	21.5*	20	63	0
Carbon tetrachloride	0.364	0.372	-	-2.2	20	80	0
Tetrahydrofuran	0.047	0.038*	-	19.1	20	63	0
Dibromofluoromethane	0.258	0.265	-	-2.7	20	81	0
1,1,1-Trichloroethane	0.41	0.41	-	0	20	78	0
2-Butanone	0.067	0.059*	-	11.9	20	70	0
1,1-Dichloropropene	0.341	0.335	-	1.8	20	75	0
Benzene	0.958	0.914	-	4.6	20	73	0
tert-Amyl methyl ether	0.611	0.551	-	9.8	20	68	0
1,2-Dichloroethane-d4	0.289	0.304	-	-5.2	20	82	0
1,2-Dichloroethane	0.317	0.314	-	0.9	20	77	0
Methyl cyclohexane	0.402	0.391	-	2.7	20	79	0
Trichloroethene	0.272	0.26	-	4.4	20	71	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA101
 Lab File ID : V01210630N01
 Sample No : WG1519326-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 20:46
 Init. Calib. Date(s) : 06/24/21 06/25/21
 Init. Calib. Times : 11:17 00:35

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.134	0.126	-	6	20	71	0
1,2-Dichloropropane	0.259	0.248	-	4.2	20	73	0
2-Chloroethyl vinyl ether	0.032	0.029*	-	9.4	20	64	0
Bromodichloromethane	0.335	0.322	-	3.9	20	75	0
1,4-Dioxane	0.00145	0.00138*	-	4.8	20	71	0
cis-1,3-Dichloropropene	0.395	0.37	-	6.3	20	71	0
Chlorobenzene-d5	1	1	-	0	20	83	0
Toluene-d8	1.279	1.252	-	2.1	20	80	0
Toluene	0.827	0.727	-	12.1	20	72	0
4-Methyl-2-pentanone	0.075	0.065*	-	13.3	20	65	0
Tetrachloroethene	0.373	0.339	-	9.1	20	74	0
trans-1,3-Dichloropropene	0.447	0.396	-	11.4	20	71	0
Ethyl methacrylate	0.314	0.264	-	15.9	20	66	0
1,1,2-Trichloroethane	0.203	0.183	-	9.9	20	72	0
Chlorodibromomethane	0.29	0.26	-	10.3	20	73	0
1,3-Dichloropropane	0.41	0.371	-	9.5	20	71	0
1,2-Dibromoethane	0.233	0.211	-	9.4	20	70	0
2-Hexanone	0.14	0.114	-	18.6	20	67	0
Chlorobenzene	0.936	0.841	-	10.1	20	73	0
Ethylbenzene	1.595	1.417	-	11.2	20	73	0
1,1,1,2-Tetrachloroethane	0.335	0.3	-	10.4	20	73	0
p/m Xylene	0.648	0.574	-	11.4	20	73	0
o Xylene	0.614	0.535	-	12.9	20	72	0
Styrene	1.013	0.851	-	16	20	70	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	84	0
Bromoform	0.331	0.278	-	16	20	70	0
Isopropylbenzene	2.967	2.646	-	10.8	20	74	0
4-Bromofluorobenzene	0.957	0.964	-	-0.7	20	83	0
Bromobenzene	0.681	0.597	-	12.3	20	73	0
n-Propylbenzene	3.418	3.112	-	9	20	76	0
1,4-Dichlorobutane	0.805	0.719	-	10.7	20	73	0
1,1,2,2-Tetrachloroethane	0.454	0.416	-	8.4	20	74	0
4-Ethyltoluene	2.755	2.474	-	10.2	20	74	0
2-Chlorotoluene	2.039	1.822	-	10.6	20	75	0
1,3,5-Trimethylbenzene	2.35	2.095	-	10.9	20	73	0
1,2,3-Trichloropropane	0.401	0.332	-	17.2	20	66	0
trans-1,4-Dichloro-2-buten	0.135	0.123	-	8.9	20	72	0
4-Chlorotoluene	2.121	1.878	-	11.5	20	73	0
tert-Butylbenzene	1.98	1.802	-	9	20	76	0
1,2,4-Trimethylbenzene	2.289	2.035	-	11.1	20	73	0
sec-Butylbenzene	2.397	2.221	-	7.3	20	77	0
p-Isopropyltoluene	2.262	2.089	-	7.6	20	77	0
1,3-Dichlorobenzene	1.277	1.117	-	12.5	20	73	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA101
 Lab File ID : V01210630N01
 Sample No : WG1519326-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 06/30/21 20:46
 Init. Calib. Date(s) : 06/24/21 06/25/21
 Init. Calib. Times : 11:17 00:35

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.287	1.137	-	11.7	20	74	0
p-Diethylbenzene	1.235	1.148	-	7	20	77	0
n-Butylbenzene	1.802	1.745	-	3.2	20	81	0
1,2-Dichlorobenzene	1.103	0.966	-	12.4	20	72	0
1,2,4,5-Tetramethylbenzene	1.657	1.5	-	9.5	20	75	0
1,2-Dibromo-3-chloropropan	0.06	0.051	-	15	20	69	0
1,3,5-Trichlorobenzene	0.579	0.531	-	8.3	20	75	0
Hexachlorobutadiene	0.199	0.201	-	-1	20	85	0
1,2,4-Trichlorobenzene	0.458	0.421	-	8.1	20	75	0
Naphthalene	0.936	0.898	-	4.1	20	78	0
1,2,3-Trichlorobenzene	0.339	0.31	-	8.6	20	76	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA122
 Lab File ID : V22210705A01
 Sample No : WG1520693-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 07/05/21 06:32
 Init. Calib. Date(s) : 06/26/21 06/26/21
 Init. Calib. Times : 14:07 18:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	63	0
Dichlorodifluoromethane	0.197	0.164	-	16.8	20	54	0
Chloromethane	0.222	0.199	-	10.4	20	57	0
Vinyl chloride	0.246	0.285	-	-15.9	20	71	0
Bromomethane	0.178	0.254	-	-42.7*	20	105	0
Chloroethane	0.177	0.252	-	-42.4*	20	90	0
Trichlorofluoromethane	0.363	0.365	-	-0.6	20	63	0
Ethyl ether	0.102	0.097	-	4.9	20	59	0
1,1-Dichloroethene	0.211	0.196	-	7.1	20	59	0
Carbon disulfide	0.566	0.569	-	-0.5	20	64	0
Freon-113	0.215	0.218	-	-1.4	20	65	0
Acrolein	10	7.52	-	24.8*	20	52	0
Methylene chloride	0.223	0.207	-	7.2	20	59	0
Acetone	0.039	0.036*	-	7.7	20	60	0
trans-1,2-Dichloroethene	0.219	0.208	-	5	20	60	0
Methyl acetate	0.095	0.09*	-	5.3	20	65	0
Methyl tert-butyl ether	0.479	0.445	-	7.1	20	59	0
tert-Butyl alcohol	0.014	0.011*	-	21.4*	20	55	0
Diisopropyl ether	0.566	0.53	-	6.4	20	60	0
1,1-Dichloroethane	0.4	0.399	-	0.3	20	62	0
Halothane	0.18	0.167	-	7.2	20	58	0
Acrylonitrile	0.051	0.045*	-	11.8	20	57	0
Ethyl tert-butyl ether	0.567	0.512	-	9.7	20	59	0
Vinyl acetate	0.303	0.403	-	-33*	20	89	0
cis-1,2-Dichloroethene	0.254	0.238	-	6.3	20	59	0
2,2-Dichloropropane	0.338	0.372	-	-10.1	20	69	0
Bromochloromethane	0.116	0.108	-	6.9	20	57	0
Cyclohexane	0.373	0.364	-	2.4	20	64	0
Chloroform	0.417	0.401	-	3.8	20	62	0
Ethyl acetate	0.124	0.116	-	6.5	20	63	0
Carbon tetrachloride	0.351	0.338	-	3.7	20	60	0
Tetrahydrofuran	0.048	0.044*	-	8.3	20	60	0
Dibromofluoromethane	0.275	0.272	-	1.1	20	63	0
1,1,1-Trichloroethane	0.383	0.368	-	3.9	20	61	0
2-Butanone	0.064	0.058*	-	9.4	20	65	0
1,1-Dichloropropene	0.196	0.206	-	-5.1	20	64	0
Benzene	0.83	0.808	-	2.7	20	61	0
tert-Amyl methyl ether	0.518	0.475	-	8.3	20	59	0
1,2-Dichloroethane-d4	0.272	0.29	-	-6.6	20	69	0
1,2-Dichloroethane	0.268	0.275	-	-2.6	20	65	0
Methyl cyclohexane	0.388	0.364	-	6.2	20	62	0
Trichloroethene	0.256	0.223	-	12.9	20	56	0
Dibromomethane	0.142	0.133	-	6.3	20	63	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA122
 Lab File ID : V22210705A01
 Sample No : WG1520693-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 07/05/21 06:32
 Init. Calib. Date(s) : 06/26/21 06/26/21
 Init. Calib. Times : 14:07 18:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.208	0.204	-	1.9	20	61	0
2-Chloroethyl vinyl ether	0.112	0.09	-	19.6	20	50	0
Bromodichloromethane	0.311	0.301	-	3.2	20	64	0
1,4-Dioxane	0.00146	0.00146*	-	0	20	63	0
cis-1,3-Dichloropropene	0.342	0.341	-	0.3	20	61	0
Chlorobenzene-d5	1	1	-	0	20	63	0
Toluene-d8	1.229	1.25	-	-1.7	20	64	0
Toluene	0.711	0.679	-	4.5	20	61	0
4-Methyl-2-pentanone	0.07	0.059*	-	15.7	20	60	0
Tetrachloroethene	0.353	0.307	-	13	20	55	0
trans-1,3-Dichloropropene	0.39	0.393	-	-0.8	20	63	0
Ethyl methacrylate	0.298	0.25	-	16.1	20	52	0
1,1,2-Trichloroethane	0.191	0.171	-	10.5	20	60	0
Chlorodibromomethane	0.312	0.284	-	9	20	58	0
1,3-Dichloropropane	0.368	0.356	-	3.3	20	61	0
1,2-Dibromoethane	0.225	0.207	-	8	20	57	0
2-Hexanone	0.114	0.105	-	7.9	20	62	0
Chlorobenzene	0.83	0.792	-	4.6	20	59	0
Ethylbenzene	1.398	1.376	-	1.6	20	62	0
1,1,1,2-Tetrachloroethane	0.302	0.272	-	9.9	20	57	0
p/m Xylene	0.578	0.544	-	5.9	20	59	0
o Xylene	0.548	0.513	-	6.4	20	58	0
Styrene	0.907	0.855	-	5.7	20	59	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	61	0
Bromoform	0.354	0.312	-	11.9	20	56	0
Isopropylbenzene	2.662	2.634	-	1.1	20	61	0
4-Bromofluorobenzene	0.879	0.887	-	-0.9	20	62	0
Bromobenzene	0.643	0.592	-	7.9	20	56	0
n-Propylbenzene	3.224	3.236	-	-0.4	20	62	0
1,4-Dichlorobutane	0.652	0.62	-	4.9	20	62	0
1,1,2,2-Tetrachloroethane	0.453	0.46	-	-1.5	20	67	0
4-Ethyltoluene	2.605	2.592	-	0.5	20	61	0
2-Chlorotoluene	2.142	2.119	-	1.1	20	62	0
1,3,5-Trimethylbenzene	2.293	2.222	-	3.1	20	59	0
1,2,3-Trichloropropane	0.395	0.379	-	4.1	20	63	0
trans-1,4-Dichloro-2-buten	0.135	0.142	-	-5.2	20	73	0
4-Chlorotoluene	1.955	1.926	-	1.5	20	61	0
tert-Butylbenzene	2.187	2.219	-	-1.5	20	59	0
1,2,4-Trimethylbenzene	2.255	2.191	-	2.8	20	60	0
sec-Butylbenzene	2.495	2.541	-	-1.8	20	62	0
p-Isopropyltoluene	2.372	2.362	-	0.4	20	60	0
1,3-Dichlorobenzene	1.301	1.255	-	3.5	20	59	0
1,4-Dichlorobenzene	1.301	1.261	-	3.1	20	60	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Sterling Environmental Engineering
 Project Name : WAVERLY AVE
 Instrument ID : VOA122
 Lab File ID : V22210705A01
 Sample No : WG1520693-2
 Channel :

Lab Number : L2133145
 Project Number : 28012
 Calibration Date : 07/05/21 06:32
 Init. Calib. Date(s) : 06/26/21 06/26/21
 Init. Calib. Times : 14:07 18:06

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.357	1.347	-	0.7	20	61	0
n-Butylbenzene	2.002	2.147	-	-7.2	20	66	0
1,2-Dichlorobenzene	1.165	1.121	-	3.8	20	59	0
1,2,4,5-Tetramethylbenzene	1.868	1.847	-	1.1	20	63	0
1,2-Dibromo-3-chloropropan	0.09	0.077	-	14.4	20	55	0
1,3,5-Trichlorobenzene	0.795	0.74	-	6.9	20	56	0
Hexachlorobutadiene	0.274	0.24	-	12.4	20	53	0
1,2,4-Trichlorobenzene	0.708	0.626	-	11.6	20	54	0
Naphthalene	1.525	1.429	-	6.3	20	60	0
1,2,3-Trichlorobenzene	0.627	0.556	-	11.3	20	54	0

* Value outside of QC limits.



Field Duplicate Calculation Section

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. L2133145

S1= B6-OWD

S2= DUP06172021

<u>Analyte</u>	<u>S1</u>	<u>S2</u>	<u>RPD (%)</u>	
Tetrachloroethene	1100	800	32%	*
1,2-Dichloroethane	11	8.0	NC	
Benzene	8.8	5.2	NC	
Vinyl chloride	1.6	1.7	NC	
trans-1,2-Dichloroethene	30	22	NC	
Trichloroethene	1900	1700	11%	
cis-1,2-Dichloroethene	530	480	10%	

* RPD is above the allowable maximum (20%).

All results are in 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.

Alpha Geoscience: Acronyms and Definitions

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

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.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.