Sterling Environmental Engineering, P.C.

January 22, 2019

Mr. Daniel Lanners
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7014

Subject: Former M. Argueso and Company, Inc.
441 & 442 Waverly Avenue, Mamaroneck, NY
Site #C360108
2nd Semiannual 2018 Groundwater Monitoring Report
STERLING File #28012 (Task 995)

Dear Mr. Lanners,

Sterling Environmental Engineering P.C. (STERLING) performed the semiannual groundwater monitoring event at the above-referenced site on October 18, 2018. 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 second semiannual groundwater monitoring results for 2018. Tasks completed during the October 18, 2018 groundwater monitoring event included: Groundwater gauging of six (6) groundwater monitoring wells, calculation of groundwater flow direction, sampling of six (6) groundwater monitoring wells for analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260, and completion of a site asphalt and cover system inspection.

Groundwater Flow Direction

The estimated groundwater flow in the deep overburden hydrogeologic unit is to the north and northeast (Figure 1), which is consistent with historical groundwater flow direction patterns. The deep overburden groundwater elevation decreased an average of 0.38 feet when compared to groundwater elevation measurements collected in May 2018.

Groundwater Monitoring

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) were sampled on October 18, 2018. The locations of the groundwater monitoring wells are presented in Figure 1. Groundwater samples were analyzed for TCL

VOCs via USEPA Method 8260C. Groundwater samples were collected in accordance with the SMP and sent to Alpha Analytical, Inc. of Westborough, Massachusetts under chain-of-custody protocol for analysis. Samples were shipped in a cooler with ice and analyzed within applicable holding times. The Daily Field Report and Sampling Data Sheets are attached.

Results of the laboratory analysis for chlorinated VOCs (cVOCs) 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 and Data Usability Summary Report (DUSR) are attached.

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

Onsite Wells

GZ-21D

Initially following treatment, levels of several VOCs increased in this monitoring well. Since 2014, levels of all VOCs steadily decreased through November 2017 to below standards with the exception of 1,2-Dichloroethane (1,2-DCA). During 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). Total cVOCs decreased from May 2018 and are lower than the highest levels in 2014.

GZ-22D

Tetrachloroethylene (PCE) and trichloroethylene (TCE) levels in groundwater at this monitoring well have decreased to below standards for the last eight (8) sampling events. All other cVOCs have decreased to levels below standards with the exception of 1,2-DCA, cis-1,2-DCE, and trans-1,2-Dichloroethene (trans-1,2-DCE) (Table 1). Concentrations of these cVOCs have remained relatively stable for the past seven (7) events spanning three (3) years, and total cVOCs have decreased to the lowest recorded levels since 2015.

GZ-23D

PCE and TCE concentrations in groundwater decreased significantly in early 2014. TCE concentrations have gradually increased since the end of 2014, and PCE concentrations have fluctuated (Table 1). Both have significantly decreased for this event from May 2018. VC, a degradation product of PCE and TCE, increased following the 2013 injections and has consistently decreased or remained stable since late 2015. Cis-1,2-DCE concentrations increased following the injections, and concentrations have been stable since May 2016. Total cVOCs in this well significantly decreased for this event from May 2018.

B6-OWD

Initially following treatment, levels of several cVOCs increased in this monitoring well. During the six (6) subsequent sampling events (2014 through June 2017), concentrations of all cVOCs decreased to below groundwater standards. Since November 2017, PCE, TCE, 1,2-DCA, cis-1,2-DCE, and trans-1,2-DCE concentrations have increased above groundwater standards.

Offsite Wells

Offsite wells OSMW-3 and OSMW-4 were installed upgradient of the site wells to determine upgradient groundwater quality. These well installations are located upgradient of the treatment zone.

OSMW-3

Both PCE and TCE concentrations increased following the 2013 injections and have steadily decreased since 2014. PCE was recorded at a concentration of 3,600 µg/L in October 2018 and represents the highest recorded concentration since January 2012.

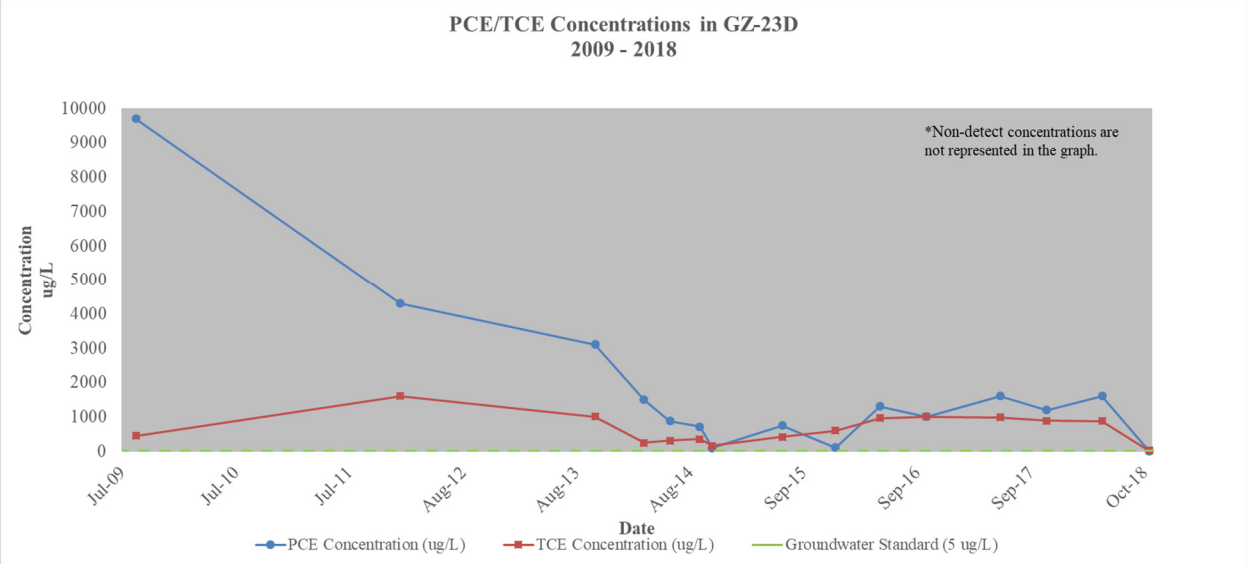
OSMW-4

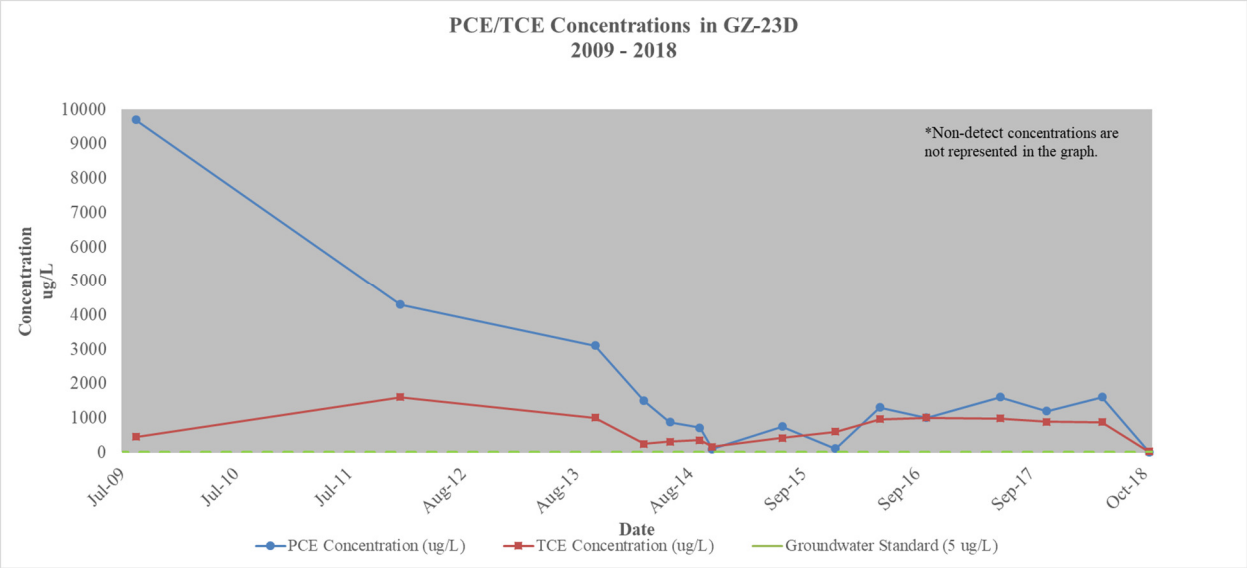
All cVOCs have been below groundwater standards since 2014.

Injection Well Data Trends

The graphs below depict PCE and TCE concentrations in monitoring wells GZ-22D and GZ-23D over time (2014 - 2018).

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.





Conclusions and Recommendations

- OSMW-4 has consistently been reported at levels below groundwater standards; therefore, STERLING recommends sampling of this well be discontinued.

- VOC concentrations in monitoring well B6-OWD increased during the three most recent monitoring events after being below standards for six (6) consecutive events.

- Groundwater monitoring data collected subsequent to the 2013 HRC injections indicates an overall decrease in the concentration of VOCs at four (4) of the monitoring wells. Therefore, the remedy continues to be effective at this site.

- The 8" diameter lid at groundwater monitoring well GZ-21D is broken and replacement is recommended. Additionally, replacement of the protective well casing assembly at B6-OWD and replacement of monitoring cover bolts at monitoring wells GZ-22D and OSMW-4 are recommended.

- STERLING will conduct the next semiannual sampling event in the spring of 2019. To determine groundwater flow and quality upgradient of the site, STERLING recommends inclusion of offsite wells OSMW-1 and OSMW-2 in this event.

Please contact me should you have any questions.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.

Mark P. Millspaugh, P.E.
President
mark.millspaugh@sterlingenvironmental.com

MPM/bc
Email/First Class Mail
Attachments

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

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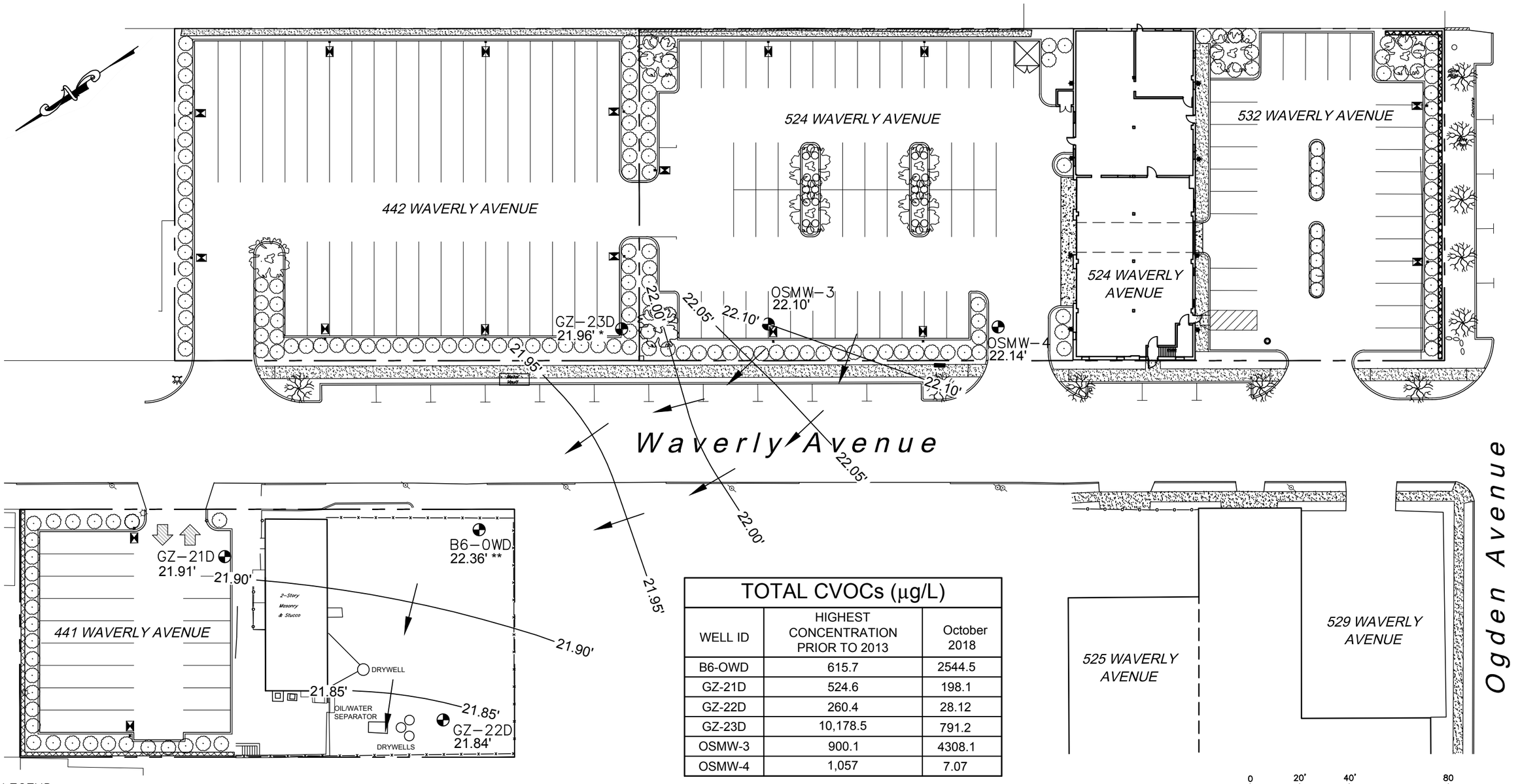
FIGURE



TOTAL CVOCs (µg/L)		
WELL ID	HIGHEST CONCENTRATION PRIOR TO 2013	October 2018
B6-OWD	615.7	2544.5
GZ-21D	524.6	198.1
GZ-22D	260.4	28.12
GZ-23D	10,178.5	791.2
OSMW-3	900.1	4308.1
OSMW-4	1,057	7.07

* MEASURED GW ELEVATION ADJUSTED +0.31' TO ACCOUNT FOR 30° BEND IN MONITORING WELL GZ–23D

** DEPTH TO GROUNDWATER MEASUREMENT COLLECTED PRIOR TO REDEVELOPMENT. CORRESPONDING ELEVATION NOT CONSIDERED REPRESENTATIVE OF STATIC CONDITIONS.

LEGEND:

- 21.90' — GROUNDWATER CONTOUR OCTOBER 18, 2018 (DASHED WHERE INFERRED)
- GZ-22D 21.84' — MONITORING WELL WITH CORRESPONDING GROUNDWATER ELEVATION
- PROPERTY BOUNDARY
- LIGHT POLE
- CONCRETE SIDEWALK
- FENCE
- 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
OCTOBER 18, 2018
SITE# C360108
NEW WAVERLY AVENUE ASSOCIATES, LLC
V/T OF MAMARONECK WESTCHESTER CO., N.Y.

PROJ. No.:	28012	DATE:	10–31–2018	SCALE:	1" = 40'	DWG. NO.	28012102	FIGURE	1

TABLES

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

Location		441 Waverly Avenue																
Sample ID	Water Quality Standard*	GZ-21D															DUP-1 [3]	DUP-1 [3]
Unit	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	06/18/14	10/12/16
Parameter *Chlorinated Volatile Organic Compounds:*																		
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	<4.0	<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	<4.0	<0.50
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**	**190**	**56**
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**	**350**	2.9
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	<4.0	0.75 J
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	<4.0	<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	---	<0.5
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	---	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<6.0	<1.5	---	<1.5
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	---	<1.0
Bromochloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	**10**	---	<2.5
Bromodichloromethane	50.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<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	<4.0	<0.5
Chloroethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<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	<4.0	<2.5
Chloromethane	---	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<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	---	<0.5
Dibromochloromethane	50.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	1.7 J	---	<0.5
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	---	<5.0
Freon-113	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<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	<4.0	<2.5
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10	<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	2.9 J	<0.50
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	**13**	<0.50
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**	<4.0	**2.8**
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	555.9	62.45

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.

[1] DUP-1 samples collected from monitoring well location GZ-22D.

[2] DUP-1 samples collected from offsite monitoring well location OSMW-4.

[3] DUP-1 samples collected from monitoring well location GZ-21D.

[4] DUP-1 samples collected from offsite monitoring well location OSMW-3.

[5] DUP-1 samples collected from monitoring well location B6-OWD.

[6] DUP-1 samples collected from monitoring well location GZ-23D.

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 low.

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

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

Location		441 Waverly Avenue																
Sample ID	Water Quality Standard*	GZ-22D															DUP-1 [1]	DUP-1 [1]
Unit	µg/L	µg/L															µg/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	10/15/13	03/24/14
Parameter																		
Chlorinated Volatile Organic Compounds:																		
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	<0.5	<25
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	<25
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**	**16**	**22** J
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**	**12**	**100**
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**	4.4 J	<25
1,1,1-Tricholoroethane	5.0	---	---	<5.0	<25	<25	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<25
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	---	<0.5	<0.5	<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	<1.5	<1.5	---	---
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	---	---
Bromochloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	---
Bromodichloromethane	50.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<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	<0.5	<0.5	<5.0	<25
Chloroethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<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	<2.5	<2.5	<5.0	<25
Chloromethane	---	---	---	---	---	---	---	---	<2.5	<2.5	<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	<0.5	<0.5	---	---
Dibromochloromethane	50.0	---	---	---	---	---	---	---	<0.5	<0.5	<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	<0.5	<5.0	---	---
Freon-113	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	---
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	<5.0	<25
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	---
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	**60**	**21** J
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	**88**	**34**
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	<5.0	<25
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	180.4	177

Notes:

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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 low.

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

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

Location		442 Waverly Avenue															
Well ID	Water Quality Standard*	GZ-23D															DUP-1 [6]
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	06/13/17
Parameter *Chlorinated Volatile Organic Compounds:*																	
1,1-Dichloroethane	5.0	<5.0	<5.0	<100	<1.0	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<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
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	**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**	**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	**21** D,J
1,1,1-Tricholoroethane	5.0	---	---	<100	<40	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	---	<15	<30	<15	<38	<30	<30	<15	<7.5	<30
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<10	<20	<10	<25	<20	<20	<10	<5.0	<20
Bromochloromethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50
Bromodichloromethane	50.0	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10
Carbon Tetrachloride	5.0	---	---	<100	<40	<20	<20	<20	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10
Chloroethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50
Chloroform	7.0	---	---	<100	<40	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50
Chloromethane	---	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10
Dibromochloromethane	50.0	---	---	---	---	---	---	---	<5.0	<10	<5.0	<12	<10	<10	<5.0	<2.5	<10
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<50	<100	<50	<120	<100	<100	<50	<25	<100
Freon-113	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<50
Methylene Chloride	5.0	---	---	<100	<40	<20	<20	<20	<25	<50	<25	<62	<50	<50	<25	<12	<50
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<25	<50	<25	<62	<50	<50	<25	<12	<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**	**1,500** 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**	**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**	**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	2,836.1

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.

[1] DUP-1 samples collected from monitoring well location GZ-22D.

[2] DUP-1 samples collected from offsite monitoring well location OSMW-4.

[3] DUP-1 samples collected from monitoring well location GZ-21D.

[4] DUP-1 samples collected from offsite monitoring well location OSMW-3.

[5] DUP-1 samples collected from monitoring well location B6-OWD.

[6] DUP-1 samples collected from monitoring well location GZ-23D.

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 low.

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

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

Location		**441 Waverly Avenue**																	
Well ID	**Water Quality Standard***	**B6-OWD**															**DUP-1 [5]**	**DUP-1 [5]**	**DUP-1 [5]**
Unit	**µg/L**	**µg/L**															**µg/L**	**µg/L**	**µg/L**
Sample Date		**08/21/09**	**01/11/12**	**10/15/13**	**03/24/14**	**06/18/14**	**09/24/14**	**11/05/14**	**06/23/15**	**12/16/15**	**05/12/16**	**10/12/16**	**06/13/17**	**11/14/17**	**05/16/18**	**10/18/18**	**12/16/15**	**05/16/18**	**10/18/18**
Parameter																			
Chlorinated Volatile Organic Compounds:																			
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	<2.5	<50	<25
1,1-Dichloroethene	5.0	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<8.0	<0.50	<0.50	<0.50	<0.50	<1.0	<2.5	<10	<5.0	<0.50	<10	<5.0
1,2-Dichloroethane	0.6	**9.7**	<5.0	**1.9** J	**2.8**	**8.0**	**9.1**	<8.0	0.36 J	<0.50	0.31 J	0.32 J	0.29 J	**3.7** D	**11**	**8.5**	<0.50	**9.1** J	**9.4**
cis-1,2-Dichloroethene	5.0	**390** D	1.5 J	**76**	**180** D	**330**	**430** D	<8.0	1.3 J	1.1 J	2.4 J	2.1 J	1.8 J	**150** D	**390**	**360**	1.2 J	**330**	**380**
trans-1,2-Dichloroethene	5.0	**150**	<5.0	**6.8**	**7.2**	**8.4**	**14**	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	**6.0** J,D	**22** J	**16** J	<2.5	**20** J	**17** J
1,1,1-Tricholoroethane	5.0	---	---	<5.0	---	<20	<4.0	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<2.5	<50	<25
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	**---**	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<0.5	<10	<5.0
1,1,2-Trichloroethane	1.0	---	---	---	---	**---**	---	---	<1.5	<1.5	<1.5	<1.5	<3.0	<7.5	<30	<15	<1.5	<30	<15
1,2-Dichloropropane	1.0	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<2.0	<5.0	<20	<10	<1.0	<20	<10
Bromochloromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<2.5	<50	<25
Bromodichloromethane	50.0	---	---	**---**	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<0.5	<10	<5.0
Carbon Tetrachloride	5.0	---	---	<5.0	---	<20	<4.0	<8.0	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<0.5	<10	<5.0
Chloroethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<2.5	<50	<25
Chloroform	7.0	---	---	<5.0	---	<20	4	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<2.5	<50	<25
Chloromethane	---	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<2.5	<50	<25
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<0.5	<10	<5.0
Dibromochloromethane	50.0	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<1.0	<2.5	<10	<5.0	<0.5	<10	<5.0
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	---	<5.0	<5.0	<5.0	<5.0	<10	<25	<100	<50	<5.0	<100	<50
Freon-113	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<2.5	<50	<25
Methylene Chloride	5.0	---	---	<5.0	---	<20	<4.0	<8.0	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<2.5	<50	<25
Trichlorofluoromethane	5.0	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<5.0	<12	<50	<25	<2.5	<50	<25
Tetrachloroethene	5.0	**23**	**6.2**	**18**	**59**	**47**	**110**	<8.0	2.4	2.1	2.4	2.6	2.6	**190** D	**1,200** J-	**860**	2.2	**1,100** J-	**950**
Trichloroethene	5.0	**43**	2.1 J	**41**	**170** D	**180**	**330**	<8.0	1.3	1.4	1.7	1.7	1.4	**470** D	**1,400**	**1,300**	1.4	**1,400**	**1,400**
Vinyl chloride	2.0	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<8.0	<1.0	<1.0	0.27 J	0.28 J	0.2 j	<5.0	1.8 J	<10	<1.0	1.8 J	2.1 J
TOTAL CVOCs		615.7	9.8	143.7	419	573.4	893.1	ND	5.36	4.6	7.08	7	6.29	819.7	3,024.8	2,544.5	4.8	2,860.9	2,758.5

Notes:

BOLD Indicates exceedance of groundwater standard

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

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

NA Not Analyzed.

--- No standard or not applicable.

[1] DUP-1 samples collected from monitoring well location GZ-22D.

[2] DUP-1 samples collected from offsite monitoring well location OSMW-4.

[3] DUP-1 samples collected from monitoring well location GZ-21D.

[4] DUP-1 samples collected from offsite monitoring well location OSMW-3.

[5] DUP-1 samples collected from monitoring well location B6-OWD.

[6] DUP-1 samples collected from monitoring well location GZ-23D.

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 low.

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

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

Location		Offsite Monitoring Well															
Well ID	Water Quality Standard*	OSMW-3														DUP-1 [4]	DUP-1 [4]
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	11/05/14	11/14/17
Parameter																	
Chlorinated Volatile Organic Compounds:																	
1,1-Dichloroethane	5.0	<5.0	<80	<1.0	<20	<20	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<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	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	**3.5**	**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**	**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	**26**	**7.1** J,D
1,1,1-Tricholoroethane	5.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<1.0	---
1,1,2,2-Tetrachloroethane	5.0	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	---	---
1,1,2-Trichloroethane	1.0	---	---	---	---	---	---	<30	<60	<7.5	<15	<1.5	<15	<3.0	<38	---	---
1,2-Dichloropropane	1.0	---	---	---	---	---	---	<20	<40	<5.0	<10	<1.0	<10	<2.0	<25	---	---
Bromochloromethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	---	---
Bromodichloromethane	50.0	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	---	---
Carbon Tetrachloride	5.0	---	<80	---	<20	---	<50	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	<1.0	---
Chloroethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	---	---
Chloroform	7.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<1.0	---
Chloromethane	---	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	---	---
cis-1,3-Dichloropropene	0.4	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	---	---
Dibromochloromethane	50.0	---	---	---	---	---	---	<10	<20	<2.5	<5.0	<0.5	<5.0	<1.0	<12	---	---
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	<100	<200	<25	<50	<5.0	<50	<10	<120	---	---
Freon-113	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	---	---
Methylene Chloride	5.0	---	<80	---	<20	---	<50	<50	<100	<12	<25	<2.5	<25	<5.0	<62	<1.0	---
Trichlorofluoromethane	5.0	---	---	---	---	---	---	<50	<100	<12	<25	<2.5	<25	<5.0	<62	---	---
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-	**3600**	**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**	**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	<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	4308.1	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.

[1] DUP-1 samples collected from monitoring well location GZ-22D.

[2] DUP-1 samples collected from offsite monitoring well location OSMW-4.

[3] DUP-1 samples collected from monitoring well location GZ-21D.

[4] DUP-1 samples collected from offsite monitoring well location OSMW-3.

[5] DUP-1 samples collected from monitoring well location B6-OWD.

[6] DUP-1 samples collected from monitoring well location GZ-23D.

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 low.

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

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

Location		Offsite Monitoring Well																	
Well ID	Water Quality Standard*	OSMW-4														DUP-1 [2]	DUP-1 [2]	DUP-1 [2]	DUP-1 [2]
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	01/10/12	09/24/14	06/24/15	05/12/16
Parameter *Chlorinated Volatile Organic Compounds:*																			
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	<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	<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	**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	**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	**7.2**	<1.0	<2.5	<2.5
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	---	<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
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
1,2-Dichloropropane	1.0	---	---	---	---	---	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	---	---	<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
Bromodichloromethane	50.0	---	---	---	---	---	---	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<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	---	<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
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	---	<1.0	<2.5	<2.5
Chloromethane	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<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
Dibromochloromethane	50.0	---	---	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	---	---	<0.5	<0.5
Dichlorodifluoromethane	5.0	---	---	---	---	---	---	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	---	---	<5.0	<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
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	---	<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
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	**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	**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	<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	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.

NA Not Analyzed.

--- No standard or not applicable.

[1] DUP-1 samples collected from monitoring well location GZ-22D.

[2] DUP-1 samples collected from offsite monitoring well location OSMW-4.

[3] DUP-1 samples collected from monitoring well location GZ-21D.

[4] DUP-1 samples collected from offsite monitoring well location OSMW-3.

[5] DUP-1 samples collected from monitoring well location B6-OWD.

[6] DUP-1 samples collected from monitoring well location GZ-23D.

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 low.

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

DAILY FIELD REPORT

STERLING
Sterling Environmental Engineering, P.C.

DAILY FIELD REPORT

Project Name: WAVERLY (#28012)
Project No: 28012
Client Name: TJ MILO
Date: 10/18/2018 (THURSDAY)
Location: 441/442 WAVERLY AVENUE
Personnel: STEFAN TRUEX (ST)
Weather: SUNNY, LO: 39°F HI: 45°F, WIND N-NW 10-15 MPH

Work Description:
6[50] DEPART STERLING (61816 MI)
7[45] ST ONSITE, (61980), COMPLETE TAILGATE HEALTH AND SAFETY MEETING, CALIBRATE YST DSS PRO pH 7.00/7.08, OK COND 7,000/7,027 OK 10.00/10.02, OK, DO, ATM PRES: 769.66 mmHg
10[20] COLLECT SAMPLE FROM OSMW-4, DECON EQUIPMENT,
10[40] TELECON W/ TJ MILO, REQUESTED TRACTOR-TRAILERS BE MOVED TO ACCESS MW: "GZZ1-D", COMPLETE SITE INSPECTION, (SEE ATTACHED INSPECTION LOG.)
11[30] COMPLETE INSPECTION, SETUP BLADDER PUMP @ GROUNDWATER MONITORING WELL GZZ1-D
12[10] COLLECT GZ-210 SAMPLES, DECON EQUIPMENT,
12[15]/12[20] COLLECT GZ-210 MS/MSD SAMPLES
13[45] COLLECT GZ-220 SAMPLE, DECON EQUIPMENT
14[30] COLLECT B6-OWD(DUP) SAMPLE, MOVE TO NEXT LOCATION, DECONTAMINATE EQUIPMENT.
15[40] COLLECT OSMW-3 SAMPLES, DECON EQUIP, MOVE TO NEXT LOCATION
16[30] COLLECT GZ-230 SAMPLE, DECON, CLEAN UP SITE, LABEL PURGE WATER DRUM (APPROX ~1/3 FULL)
17[00] ST OFFSITE (@ 61981 MILES)
20[00] RELINQUISH SAMPLES @ ALPHA LABS
8[15]pm END OF DAY (62151 MILES)

16[40] pH 7.07 OK COND: 7019 OK

Signature:

DAILY SAFETY MEETING LOG
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, N.Y. 12110

PROJECT: WAVERLY **PROJECT NO.** 28012

MEETING CONDUCTED BY: STEFAN TRUEX **DATE/DAY:** 10/18/2018

Description of Work to be Performed:

SEMI-ANNUAL GROUNDWATER SAMPLING

Description of Concerns or Modifications:

N/A

Description/Discussion of Potential Hazards and Protections: (check those that apply for the work shift)

Excessive Noise		Heavy Equipment		Wet/Slippery Surfaces	
Overhead Objects		Explosive Gas/Fire		Water Bodies	
O.H. Electrical		Biological Hazards		Telephone/Radio	
Chemical Splash/Exposure	✓	Scaffolding/Ladders		Decontamination	✓
Heat/Cold Stress	✓	Confined Space Entry		Lock Out/Tag Out	
Slip/Trip	✓	Dust/Particulates		First Aid Kit	
Excavation/Shoring		Vapors/Fumes	✓	Emergency Routes	
Electrical Shock		Slopes/Uneven Terrain		Fire Extinguisher	
U.G. Utilities		Pinch Points		Eye Protection	
Pressure Hoses		Hand Tool Use		Respirators	
Vehicle Traffic		Silica Products		Other	

Other Special Conditions: VEHICULAR TRAFFIC, USE NITRILE GLOVES

NAME:	SIGNATURE:	COMPANY:
STEFAN TRUEX		STERLING ENV. ENG.

PURGING/SAMPLING DATA SHEETS

Purging / Sampling Data Sheet

Project:	28012	Site:	441 Waverly Avenue, Mamaroneck, NY
Well No.:	B6-OWD	Date:	October 18, 2018
Well Depth:	35.30 feet	Screen Length:	10 feet
Well Diameter:	2 inches (broken/heaved)	Casing Type:	PVC
Sampling Device:	Bailer (1")	Tubing Type:	N/A
Static Water Level:	8.00 feet	Measuring Point:	Top of PVC

Sampling Personnel: Stefan R. Truex, Sterling Environmental Engineering, P.C.

Time	Pump Rate (gal/min.)	Depth to Water (ft.)	Drawdown (< 0.33ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (µS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
14:00	---	8.00	Static						
14:00	0.2			7.10	15.9	1542	47.4	6.84	24.8
14:10	0.2			7.27	16.3	1539	43.8	4.45	17.9
14:30	0.2			7.34	16.5	1529	50.7	3.72	9.33
14:30	Collect Sample @ 14:30								

Observations: No padlock is affixed to j-plug. Monitoring well appears to be damaged due to frost heave. An obstruction at < 4 feet below ground prevented lowering of bladder pump into well. Bailer and water level meter are still able to be lowered down the monitoring well.

Total: 3.3 gallons purged prior to sampling

Types of Samples Collected: TCL VOCs [Duplicate sample (DUP-1) collected at B6-OWD]

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Purging / Sampling Data Sheet

Project:	28012	Site:	441 Waverly Avenue, Mamaroneck, NY
Well No.:	GZ-21D	Date:	October 18, 2018
Well Depth:	44.21 feet	Screen Length:	5 feet
Well Diameter:	2 inches	Casing Type:	PVC
Sampling Device:	Bladder Pump	Tubing Type:	1/4" LDPE Air & 3/8" HDPE Water
Static Water Level:	7.47 feet	Measuring Point:	Top of PVC

Sampling Personnel: Stefan R. Truex, Sterling Environmental Engineering, P.C

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (µS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)	Notes
11:35	---	7.47	Static							
11:45	0.180	7.49	0.02	7.30	16.3	1916	-138.5	10.4	54.19	Light Brown/clear
11:50	0.180	7.50	0.01	7.39	15.9	1940	-147.7	0.34	174.97	Slight "Acrid" Odor
11:55	0.180	7.50	0.00	7.40	15.6	1943	-158.2	0.25	220.41	
12:00	0.180	7.50	0.00	7.40	15.5	1949	-159.4	0.19	218.40	
12:05	0.180	7.50	0.00	7.40	15.5	1951	-159.7	0.17	217.66	
12:10	Collect Sample @ 12:10									
12:15										
12:20	Collect Matrix Spike (MS) & Matrix Spike Duplicate (MSD) @ 12:20									

Observations: Flush mount cover is cracked. No padlock is affixed to j-plug. Flush mount cover missing bolts.

Total: 2 gallons purged prior to sampling

Types of Samples Collected: TCL VOCs

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Purging / Sampling Data Sheet

Project:	28012	Site:	441 Waverly Avenue, Mamaroneck, NY
Well No.:	GZ-22D	Date:	October 18, 2018
Well Depth:	45.35 feet	Screen Length:	5 feet
Well Diameter:	2 inches	Casing Type:	PVC
Sampling Device:	Bladder Pump	Tubing Type:	1/4" LDPE Air & 3/8" HDPE Water
Static Water Level:	8.64 feet	Measuring Point:	Top of PVC

Sampling Personnel: Stefan R. Truex, Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (µS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu) (± 10%)	Notes
13:10	---	8.64	Static							
13:15	0.220	8.72	0.08	7.48	15.9	1021	-147.9	11.49	178.44	Gray
13:20	0.220	8.73	0.01	7.39	15.8	1020	-140.0	12.76	167.27	Slight Acrid Odor
13:25	0.220	8.73	0.00	7.37	15.7	1033	-121.3	10.52	150.59	No Sheen
13:30	0.220	8.73	0.00	7.23	16.5	1045	-112.5	1.52	145.24	
13:35	0.220	8.73	0.00	7.22	16.7	1042	-114.9	1.47	148.42	
13.40	0.220	8.73	0.00	7.22	16.6	1050	-116.4	1.43	149.69	
13:45	Collect Sample @ 13:45									

Observations: No padlock is affixed to j-plug. Flush mount cover missing bolts.

Total: 3.0 gallons purged prior to sampling

Types of Samples Collected: TCL VOCs

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Purging / Sampling Data Sheet

Project:	28012	Site:	442 Waverly Avenue, Mamaroneck, NY
Well No.:	GZ-23D	Date:	October 18, 2018
Well Depth:	44.86 feet	Screen Length:	5 feet
Well Diameter:	2 inches	Casing Type:	PVC
Sampling Device:	Waterra	Tubing Type:	5/8" Plastic
Static Water Level:	9.39 feet	Measuring Point:	Top of PVC

Sampling Personnel: Stefan R. Truex, Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (µS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu) (± 10%)	Notes
16:10	---	9.39	Static							
16:10	<0.2	---	---	7.54	13.8	1442	-72.4	2.74	142.19	Sweet Odor. No Sheen.
16:20	<0.2	---	---	7.41	13.8	1897	-77.9	3.02	54.81	Brown/gray
16:25	<0.2	---	---	7.43	13.9	1684	-97.7	2.33	16.83	Collect Sample @ 16:30.

Observations: No padlock is affixed to j-plug.

Total: 4.2 gallons purged prior to sampling

Types of Samples Collected: TCL VOCs

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Purging / Sampling Data Sheet

Project:	28012	Site:	524 Waverly Avenue, Mamaroneck, NY
Well No.:	OSMW-3	Date:	October 18, 2018
Well Depth:	39.4 feet	Screen Length:	10 feet
Well Diameter:	1 inch	Casing Type:	PVC
Sampling Device:	Bailer	Tubing Type:	Bailer
Static Water Level:	8.40 feet	Measuring Point:	Top of PVC

Sampling Personnel: Stefan R. Truex, Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (µS/cm[c]) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu) (± 10%)	Notes
15:00	---	8.40	Static							
15:00	---	---	---	7.18	14.0	1023	52.8	7.61	37.61	Light Brown/turbid
15:20	---	---	---	7.07	14.3	1097	39.7	4.44	48.70	Slight Sweet/Acrid Odor, no Sheen
15:40	---	---	---	7.11	14.7	1065	-6.9	3.49	83.51	Collect Sample @ 15:40

Observations: No padlock is affixed to j-plug.

Total: 3.7 gallons purged prior to sampling

Types of Samples Collected: TCL VOCs.

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Purging / Sampling Data Sheet

Project:	28012	Site:	524 Waverly Avenue, Mamaroneck, NY
Well No.:	OSMW-4	Date:	October 18, 2018
Well Depth:	35.62 feet	Screen Length:	10 feet
Well Diameter:	1 Inch	Casing Type:	PVC
Sampling Device:	1" Bailer	Tubing Type:	N/A
Static Water Level:	8.70 feet	Measuring Point:	Top of PVC

Sampling Personnel: Stefan R. Truex, Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (µS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu) (± 10%)	Notes
10:00	---	8.70	Static							Light Brown
10:00	---	---	---	7.09	15.9	1147	12.1	3.74	38.4	No Odor
10:10	---	---	---	7.08	15.9	1160	-35.7	2.69	67.7	No Sheen
10:20	---	---	---	7.07	15.7	1165	-94.4	2.96	52.4	Collect Sample @ 10:20 AM

Observations: No padlock is affixed to j-plug. Flush mount cover missing bolts.

Total: 3.2 gallons purged prior to sampling

Types of Samples Collected: TCL VOCs

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

LABORATORY ANALYSIS REPORT
AND
DATA USABILITY SUMMARY REPORT (DUSR)

ANALYTICAL REPORT

Lab Number:	L1842663
Client:	Sterling Environmental Eng 24 Wade Road Latham, NY 12110
ATTN:	Stefan Truex
Phone:	(518) 456-4900
Project Name:	WAVERLY
Project Number:	28012
Report Date:	10/29/18

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
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1842663-01	OSMW-4	WATER	441-442 WAVERLY AVENUE	10/18/18 10:20	10/18/18
L1842663-02	GZ-21D	WATER	441-442 WAVERLY AVENUE	10/18/18 12:10	10/18/18
L1842663-03	GZ-22D	WATER	441-442 WAVERLY AVENUE	10/18/18 13:45	10/18/18
L1842663-04	B6 OWD	WATER	441-442 WAVERLY AVENUE	10/18/18 14:30	10/18/18
L1842663-05	OSMW-3	WATER	441-442 WAVERLY AVENUE	10/18/18 15:40	10/18/18
L1842663-06	GZ-23D	WATER	441-442 WAVERLY AVENUE	10/18/18 16:30	10/18/18
L1842663-07	DUP101818	WATER	441-442 WAVERLY AVENUE	10/18/18 00:00	10/18/18
L1842663-08	TB101818	WATER	441-442 WAVERLY AVENUE	10/18/18 00:00	10/18/18

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

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 WG1171951-7 MSD recovery, performed on L1842663-02, is outside the acceptance criteria for cis-1,2-dichloroethene (0%). The an unacceptable percent recovery is attributed to the elevated concentrations of target compounds 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:  Amita Naik

Title: Technical Director/Representative Date: 10/29/18

ORGANICS

VOLATILES

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-01 Date Collected: 10/18/18 10:20
Client ID: OSMW-4 Date Received: 10/18/18
Sample Location: 441-442 WAVERLY AVENUE Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/24/18 10:18
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	0.25	J	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	1.5		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	0.54	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	1.3	J	ug/l	2.5	0.70	1
Trichloroethene	0.48	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-01 Date Collected: 10/18/18 10:20

Client ID: OSMW-4 Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.75	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	4.5		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	11		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	4.4	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	97		70-130

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-02 Date Collected: 10/18/18 12:10
Client ID: GZ-21D Date Received: 10/18/18
Sample Location: 441-442 WAVERLY AVENUE Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/24/18 09:56
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	52		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	10		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	12		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	2.4	J	ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-02 Date Collected: 10/18/18 12:10

Client ID: GZ-21D Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.98	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	120		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	1.7	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	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-03 Date Collected: 10/18/18 13:45
Client ID: GZ-22D Date Received: 10/18/18
Sample Location: 441-442 WAVERLY AVENUE Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/24/18 10:41
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	9.6		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	3.5		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	11		ug/l	2.5	0.70	1
Trichloroethene	0.52		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-03 Date Collected: 10/18/18 13:45

Client ID: GZ-22D Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE 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	7.0		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	7.0		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	1.6	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	1.4	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-04 D
Client ID: B6 OWD
Sample Location: 441-442 WAVERLY AVENUE

Date Collected: 10/18/18 14:30
Date Received: 10/18/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/24/18 11:03
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	860		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	8.5		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	16	J	ug/l	25	7.0	10
Trichloroethene	1300		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-04 D Date Collected: 10/18/18 14:30

Client ID: B6 OWD Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE 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	360		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	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-05 D
Client ID: OSMW-3
Sample Location: 441-442 WAVERLY AVENUE

Date Collected: 10/18/18 15:40
Date Received: 10/18/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/25/18 17:15
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	62	18.	25
1,1-Dichloroethane	ND		ug/l	62	18.	25
Chloroform	ND		ug/l	62	18.	25
Carbon tetrachloride	ND		ug/l	12	3.4	25
1,2-Dichloropropane	ND		ug/l	25	3.4	25
Dibromochloromethane	ND		ug/l	12	3.7	25
1,1,2-Trichloroethane	ND		ug/l	38	12.	25
Tetrachloroethene	3600		ug/l	12	4.5	25
Chlorobenzene	ND		ug/l	62	18.	25
Trichlorofluoromethane	ND		ug/l	62	18.	25
1,2-Dichloroethane	ND		ug/l	12	3.3	25
1,1,1-Trichloroethane	ND		ug/l	62	18.	25
Bromodichloromethane	ND		ug/l	12	4.8	25
trans-1,3-Dichloropropene	ND		ug/l	12	4.1	25
cis-1,3-Dichloropropene	ND		ug/l	12	3.6	25
Bromoform	ND		ug/l	50	16.	25
1,1,2,2-Tetrachloroethane	ND		ug/l	12	4.2	25
Benzene	ND		ug/l	12	4.0	25
Toluene	ND		ug/l	62	18.	25
Ethylbenzene	ND		ug/l	62	18.	25
Chloromethane	ND		ug/l	62	18.	25
Bromomethane	ND		ug/l	62	18.	25
Vinyl chloride	8.1	J	ug/l	25	1.8	25
Chloroethane	ND		ug/l	62	18.	25
1,1-Dichloroethene	ND		ug/l	12	4.2	25
trans-1,2-Dichloroethene	ND		ug/l	62	18.	25
Trichloroethene	500		ug/l	12	4.4	25
1,2-Dichlorobenzene	ND		ug/l	62	18.	25

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-05 D Date Collected: 10/18/18 15:40

Client ID: OSMW-3 Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE 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	62	18.	25
1,4-Dichlorobenzene	ND		ug/l	62	18.	25
Methyl tert butyl ether	ND		ug/l	62	18.	25
p/m-Xylene	ND		ug/l	62	18.	25
o-Xylene	ND		ug/l	62	18.	25
cis-1,2-Dichloroethene	200		ug/l	62	18.	25
Styrene	ND		ug/l	62	18.	25
Dichlorodifluoromethane	ND		ug/l	120	25.	25
Acetone	ND		ug/l	120	36.	25
Carbon disulfide	ND		ug/l	120	25.	25
2-Butanone	ND		ug/l	120	48.	25
4-Methyl-2-pentanone	ND		ug/l	120	25.	25
2-Hexanone	ND		ug/l	120	25.	25
Bromochloromethane	ND		ug/l	62	18.	25
1,2-Dibromoethane	ND		ug/l	50	16.	25
1,2-Dibromo-3-chloropropane	ND		ug/l	62	18.	25
Isopropylbenzene	ND		ug/l	62	18.	25
1,2,3-Trichlorobenzene	ND		ug/l	62	18.	25
1,2,4-Trichlorobenzene	ND		ug/l	62	18.	25
Methyl Acetate	ND		ug/l	50	5.8	25
Cyclohexane	30	J	ug/l	250	6.8	25
1,4-Dioxane	ND		ug/l	6200	1500	25
Freon-113	ND		ug/l	62	18.	25
Methyl cyclohexane	ND		ug/l	250	9.9	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	103		70-130

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-06 D
Client ID: GZ-23D
Sample Location: 441-442 WAVERLY AVENUE

Date Collected: 10/18/18 16:30
Date Received: 10/18/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/24/18 11:48
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	12	3.5	5
1,1-Dichloroethane	ND		ug/l	12	3.5	5
Chloroform	ND		ug/l	12	3.5	5
Carbon tetrachloride	ND		ug/l	2.5	0.67	5
1,2-Dichloropropane	ND		ug/l	5.0	0.68	5
Dibromochloromethane	ND		ug/l	2.5	0.74	5
1,1,2-Trichloroethane	ND		ug/l	7.5	2.5	5
Tetrachloroethene	7.6		ug/l	2.5	0.90	5
Chlorobenzene	ND		ug/l	12	3.5	5
Trichlorofluoromethane	ND		ug/l	12	3.5	5
1,2-Dichloroethane	1.6	J	ug/l	2.5	0.66	5
1,1,1-Trichloroethane	ND		ug/l	12	3.5	5
Bromodichloromethane	ND		ug/l	2.5	0.96	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5
Bromoform	ND		ug/l	10	3.2	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.84	5
Benzene	0.82	J	ug/l	2.5	0.80	5
Toluene	ND		ug/l	12	3.5	5
Ethylbenzene	ND		ug/l	12	3.5	5
Chloromethane	ND		ug/l	12	3.5	5
Bromomethane	ND		ug/l	12	3.5	5
Vinyl chloride	96		ug/l	5.0	0.36	5
Chloroethane	ND		ug/l	12	3.5	5
1,1-Dichloroethene	ND		ug/l	2.5	0.84	5
trans-1,2-Dichloroethene	10	J	ug/l	12	3.5	5
Trichloroethene	16		ug/l	2.5	0.88	5
1,2-Dichlorobenzene	ND		ug/l	12	3.5	5

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-06 D Date Collected: 10/18/18 16:30

Client ID: GZ-23D Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE 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	12	3.5	5
1,4-Dichlorobenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	ND		ug/l	12	3.5	5
o-Xylene	ND		ug/l	12	3.5	5
cis-1,2-Dichloroethene	660		ug/l	12	3.5	5
Styrene	ND		ug/l	12	3.5	5
Dichlorodifluoromethane	ND		ug/l	25	5.0	5
Acetone	ND		ug/l	25	7.3	5
Carbon disulfide	ND		ug/l	25	5.0	5
2-Butanone	ND		ug/l	25	9.7	5
4-Methyl-2-pentanone	ND		ug/l	25	5.0	5
2-Hexanone	ND		ug/l	25	5.0	5
Bromochloromethane	ND		ug/l	12	3.5	5
1,2-Dibromoethane	ND		ug/l	10	3.2	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	3.5	5
Isopropylbenzene	ND		ug/l	12	3.5	5
1,2,3-Trichlorobenzene	ND		ug/l	12	3.5	5
1,2,4-Trichlorobenzene	ND		ug/l	12	3.5	5
Methyl Acetate	ND		ug/l	10	1.2	5
Cyclohexane	ND		ug/l	50	1.4	5
1,4-Dioxane	ND		ug/l	1200	300	5
Freon-113	ND		ug/l	12	3.5	5
Methyl cyclohexane	ND		ug/l	50	2.0	5

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

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-07 D
Client ID: DUP101818
Sample Location: 441-442 WAVERLY AVENUE

Date Collected: 10/18/18 00:00
Date Received: 10/18/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/25/18 17:38
Analyst: MKS

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	950		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	9.4		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	2.1	J	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	17	J	ug/l	25	7.0	10
Trichloroethene	1400		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-07 D Date Collected: 10/18/18 00:00

Client ID: DUP101818 Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE 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	380		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	108		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	107		70-130

Project Name: WAVERLY **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-08 Date Collected: 10/18/18 00:00

Client ID: TB101818 Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 10/24/18 09:33

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 **Lab Number:** L1842663

Project Number: 28012 **Report Date:** 10/29/18

SAMPLE RESULTS

Lab ID: L1842663-08 Date Collected: 10/18/18 00:00

Client ID: TB101818 Date Received: 10/18/18

Sample Location: 441-442 WAVERLY AVENUE 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	97		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	97		70-130

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/24/18 08:25
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06,08 Batch: WG1171951-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/24/18 08:25
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06,08 Batch: WG1171951-5					
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
Project Number: 28012
Lab Number: L1842663
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/24/18 08:25
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,06,08 Batch: WG1171951-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	101		70-130

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/25/18 10:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05,07 Batch: WG1172387-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/25/18 10:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05,07 Batch: WG1172387-5					
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
Project Number: 28012
Lab Number: L1842663
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/25/18 10:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05,07 Batch: WG1172387-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY

Project Number: 28012

Lab Number: L1842663

Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06,08 Batch: WG1171951-3 WG1171951-4								
Methylene chloride	90		86		70-130	5		20
1,1-Dichloroethane	89		89		70-130	0		20
Chloroform	95		95		70-130	0		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	88		86		70-130	2		20
Dibromochloromethane	96		94		63-130	2		20
1,1,2-Trichloroethane	85		82		70-130	4		20
Tetrachloroethene	100		95		70-130	5		20
Chlorobenzene	99		96		75-130	3		20
Trichlorofluoromethane	91		90		62-150	1		20
1,2-Dichloroethane	90		91		70-130	1		20
1,1,1-Trichloroethane	98		97		67-130	1		20
Bromodichloromethane	94		90		67-130	4		20
trans-1,3-Dichloropropene	88		87		70-130	1		20
cis-1,3-Dichloropropene	91		90		70-130	1		20
Bromoform	94		94		54-136	0		20
1,1,2,2-Tetrachloroethane	84		81		67-130	4		20
Benzene	90		89		70-130	1		20
Toluene	96		92		70-130	4		20
Ethylbenzene	97		93		70-130	4		20
Chloromethane	90		89		64-130	1		20
Bromomethane	83		84		39-139	1		20
Vinyl chloride	77		73		55-140	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY

Project Number: 28012

Lab Number: L1842663

Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06,08 Batch: WG1171951-3 WG1171951-4								
Chloroethane	89		88		55-138	1		20
1,1-Dichloroethene	99		93		61-145	6		20
trans-1,2-Dichloroethene	100		95		70-130	5		20
Trichloroethene	100		96		70-130	4		20
1,2-Dichlorobenzene	100		99		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	83		84		63-130	1		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	99		94		70-130	5		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	79		78		36-147	1		20
Acetone	83		78		58-148	6		20
Carbon disulfide	90		88		51-130	2		20
2-Butanone	77		80		63-138	4		20
4-Methyl-2-pentanone	77		78		59-130	1		20
2-Hexanone	72		68		57-130	6		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	90		88		70-130	2		20
1,2-Dibromo-3-chloropropane	78		76		41-144	3		20
Isopropylbenzene	94		92		70-130	2		20
1,2,3-Trichlorobenzene	98		98		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAVERLY

Project Number: 28012

Lab Number: L1842663

Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,06,08 Batch: WG1171951-3 WG1171951-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
Methyl Acetate	75		76		70-130	1		20
Cyclohexane	83		83		70-130	0		20
1,4-Dioxane	114		110		56-162	4		20
Freon-113	88		87		70-130	1		20
Methyl cyclohexane	92		87		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		95		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	96		97		70-130
Dibromofluoromethane	97		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05,07 Batch: WG1172387-3 WG1172387-4								
Methylene chloride	89		89		70-130	0		20
1,1-Dichloroethane	96		94		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	120		110		63-132	9		20
1,2-Dichloropropane	90		87		70-130	3		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	86		88		70-130	2		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	99		96		67-130	3		20
trans-1,3-Dichloropropene	90		93		70-130	3		20
cis-1,3-Dichloropropene	94		92		70-130	2		20
Bromoform	100		98		54-136	2		20
1,1,2,2-Tetrachloroethane	81		80		67-130	1		20
Benzene	94		92		70-130	2		20
Toluene	100		99		70-130	1		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	100		98		64-130	2		20
Bromomethane	91		89		39-139	2		20
Vinyl chloride	84		79		55-140	6		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05,07 Batch: WG1172387-3 WG1172387-4								
Chloroethane	100		93		55-138	7		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	90		87		63-130	3		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	95		100		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	100		95		36-147	5		20
Acetone	92		91		58-148	1		20
Carbon disulfide	98		93		51-130	5		20
2-Butanone	82		85		63-138	4		20
4-Methyl-2-pentanone	77		76		59-130	1		20
2-Hexanone	75		75		57-130	0		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	94		95		70-130	1		20
1,2-Dibromo-3-chloropropane	84		88		41-144	5		20
Isopropylbenzene	97		95		70-130	2		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05,07 Batch: WG1172387-3 WG1172387-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
Methyl Acetate	81		77		70-130	5		20
Cyclohexane	88		85		70-130	3		20
1,4-Dioxane	128		102		56-162	**23**	Q	20
Freon-113	95		94		70-130	1		20
Methyl cyclohexane	95		89		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		98		70-130
Toluene-d8	95		96		70-130
4-Bromofluorobenzene	92		93		70-130
Dibromofluoromethane	105		99		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

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): 01-04,06,08 QC Batch ID: WG1171951-6 WG1171951-7 QC Sample: L1842663-02 Client ID: GZ-21D												
Methylene chloride	ND	10	7.2	72		8.6	86		70-130	18		20
1,1-Dichloroethane	ND	10	7.6	76		9.0	90		70-130	17		20
Chloroform	ND	10	7.9	79		9.3	93		70-130	16		20
Carbon tetrachloride	ND	10	9.6	96		11	110		63-132	14		20
1,2-Dichloropropane	ND	10	7.2	72		8.3	83		70-130	14		20
Dibromochloromethane	ND	10	8.0	80		9.4	94		63-130	16		20
1,1,2-Trichloroethane	ND	10	6.8	**68**	Q	7.8	78		70-130	14		20
Tetrachloroethene	ND	10	8.8	88		9.6	96		70-130	9		20
Chlorobenzene	ND	10	8.3	83		9.5	95		75-130	13		20
Trichlorofluoromethane	ND	10	8.8	88		9.9	99		62-150	12		20
1,2-Dichloroethane	52	10	62	100		64	120		70-130	3		20
1,1,1-Trichloroethane	ND	10	9.1	91		10	100		67-130	9		20
Bromodichloromethane	ND	10	7.7	77		8.9	89		67-130	14		20
trans-1,3-Dichloropropene	ND	10	7.0	70		8.3	83		70-130	17		20
cis-1,3-Dichloropropene	ND	10	7.0	70		8.3	83		70-130	17		20
Bromoform	ND	10	7.5	75		8.6	86		54-136	14		20
1,1,2,2-Tetrachloroethane	ND	10	6.2	**62**	Q	7.6	76		67-130	20		20
Benzene	10	10	19	90		18	80		70-130	5		20
Toluene	ND	10	8.1	81		9.2	92		70-130	13		20
Ethylbenzene	ND	10	8.4	84		9.0	90		70-130	7		20
Chloromethane	ND	10	8.2	82		9.2	92		64-130	11		20
Bromomethane	ND	10	6.9	69		7.8	78		39-139	12		20
Vinyl chloride	12	10	21	90		18	60		55-140	15		20

Matrix Spike Analysis
Batch Quality Control

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

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): 01-04,06,08 QC Batch ID: WG1171951-6 WG1171951-7 QC Sample: L1842663-02 Client ID: GZ-21D												
Chloroethane	ND	10	8.2	82		19	**190**	Q	55-138	**79**	Q	20
1,1-Dichloroethene	ND	10	8.5	85		10	100		61-145	16		20
trans-1,2-Dichloroethene	2.4J	10	11	110		12	120		70-130	9		20
Trichloroethene	ND	10	8.9	89		10	100		70-130	12		20
1,2-Dichlorobenzene	ND	10	7.8	78		9.1	91		70-130	15		20
1,3-Dichlorobenzene	ND	10	8.2	82		9.3	93		70-130	13		20
1,4-Dichlorobenzene	ND	10	8.1	81		9.1	91		70-130	12		20
Methyl tert butyl ether	0.98J	10	7.9	79		9.1	91		63-130	14		20
p/m-Xylene	ND	20	16	80		18	90		70-130	12		20
o-Xylene	ND	20	16	80		18	90		70-130	12		20
cis-1,2-Dichloroethene	120	10	140	**200**	Q	120	**0**	Q	70-130	15		20
Styrene	ND	20	15	75		17	85		70-130	13		20
Dichlorodifluoromethane	ND	10	7.2	72		7.9	79		36-147	9		20
Acetone	ND	10	6.5	65		8.6	86		58-148	**28**	Q	20
Carbon disulfide	ND	10	8.3	83		10	100		51-130	19		20
2-Butanone	ND	10	6.1	**61**	Q	7.2	72		63-138	17		20
4-Methyl-2-pentanone	ND	10	6.5	65		7.0	70		59-130	7		20
2-Hexanone	ND	10	5.8	58		7.1	71		57-130	20		20
Bromochloromethane	ND	10	8.5	85		10	100		70-130	16		20
1,2-Dibromoethane	ND	10	7.7	77		8.5	85		70-130	10		20
1,2-Dibromo-3-chloropropane	ND	10	6.3	63		7.2	72		41-144	13		20
Isopropylbenzene	ND	10	7.6	76		8.7	87		70-130	13		20
1,2,3-Trichlorobenzene	ND	10	7.8	78		8.9	89		70-130	13		20

Matrix Spike Analysis

Batch Quality Control

Project Name: WAVERLY

Project Number: 28012

Lab Number: L1842663

Report Date: 10/29/18

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): 01-04,06,08 QC Batch ID: WG1171951-6 WG1171951-7 QC Sample: L1842663-02 Client ID: GZ-21D												
1,2,4-Trichlorobenzene	ND	10	7.9	79		9.2	92		70-130	15		20
Methyl Acetate	ND	10	5.8	**58**	Q	7.1	71		70-130	20		20
Cyclohexane	1.7J	10	8.2J	82		8.2J	82		70-130	0		20
1,4-Dioxane	ND	500	330	66		340	68		56-162	3		20
Freon-113	ND	10	7.4	74		8.2	82		70-130	10		20
Methyl cyclohexane	ND	10	7.8J	78		7.8J	78		70-130	0		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		93		70-130
4-Bromofluorobenzene	95		95		70-130
Dibromofluoromethane	98		99		70-130
Toluene-d8	97		97		70-130

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

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(*)
L1842663-01A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-01B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-01C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02A1	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02A2	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02B1	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02B2	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02C1	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-02C2	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-03A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-03B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-03C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-04A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-04B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-04C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-05A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-05B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-05C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-06A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-06B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: WAVERLY
Project Number: 28012

Lab Number: L1842663
Report Date: 10/29/18

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L1842663-06C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-07A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-07B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-07C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-08A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)
L1842663-08B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	WAVERLY	**Lab Number:**	L1842663
Project Number:	28012	**Report Date:**	10/29/18

GLOSSARY

Acronyms

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.
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.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample¿s toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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.

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	WAVERLY	**Lab Number:**	L1842663
Project Number:	28012	**Report Date:**	10/29/18

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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

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

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

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

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

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

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

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.

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).

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	**Lab Number:**	L1842663
Project Number:	28012	**Report Date:**	10/29/18

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

ALPHA ANALYTICAL

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

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

NEW YORK CHAIN OF CUSTODY

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

Page 1 of 1

Date Rec'd in Lab: 10/18/18

ALPHA Job #: L1842663

Client Information
Client: STERLING ENV.
Address: 24 WADE ROAD
LATHAM, NEW YORK 12110
Phone: 518-456-4900
Fax: 518-456-3532
Email: SEE BELOW

Project Information
Project Name: WAVERLY
Project Location: 441, 442 WAVERLY AVENUE
Project # 28012
(Use Project name as Project #) ☐
Project Manager: JENNIFER DICERBO/CANDY FOX
ALPHAQuote #: N/A

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

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

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

Billing Information
☐ Same as Client Info
PO #

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

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
STEFAN.TRUEX@STERLINGENVIRONMENTAL.COM
JENNIFER.DICERBO@STERLINGENVIRONMENTAL.COM

Please specify Metals or TAL. MACK.WILLIAMS@STERLINGENVIRONMENTAL.COM

ANALYSIS

NYTCL-8260

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8260	Sample Specific Comments	Total Bottle
42663 - 01	OSMW-4	10/18/18	10:40 AM	WATER	JT	X		4
02	GZ-210		12:10 pm					
↓	GZ-210 MS		12:15 pm					
	GZ-210 MSD		12:20 pm					
03	GZ-22D		13:45					
04	B6 OWD		14:30					
05	OSMW-3		15:40					
06	GZ-23D		16:30					
07	DUP101818		—				DUPLICATE	
08	TB 101818	↓	—	↓	↓	↓	TRIP BLANK	2

Container Type: V
Preservative: B

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

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

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

Relinquished By:	Date/Time	Received By:	Date/Time
	10/18/18 2000	MAB	10/18/18 2000
TM	10/18/18 2300		10/18/18 23:10

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

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

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Geology
Hydrology
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Water Supply

October 31, 2018

Mr. Stefan Truex, P.G.
Geologist
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Re: Data Validation Report
Waverly Avenue
October 2018 Ground Water Sampling Event

Dear Mr. Truex:

The data usability summary report (DUSR) and QA/QC review are attached to this letter for the above referenced project sampling event. The data for Alpha Analytical Labs, lab number L1842663 were acceptable with some minor issues that are identified and discussed in the validation summary. There were no data that were flagged unusable (R) in the data pack.

A list of common data validation acronyms is attached to this letter to assist you 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

Donald Anné
Senior Chemist

DCA:dca
attachments

Z:\projects\2009\09600 - 09620\09619-waverly ave\2018\Waverly Ave-181.ltr.wpd

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 andassociated 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.

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-Dichlophenylacetic 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

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Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L1842663

6 Ground Water Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected October 18, 2017

Prepared by: Donald Anné
October 31, 2018

The data package contains the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appears legible and complete. The data pack contains the results for the volatile analyses for 6 ground water samples, 1 field duplicate, and 1 trip blank.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did not fulfill the requirements of the analytical method.

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

- The "not detected" volatile results for 1,1,2-trichloroethane, 1,1,2,2-tetrachloroethane, 2-butanone, and methyl acetate were qualified as "estimated" (UJ) for sample GZ-21D because 1 of 2 percent recoveries for 1,1,2-trichloroethane, 1,1,2,2-tetrachloroethane, 2-butanone, and methyl acetate were below QC limits, but not below 10% in aqueous MS/MSD sample GZ-21D.

All data are considered usable, with estimated (UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation review.

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QA/QC Review of Method 8260C Volatiles
Data for Alpha Analytical Labs
SDG Number: L1842663

6 Ground Water Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected October 10, 2018

Prepared by: Donald Anné
October 31, 2018

Holding Times: 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 RRF for acetone was below the method minimum, but not below 0.010 for VOA108 on 10-14-18. 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 (0.010 for all compounds except 1,4-dioxane, 0.001 for 1,4-dioxane) and the%RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for 2-butanone and 1,2-dibromo-3-chloropropane were below the method minimums, but not below 0.010 on 10-24-18 (V08181024A02). The RRFs for 2-butanone, 4-methyl-2-pentanone, and 1,2-dibromo-3-chloropropane were below the method minimums, but not below 0.010 on 10-25-18 (V08181025A02). The %Ds for dichlorodifluoromethane, vinyl chloride, methyl acetate, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, and, 1,2-dibromo-3-chloropropane were above the method maximum on 10-24-18 (V08181024A02). The %Ds for 4-methyl-2-pentanone and 2-hexanone were above the method maximum on 10-25-18 (V08181025A02). 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 RRFs for target compounds were above the allowable minimum (0.010 for all compounds except 1,4-dioxane, as required.

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The %Ds for methyl acetate and 2-hexanone were above the allowable maximum (25%) on 10-24-18 (V08181024A02). The %Ds for 1,4-dioxane and 2-hexanone were above the allowable maximum (25%) on 10-25-18 (V08181025A02). 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 chloroethane and acetone were above the allowable maximum; 1 of 2 percent recoveries (%Rs) for chloroethane was above QC limits; and 1 of 2 %Rs for 1,1,2-trichloroethane, 1,1,2,2-tetrachloroethane, 2-butanone, and methyl acetate were below QC limits, but not 10% for aqueous MS/MSD sample GZ-21D. The "not detected" results for 1,1,2-trichloroethane, 1,1,2,2-tetrachloroethane, 2-butanone, and methyl acetate should be considered estimated (UJ) in sample GZ-21D.

Laboratory Control Sample: The relative percent differences (RPDs) for applicable target compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples WG1171951-3 and WG1171951-4.

The percent recoveries for applicable target compounds were within QC limits, but the RPD for 1,4-dioxane was above the allowable maximum for aqueous samples WG1172387-3 and WG1172387-4. Positive results for 1,4-dioxane should be considered estimated (J) in associated aqueous samples.

Field Duplicates: The relative percent differences for applicable compounds were below the allowable maximum (20%) for aqueous field duplicate pair B6-OWD/DUP101818 (attached table), as required.

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

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L1842663

S1= B6-OWD **S2=** DUP101818

Analyte	S1	S2	RPD (%)
tetrachloroethane	860	950	10%
1,2-dichloroethane	8.5	9.4	10%
vinyl chloride	ND	**2.1**	NC
trans-1,2-dichloroethene	**16**	**17**	NC
trichloroethene	1300	1400	7%
cis-1,2-dichloroethene	360	380	5%

* RPD is above the allowable maximum waters 20%.

Results are in units of ug/L.

Bold numbers were values that 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.

Laboratory Control Sample
Form 3

Client	: Sterling Environmental Eng	**Lab Number**	: L1842663
Project Name	: WAVERLY	**Project Number**	: 28012
Matrix	: WATER		
LCS Sample ID	: WG1172387-3	**Analysis Date** : 10/25/18 08:59	**File ID** : V08181025A02
LCSD Sample ID	: WG1172387-4	**Analysis Date** : 10/25/18 09:22	**File ID** : V08181025A03

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	8.9	89	10	8.9	89	0	70-130	20
1,1-Dichloroethane	10	9.6	96	10	9.4	94	2	70-130	20
Chloroform	10	10.	100	10	10.	100	0	70-130	20
Carbon tetrachloride	10	12.	120	10	11.	110	9	63-132	20
1,2-Dichloropropane	10	9.0	90	10	8.7	87	3	70-130	20
Dibromochloromethane	10	10.	100	10	10.	100	0	63-130	20
1,1,2-Trichloroethane	10	8.6	86	10	8.8	88	2	70-130	20
Tetrachloroethene	10	10.	100	10	10.	100	0	70-130	20
Chlorobenzene	10	10.	100	10	10.	100	0	75-130	20
Trichlorofluoromethane	10	11.	110	10	10.	100	10	62-150	20
1,2-Dichloroethane	10	10.	100	10	10.	100	0	70-130	20
1,1,1-Trichloroethane	10	11.	110	10	11.	110	0	67-130	20
Bromodichloromethane	10	9.9	99	10	9.6	96	3	67-130	20
trans-1,3-Dichloropropene	10	9.0	90	10	9.3	93	3	70-130	20
cis-1,3-Dichloropropene	10	9.4	94	10	9.2	92	2	70-130	20
Bromoform	10	10.	100	10	9.8	98	2	54-136	20
1,1,2,2-Tetrachloroethane	10	8.1	81	10	8.0	80	1	67-130	20
Benzene	10	9.4	94	10	9.2	92	2	70-130	20
Toluene	10	10.	100	10	9.9	99	1	70-130	20
Ethylbenzene	10	9.9	99	10	10.	100	1	70-130	20
Chloromethane	10	10.	100	10	9.8	98	2	64-130	20
Bromomethane	10	9.1	91	10	8.9	89	2	39-139	20
Vinyl chloride	10	8.4	84	10	7.9	79	6	55-140	20
Chloroethane	10	10.	100	10	9.3	93	7	55-138	20
1,1-Dichloroethene	10	10.	100	10	11.	110	10	61-145	20
trans-1,2-Dichloroethene	10	10.	100	10	10.	100	0	70-130	20
Trichloroethene	10	11.	110	10	10.	100	10	70-130	20
1,2-Dichlorobenzene	10	10.	100	10	10.	100	0	70-130	20

Laboratory Control Sample
Form 3

Client	: Sterling Environmental Eng	**Lab Number**	: L1842663
Project Name	: WAVERLY	**Project Number**	: 28012
Matrix	: WATER		
LCS Sample ID	: WG1172387-3 **Analysis Date** : 10/25/18 08:59	**File ID**	: V08181025A02
LCSD Sample ID	: WG1172387-4 **Analysis Date** : 10/25/18 09:22	**File ID**	: V08181025A03

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichlorobenzene	10	10.	100	10	10.	100	0	70-130	20
1,4-Dichlorobenzene	10	10.	100	10	10.	100	0	70-130	20
Methyl tert butyl ether	10	9.0	90	10	8.7	87	3	63-130	20
p/m-Xylene	20	20.	100	20	19.	95	5	70-130	20
o-Xylene	20	19.	95	20	20.	100	5	70-130	20
cis-1,2-Dichloroethene	10	10.	100	10	10.	100	0	70-130	20
Styrene	20	20.	100	20	19.	95	5	70-130	20
Dichlorodifluoromethane	10	10.	100	10	9.5	95	5	36-147	20
Acetone	10	9.2	92	10	9.1	91	1	58-148	20
Carbon disulfide	10	9.8	98	10	9.3	93	5	51-130	20
2-Butanone	10	8.2	82	10	8.5	85	4	63-138	20
4-Methyl-2-pentanone	10	7.7	77	10	7.6	76	1	59-130	20
2-Hexanone	10	7.5	75	10	7.5	75	0	57-130	20
Bromochloromethane	10	11.	110	10	11.	110	0	70-130	20
1,2-Dibromoethane	10	9.4	94	10	9.5	95	1	70-130	20
1,2-Dibromo-3-chloropropane	10	8.4	84	10	8.8	88	5	41-144	20
Isopropylbenzene	10	9.7	97	10	9.5	95	2	70-130	20
1,2,3-Trichlorobenzene	10	10.	100	10	10.	100	0	70-130	20
1,2,4-Trichlorobenzene	10	10.	100	10	10.	100	0	70-130	20
Methyl Acetate	10	8.1	81	10	7.7	77	5	70-130	20
Cyclohexane	10	8.8	88	10	8.5	85	3	70-130	20
1,4-Dioxane	500	640	128	500	510	102	23 Q	56-162	20
Freon-113	10	9.5	95	10	9.4	94	1	70-130	20
Methyl cyclohexane	10	9.5	95	10	8.9	89	7	70-130	20

Matrix Spike
Form 3

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Client Sample ID	: GZ-21D	Matrix	: WATER
Lab Sample ID	: L1842663-02	Analysis Date	: 10/24/18 09:56
Matrix Spike	: WG1171951-6	MS Analysis Date	: 10/24/18 16:19
Matrix Spike Dup	: WG1171951-7	MSD Analysis Date	: 10/24/18 16:41

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	ND	10	7.2	72	10	8.6	86	18	70-130	20
1,1-Dichloroethane	ND	10	7.6	76	10	9.0	90	17	70-130	20
Chloroform	ND	10	7.9	79	10	9.3	93	16	70-130	20
Carbon tetrachloride	ND	10	9.6	96	10	11.	110	14	63-132	20
1,2-Dichloropropane	ND	10	7.2	72	10	8.3	83	14	70-130	20
Dibromochloromethane	ND	10	8.0	80	10	9.4	94	16	63-130	20
1,1,2-Trichloroethane	ND	10	6.8	68 Q	10	7.8	78	14	70-130	20
Tetrachloroethene	ND	10	8.8	88	10	9.6	96	9	70-130	20
Chlorobenzene	ND	10	8.3	83	10	9.5	95	13	75-130	20
Trichlorofluoromethane	ND	10	8.8	88	10	9.9	99	12	62-150	20
1,2-Dichloroethane	52	10	62.	100	10	64.	120	3	70-130	20
1,1,1-Trichloroethane	ND	10	9.1	91	10	10.	100	9	67-130	20
Bromodichloromethane	ND	10	7.7	77	10	8.9	89	14	67-130	20
trans-1,3-Dichloropropene	ND	10	7.0	70	10	8.3	83	17	70-130	20
cis-1,3-Dichloropropene	ND	10	7.0	70	10	8.3	83	17	70-130	20
Bromoform	ND	10	7.5	75	10	8.6	86	14	54-136	20
1,1,2,2-Tetrachloroethane	ND	10	6.2	62 Q	10	7.6	76	20	67-130	20
Benzene	10	10	19.	90	10	18.	80	5	70-130	20
Toluene	ND	10	8.1	81	10	9.2	92	13	70-130	20
Ethylbenzene	ND	10	8.4	84	10	9.0	90	7	70-130	20
Chloromethane	ND	10	8.2	82	10	9.2	92	11	64-130	20
Bromomethane	ND	10	6.9	69	10	7.8	78	12	39-139	20
Vinyl chloride	12	10	21.	90	10	18.	60	15	55-140	20
Chloroethane	ND	10	8.2	82	10	19.	190 Q	79 Q	55-138	20

Matrix Spike
Form 3

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Client Sample ID	: GZ-21D	Matrix	: WATER
Lab Sample ID	: L1842663-02	Analysis Date	: 10/24/18 09:56
Matrix Spike	: WG1171951-6	MS Analysis Date	: 10/24/18 16:19
Matrix Spike Dup	: WG1171951-7	MSD Analysis Date	: 10/24/18 16:41

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
1,1-Dichloroethene	ND	10	8.5	85		10	10.	100	16	61-145	20
trans-1,2-Dichloroethene	2.4J	10	11.	110		10	12.	120	9	70-130	20
Trichloroethene	ND	10	8.9	89		10	10.	100	12	70-130	20
1,2-Dichlorobenzene	ND	10	7.8	78		10	9.1	91	15	70-130	20
1,3-Dichlorobenzene	ND	10	8.2	82		10	9.3	93	13	70-130	20
1,4-Dichlorobenzene	ND	10	8.1	81		10	9.1	91	12	70-130	20
Methyl tert butyl ether	0.98J	10	7.9	79		10	9.1	91	14	63-130	20
p/m-Xylene	ND	20	16.	80		20	18.	90	12	70-130	20
o-Xylene	ND	20	16.	80		20	18.	90	12	70-130	20
cis-1,2-Dichloroethene	120	10	140	NA	200 Q	10	120	0	NA Q	15	70-130	20
Styrene	ND	20	15.	75		20	17.	85	13	70-130	20
Dichlorodifluoromethane	ND	10	7.2	72		10	7.9	79	9	36-147	20
Acetone	ND	10	6.5	65		10	8.6	86	28 Q	58-148	20
Carbon disulfide	ND	10	8.3	83		10	10.	100	19	51-130	20
2-Butanone	ND	10	6.1	61	Q	10	7.2	72	17	63-138	20
4-Methyl-2-pentanone	ND	10	6.5	65		10	7.0	70	7	59-130	20
2-Hexanone	ND	10	5.8	58		10	7.1	71	20	57-130	20
Bromochloromethane	ND	10	8.5	85		10	10.	100	16	70-130	20
1,2-Dibromoethane	ND	10	7.7	77		10	8.5	85	10	70-130	20
1,2-Dibromo-3-chloropropane	ND	10	6.3	63		10	7.2	72	13	41-144	20
Isopropylbenzene	ND	10	7.6	76		10	8.7	87	13	70-130	20
1,2,3-Trichlorobenzene	ND	10	7.8	78		10	8.9	89	13	70-130	20
1,2,4-Trichlorobenzene	ND	10	7.9	79		10	9.2	92	15	70-130	20
Methyl Acetate	ND	10	5.8	58	Q	10	7.1	71	20	70-130	20

NA - Not applicable, the sample concentration was greater than 4 times the spiking level; therefore, valid percent recoveries could not be calculated.

Matrix Spike
Form 3

Client	: Sterling Environmental Eng	**Lab Number**	: L1842663
Project Name	: WAVERLY	**Project Number**	: 28012
Client Sample ID	: GZ-21D	**Matrix**	: WATER
Lab Sample ID	: L1842663-02	**Analysis Date**	: 10/24/18 09:56
Matrix Spike	: WG1171951-6	**MS Analysis Date**	: 10/24/18 16:19
Matrix Spike Dup	: WG1171951-7	**MSD Analysis Date**	: 10/24/18 16:41

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Cyclohexane	1.7J	10	8.2J	82	10	8.2J	82	0	70-130	20
1,4-Dioxane	ND	500	330	66	500	340	68	3	56-162	20
Freon-113	ND	10	7.4	74	10	8.2	82	10	70-130	20
Methyl cyclohexane	ND	10	7.8J	78	10	7.8J	78	0	70-130	20

Initial Calibration Summary
Form 6

Client	: Sterling Environmental Eng	**Lab Number**	: L1842663
Project Name	: WAVERLY	**Project Number**	: 28012
Instrument ID	: VOA108	**Ical Ref**	: ICAL15130
Calibration dates	: 10/14/18 19:35 10/14/18 22:57		

Calibration Files

L11 =V08181014B03.D L1 =V08181014B05.D L2 =V08181014B07.D L3 =V08181014B08.D L4 =V08181014B09.D

L6 =V08181014B10.D L8 =V08181014B11.D L10 =V08181014B12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluo			0.176	0.275	0.291	0.319	0.305	0.284	0.275	18.59
3)	T	Chloromethane		0.290	0.364	0.380	0.360	0.396	0.393	0.387	0.367	9.99
4)	T	Vinyl chloride	0.172	0.171	0.252	0.316	0.312	0.346	0.354	0.347	*L	0.9989
5)	T	Bromomethane		0.186	0.236	0.208	0.169	0.165	0.162	0.161	0.184	15.46
6)	T	Chloroethane		0.109	0.146	0.163	0.153	0.167	0.164	0.151	0.150	13.25
7)	T	Trichlorofluor		0.208	0.296	0.447	0.464	0.493	0.471	0.443	*L	0.9980
8)	T	Ethyl ether		0.080	0.105	0.119	0.111	0.121	0.121	0.122	0.111	13.67
10)	T	1,1-Dichloroet		0.132	0.144	0.194	0.183	0.205	0.199	0.200	0.179	16.47
11)	T	Carbon disulfide		0.398	0.521	0.568	0.554	0.611	0.606	0.605	0.552	13.68
12)	T	Freon-113		0.061	0.111	0.207	0.217	0.237	0.233	0.225	*L	0.9989
14)	T	Acrolein			0.025	0.027	0.029	0.032	0.034	0.033	0.030	11.59
15)	T	Methylene chlo		0.248	0.247	0.242	0.218	0.237	0.238	0.238	0.238	4.08
17)	T	Acetone		0.124	0.098	0.072	0.060	0.062	0.061	0.058	*Q	0.9990
18)	T	trans-1,2-Dich		0.158	0.196	0.226	0.207	0.232	0.234	0.230	0.212	13.05
19)	T	Methyl acetate		0.207	0.188	0.197	0.177	0.191	0.187	0.184	0.190	5.02
20)	T	Methyl tert butyl ether		0.593	0.701	0.708	0.649	0.706	0.702	0.690	0.678	6.29
21)	T	tert-Butyl alc		0.027	0.022	0.022	0.020	0.022	0.020	0.020	0.022	10.75
22)	T	Diisopropyl ether		0.832	0.959	1.085	1.016	1.126	1.123	1.096	1.034	10.40
23)	T	1,1-Dichloroet		0.405	0.508	0.539	0.517	0.557	0.553	0.538	0.517	10.12
24)	T	Halothane			0.152	0.161	0.165	0.176	0.181	0.179	0.169	6.86
25)	T	Acrylonitrile		0.084	0.097	0.093	0.086	0.097	0.095	0.093	0.092	5.55
26)	T	Ethyl tert-but		0.852	0.931	1.017	0.984	1.085	1.078	1.049	0.999	8.47
27)	T	Vinyl acetate		0.367	0.490	0.602	0.574	0.652	0.643	0.624	0.565	18.22
28)	T	cis-1,2-Dichlo		0.197	0.225	0.242	0.236	0.260	0.261	0.262	0.240	9.89
29)	T	2,2-Dichloropr		0.355	0.394	0.436	0.422	0.457	0.439	0.419	0.417	8.08
30)	T	Bromochloromet		0.087	0.102	0.112	0.109	0.120	0.119	0.114	0.109	10.68
31)	T	Cyclohexane			0.303	0.519	0.552	0.626	0.625	0.597	*L	0.9989
32)	T	Chloroform		0.402	0.481	0.519	0.481	0.523	0.514	0.496	0.488	8.53
33)	T	Ethyl acetate		0.216	0.232	0.239	0.245	0.255	0.251	0.241	0.240	5.47
34)	T	Carbon tetrachloride		0.231	0.358	0.430	0.421	0.456	0.440	0.417	0.393	19.83
35)	T	Tetrahydrofuran			0.086	0.092	0.081	0.090	0.088	0.085	0.087	4.58
36)	S	Dibromofluoromethane	0.277	0.281	0.284	0.283	0.271	0.271	0.273	0.267	0.276	2.25
37)	T	1,1,1-Trichlor		0.341	0.419	0.493	0.475	0.510	0.493	0.466	0.457	12.84
39)	T	2-Butanone		0.129	0.111	0.115	0.098	0.112	0.111	0.108	0.112	8.21
40)	T	1,1-Dichloropr		0.229	0.273	0.358	0.350	0.397	0.394	0.383	0.340	19.02
41)	T	Benzene		0.764	0.884	0.993	0.932	1.029	1.035	1.030	0.952	10.57
42)	T	Tertiary-Amyl Methyl Ether		0.637	0.642	0.733	0.703	0.782	0.779	0.770	0.721	8.65

ave = 0.096

Initial Calibration Summary
Form 6

Client	**: Sterling Environmental Eng**	**Lab Number**	**: L1842663**
Project Name	**: WAVERLY**	**Project Number**	**: 28012**
Instrument ID	**: VOA108**	**Ical Ref**	**: ICAL15130**
Calibration dates	**: 10/14/18 19:35 10/14/18 22:57**		

Calibration Files

L11 =V08181014B03.D L1 =V08181014B05.D L2 =V08181014B07.D L3 =V08181014B08.D L4 =V08181014B09.D

L6 =V08181014B10.D L8 =V08181014B11.D L10 =V08181014B12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
43)	S	1,2-Dichloroethane-d4	0.433	0.429	0.442	0.449	0.430	0.410	0.401	0.391	0.423	4.84
44)	T	1,2-Dichloroet		0.433	0.462	0.489	0.451	0.486	0.464	0.438	0.460	4.70
47)	T	Methyl cyclohe			0.205	0.375	0.415	0.464	0.466	0.447	*L	0.9991
48)	T	Trichloroethene		0.182	0.243	0.260	0.255	0.275	0.273	0.266	0.250	12.90
50)	T	Dibromomethane		0.143	0.147	0.160	0.146	0.160	0.158	0.155	0.153	4.65
51)	T	1,2-Dichloropr		0.267	0.293	0.306	0.289	0.317	0.320	0.317	0.301	6.48
53)	T	2-Chloroethyl		0.124	0.150	0.165	0.159	0.176	0.174	0.170	0.160	11.28
54)	T	Bromodichlorom		0.339	0.376	0.418	0.392	0.426	0.418	0.406	0.396	7.75
57)	T	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	10.05
58)	T	cis-1,3-Dichlo		0.332	0.396	0.440	0.424	0.471	0.479	0.467	0.430	12.10
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.355	1.370	1.458	1.397	1.386	1.384	1.397	1.418	1.396	2.26
61)	T	Toluene		0.678	0.756	0.837	0.809	0.900	0.900	0.896	0.825	10.28
62)	T	4-Methyl-2-pen		0.095	0.114	0.138	0.129	0.146	0.141	0.141	0.129	14.36
63)	T	Tetrachloroethene		0.271	0.333	0.369	0.358	0.398	0.401	0.392	0.360	12.89
65)	T	trans-1,3-Dich		0.456	0.529	0.587	0.564	0.640	0.630	0.625	0.576	11.54
67)	T	Ethyl methacry		0.328	0.306	0.379	0.364	0.423	0.431	0.428	0.380	13.24
68)	T	1,1,2-Trichlor		0.210	0.240	0.256	0.233	0.262	0.259	0.259	0.245	7.81
69)	T	Chlorodibromom		0.304	0.348	0.369	0.358	0.396	0.390	0.385	0.364	8.70
70)	T	1,3-Dichloropr		0.469	0.498	0.529	0.496	0.557	0.557	0.550	0.522	6.67
71)	T	1,2-Dibromoethane		0.213	0.251	0.281	0.262	0.297	0.296	0.294	0.270	11.48
72)	T	2-Hexanone		0.194	0.215	0.239	0.222	0.257	0.251	0.242	0.232	9.70
73)	T	Chlorobenzene		0.727	0.840	0.898	0.860	0.952	0.946	0.941	0.881	9.18
74)	T	Ethylbenzene		1.259	1.533	1.715	1.654	1.824	1.795	1.747	1.646	11.93
75)	T	1,1,1,2-Tetrac		0.318	0.340	0.369	0.355	0.397	0.387	0.376	0.363	7.63
76)	T	p/m Xylene		0.480	0.569	0.647	0.624	0.688	0.675	0.657	0.620	11.78
77)	T	o Xylene		0.435	0.559	0.607	0.597	0.658	0.643	0.629	0.590	12.80
78)	T	Styrene		0.748	0.928	1.030	1.005	1.120	1.095	1.053	0.997	12.66
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform		0.408	0.433	0.428	0.420	0.446	0.457	0.442	0.434	3.83
82)	T	Isopropylbenzene		2.178	2.858	3.100	3.049	3.237	3.307	3.155	2.983	12.84
83)	S	4-Bromofluorobenzene	1.035	1.026	1.052	1.002	1.000	0.988	0.999	0.986	1.011	2.34
84)	T	Bromobenzene		0.737	0.736	0.731	0.681	0.727	0.739	0.730	0.726	2.81
85)	T	n-Propylbenzene		2.744	3.419	3.568	3.544	3.764	3.841	3.601	3.497	10.31
86)	T	1,4-Dichlorobu		1.200	1.234	1.262	1.214	1.260	1.272	1.217	1.237	2.28
87)	T	1,1,2,2-Tetrac		0.568	0.620	0.631	0.600	0.631	0.661	0.649	0.623	5.01
88)	T	4-Ethyltoluene		2.263	2.891	2.903	2.899	3.107	3.176	3.056	2.899	10.43
89)	T	2-Chlorotoluene		2.004	2.514	2.525	2.457	2.575	2.644	2.558	2.468	8.61

Initial Calibration Summary
Form 6

Client	: Sterling Environmental Eng	**Lab Number**	: L1842663
Project Name	: WAVERLY	**Project Number**	: 28012
Instrument ID	: VOA108	**Ical Ref**	: ICAL15130
Calibration dates	: 10/14/18 19:35 10/14/18 22:57		

Calibration Files

L11 =V08181014B03.D L1 =V08181014B05.D L2 =V08181014B07.D L3 =V08181014B08.D L4 =V08181014B09.D

L6 =V08181014B10.D L8 =V08181014B11.D L10 =V08181014B12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
90)	T	1,3,5-Trimethy		2.127	2.612	2.692	2.632	2.745	2.825	2.741	2.625	8.81
91)	T	1,2,3-Trichlor		0.525	0.602	0.570	0.541	0.566	0.573	0.570	0.564	4.37
92)	T	trans-1,4-Dich		0.217	0.258	0.257	0.240	0.251	0.252	0.242	0.245	5.80
93)	T	4-Chlorotoluene		1.784	2.190	2.267	2.216	2.323	2.395	2.329	2.215	9.15
94)	T	tert-Butylbenzene		1.987	2.409	2.517	2.497	2.570	2.645	2.567	2.456	8.93
95)	T	Pentachloroethane		0.380	0.489	0.512	0.523	0.482	0.502	0.494	0.483	9.81
97)	T	1,2,4-Trimethy		2.175	2.602	2.714	2.631	2.783	2.854	2.771	2.647	8.54
98)	T	sec-Butylbenzene		2.037	2.756	3.080	3.124	3.257	3.363	3.221	2.977	15.34
99)	T	p-Isopropyltol		2.013	2.476	2.722	2.698	2.847	2.957	2.861	2.654	12.12
100)	T	1,3-Dichlorobe		1.116	1.387	1.353	1.330	1.400	1.441	1.440	1.352	8.28
101)	T	1,4-Dichlorobe		1.240	1.353	1.388	1.327	1.405	1.457	1.461	1.376	5.64
102)	T	p-Diethylbenzene		1.261	1.508	1.498	1.536	1.676	1.743	1.717	1.563	10.71
103)	T	n-Butylbenzene		1.855	2.241	2.560	2.598	2.766	2.847	2.749	2.517	14.03
104)	T	1,2-Dichlorobe		1.090	1.197	1.293	1.228	1.329	1.379	1.371	1.269	8.24
105)	T	1,2,4,5-Tetram		2.064	2.391	2.510	2.587	2.867	3.006	2.882	2.615	12.62
106)	T	1,2-Dibromo-3-		0.121	0.107	0.107	0.101	0.110	0.112	0.117	0.111	6.18
107)	T	1,3,5-Trichlor		0.907	0.975	1.013	1.013	1.143	1.174	1.139	1.052	9.57
108)	T	Hexachlorobuta		0.406	0.404	0.481	0.514	0.561	0.572	0.533	0.496	13.95
109)	T	1,2,4-Trichlor		0.976	0.901	0.942	0.940	1.045	1.089	1.071	0.995	7.35
110)	T	Naphthalene		1.737	1.791	2.006	1.917	2.198	2.289	2.241	2.026	10.97
111)	T	1,2,3-Trichlor		0.666	0.859	0.890	0.900	0.990	1.019	0.994	0.903	13.39

Continuing Calibration
Form 7

Client	: Sterling Environmental Eng	Lab Number	: L1842663		
Project Name	: WAVERLY	Project Number	: 28012		
Instrument ID	: VOA108	Calibration Date	: 10/24/18 07:18		
Lab File ID	: V08181024A02	Init. Calib. Date(s)	: 10/14/18	10/14/18	
Sample No	: WG1171951-2	Init. Calib. Times	: 19:35	22:57	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	181	0
Dichlorodifluoromethane	0.275	0.216	-	21.5*	20	142	0
Chloromethane	0.367	0.332	-	9.5	20	159	0
Vinyl chloride	10	7.717	-	22.8*	20	149	0
Bromomethane	0.184	0.153	-	16.8	20	133	0
Chloroethane	0.15	0.134	-	10.7	20	149	0
Trichlorofluoromethane	10	9.134	-	8.7	20	165	0
Ethyl ether	0.111	0.1	-	9.9	20	153	0
1,1-Dichloroethene	0.179	0.178	-	0.6	20	166	0
Carbon disulfide	0.552	0.496	-	10.1	20	158	0
Freon-113	10	8.795	-	12.1	20	166	0
Acrolein	0.03	0.023	-	23.3* NA	20	155	0
Methylene chloride	0.238	0.213	-	10.5	20	160	0
Acetone	10	8.329	-	16.7	20	141	0
trans-1,2-Dichloroethene	0.212	0.216	-	-1.9	20	173	0
Methyl acetate	0.19	0.142	-	25.3*	20	131	0
Methyl tert-butyl ether	0.678	0.562	-	17.1	20	144	0
tert-Butyl alcohol	0.022	0.018	-	18.2	20	149	0
Diisopropyl ether	1.034	0.877	-	15.2	20	146	0
1,1-Dichloroethane	0.517	0.462	-	10.6	20	155	0
Halothane	0.169	0.157	-	7.1	20	176	-.01
Acrylonitrile	0.092	0.07	-	23.9* NA	20	135	0
Ethyl tert-butyl ether	0.999	0.842	-	15.7	20	150	0
Vinyl acetate	0.565	0.476	-	15.8	20	143	0
cis-1,2-Dichloroethene	0.24	0.239	-	0.4	20	179	-.01
2,2-Dichloropropane	0.417	0.406	-	2.6	20	168	0
Bromochloromethane	0.109	0.115	-	-5.5	20	186	-.01
Cyclohexane	10	8.336	-	16.6	20	154	0
Chloroform	0.488	0.464	-	4.9	20	162	-.01
Ethyl acetate	0.24	0.197	-	17.9	20	149	0
Carbon tetrachloride	0.393	0.401	-	-2	20	169	0
Tetrahydrofuran	0.087	0.062	-	28.7* NA	20	122	-.02
Dibromofluoromethane	0.276	0.268	-	2.9	20	172	0
1,1,1-Trichloroethane	0.457	0.449	-	1.8	20	165	0
2-Butanone	0.112	0.086	-	23.2*	20	136	0
1,1-Dichloropropene	0.34	0.311	-	8.5	20	157	0
Benzene	0.952	0.855	-	10.2	20	156	0
tert-Amyl methyl ether	0.721	0.598	-	17.1	20	148	0
1,2-Dichloroethane-d4	0.423	0.392	-	7.3	20	158	0
1,2-Dichloroethane	0.46	0.413	-	10.2	20	153	0
Methyl cyclohexane	10	9.191	-	8.1	20	176	0
Trichloroethene	0.25	0.25	-	0	20	174	0
Dibromomethane	0.153	0.148	-	3.3	20	167	0
1,2-Dichloropropane	0.301	0.265	-	12	20	156	0
2-Chloroethyl vinyl ether	0.16	0.105	-	34.4* NA	20	115	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Sterling Environmental Eng	Lab Number	: L1842663		
Project Name	: WAVERLY	Project Number	: 28012		
Instrument ID	: VOA108	Calibration Date	: 10/24/18 07:18		
Lab File ID	: V08181024A02	Init. Calib. Date(s)	: 10/14/18	10/14/18	
Sample No	: WG1171951-2	Init. Calib. Times	: 19:35	22:57	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.396	0.373	-	5.8	20	162	0
1,4-Dioxane	0.0011	0.00125	-	-13.6	20	213	0
cis-1,3-Dichloropropene	0.43	0.393	-	8.6	20	162	0
Chlorobenzene-d5	1	1	-	0	20	183	0
Toluene-d8	1.396	1.359	-	2.7	20	178	0
Toluene	0.825	0.789	-	4.4	20	173	0
4-Methyl-2-pentanone	0.129	0.1	-	22.5*	20	132	0
Tetrachloroethene	0.36	0.362	-	-0.6	20	180	0
trans-1,3-Dichloropropene	0.576	0.507	-	12	20	158	0
Ethyl methacrylate	0.38	0.294	-	22.6* NA	20	142	0
1,1,2-Trichloroethane	0.245	0.21	-	14.3	20	150	0
Chlorodibromomethane	0.364	0.348	-	4.4	20	173	0
1,3-Dichloropropane	0.522	0.443	-	15.1	20	153	0
1,2-Dibromoethane	0.27	0.245	-	9.3	20	160	0
2-Hexanone	0.232	0.167	-	28*	20	128	0
Chlorobenzene	0.881	0.872	-	1	20	178	0
Ethylbenzene	1.646	1.595	-	3.1	20	170	0
1,1,1,2-Tetrachloroethane	0.363	0.376	-	-3.6	20	186	0
p/m Xylene	0.62	0.581	-	6.3	20	164	0
o Xylene	0.59	0.564	-	4.4	20	170	0
Styrene	0.997	0.94	-	5.7	20	167	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	182	0
Bromoform	0.434	0.408	-	6	20	173	0
Isopropylbenzene	2.983	2.803	-	6	20	164	0
4-Bromofluorobenzene	1.011	0.967	-	4.4	20	175	0
Bromobenzene	0.726	0.711	-	2.1	20	177	0
n-Propylbenzene	3.497	3.429	-	1.9	20	175	0
1,4-Dichlorobutane	1.237	1.009	-	18.4	20	145	0
1,1,2,2-Tetrachloroethane	0.623	0.523	-	16.1	20	151	0
4-Ethyltoluene	2.899	2.789	-	3.8	20	175	0
2-Chlorotoluene	2.468	2.405	-	2.6	20	173	0
1,3,5-Trimethylbenzene	2.625	2.5	-	4.8	20	169	0
1,2,3-Trichloropropane	0.564	0.448	-	20.6* NA	20	143	0
trans-1,4-Dichloro-2-buten	0.245	0.208	-	15.1	20	147	0
4-Chlorotoluene	2.215	2.21	-	0.2	20	177	0
tert-Butylbenzene	2.456	2.083	-	15.2	20	150	0
1,2,4-Trimethylbenzene	2.647	2.498	-	5.6	20	167	0
sec-Butylbenzene	2.977	2.875	-	3.4	20	169	0
p-Isopropyltoluene	2.654	2.683	-	-1.1	20	179	0
1,3-Dichlorobenzene	1.352	1.419	-	-5	20	190	0
1,4-Dichlorobenzene	1.376	1.393	-	-1.2	20	182	0
p-Diethylbenzene	1.563	1.567	-	-0.3	20	190	0
n-Butylbenzene	2.517	2.594	-	-3.1	20	184	0
1,2-Dichlorobenzene	1.269	1.281	-	-0.9	20	180	0
1,2,4,5-Tetramethylbenzene	2.615	2.499	-	4.4	20	181	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Sterling Environmental Eng	**Lab Number**	: L1842663	
Project Name	: WAVERLY	**Project Number**	: 28012	
Instrument ID	: VOA108	**Calibration Date**	: 10/24/18 07:18	
Lab File ID	: V08181024A02	**Init. Calib. Date(s)**	: 10/14/18	10/14/18
Sample No	: WG1171951-2	**Init. Calib. Times**	: 19:35	22:57
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	0.111	0.086	-	22.5*	20	147	0
1,3,5-Trichlorobenzene	1.052	1.116	-	-6.1	20	200	0
Hexachlorobutadiene	0.496	0.562	-	-13.3	20	212	0
1,2,4-Trichlorobenzene	0.995	1.004	-	-0.9	20	194	0
Naphthalene	2.026	1.69	-	16.6	20	153	0
1,2,3-Trichlorobenzene	0.903	0.888	-	1.7	20	181	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Sterling Environmental Eng	Lab Number	: L1842663		
Project Name	: WAVERLY	Project Number	: 28012		
Instrument ID	: VOA108	Calibration Date	: 10/25/18 08:59		
Lab File ID	: V08181025A02	Init. Calib. Date(s)	: 10/14/18	10/14/18	
Sample No	: WG1172387-2	Init. Calib. Times	: 19:35	22:57	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	146	0
Dichlorodifluoromethane	0.275	0.29	-	-5.5	20	155	0
Chloromethane	0.367	0.366	-	0.3	20	141	0
Vinyl chloride	10	8.353	-	16.5	20	131	0
Bromomethane	0.184	0.167	-	9.2	20	118	0
Chloroethane	0.15	0.15	-	0	20	135	0
Trichlorofluoromethane	10	10.685	-	-6.9	20	157	0
Ethyl ether	0.111	0.108	-	2.7	20	133	0
1,1-Dichloroethene	0.179	0.179	-	0	20	135	0
Carbon disulfide	0.552	0.543	-	1.6	20	140	0
Freon-113	10	9.487	-	5.1	20	145	0
Acrolein	0.03	0.027	-	10	20	143	0
Methylene chloride	0.238	0.211	-	11.3	20	128	0
Acetone	10	9.155	-	8.5	20	125	0
trans-1,2-Dichloroethene	0.212	0.22	-	-3.8	20	143	0
Methyl acetate	0.19	0.154	-	18.9	20	115	0
Methyl tert-butyl ether	0.678	0.612	-	9.7	20	127	0
tert-Butyl alcohol	0.022	0.02	-	9.1	20	133	0
Diisopropyl ether	1.034	0.938	-	9.3	20	127	0
1,1-Dichloroethane	0.517	0.494	-	4.4	20	134	0
Halothane	0.169	0.167	-	1.2	20	151	0
Acrylonitrile	0.092	0.077	-	16.3	20	121	0
Ethyl tert-butyl ether	0.999	0.901	-	9.8	20	130	0
Vinyl acetate	0.565	0.515	-	8.8	20	125	0
cis-1,2-Dichloroethene	0.24	0.247	-	-2.9	20	149	-.01
2,2-Dichloropropane	0.417	0.435	-	-4.3	20	146	0
Bromochloromethane	0.109	0.122	-	-11.9	20	159	0
Cyclohexane	10	8.848	-	11.5	20	133	0
Chloroform	0.488	0.499	-	-2.3	20	141	0
Ethyl acetate	0.24	0.207	-	13.8	20	127	0
Carbon tetrachloride	0.393	0.46	-	-17	20	157	0
Tetrahydrofuran	0.087	0.067	-	23* MA	20	106	-.01
Dibromofluoromethane	0.276	0.289	-	-4.7	20	149	0
1,1,1-Trichloroethane	0.457	0.503	-	-10.1	20	149	0
2-Butanone	0.112	0.092	-	17.9	20	117	0
1,1-Dichloropropene	0.34	0.333	-	2.1	20	136	0
Benzene	0.952	0.899	-	5.6	20	133	0
tert-Amyl methyl ether	0.721	0.632	-	12.3	20	126	0
1,2-Dichloroethane-d4	0.423	0.401	-	5.2	20	131	0
1,2-Dichloroethane	0.46	0.469	-	-2	20	140	0
Methyl cyclohexane	10	9.5	-	5	20	148	0
Trichloroethene	0.25	0.267	-	-6.8	20	150	0
Dibromomethane	0.153	0.158	-	-3.3	20	144	0
1,2-Dichloropropane	0.301	0.27	-	10.3	20	129	0
2-Chloroethyl vinyl ether	0.16	0.114	-	28.7* MA	20	101	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Sterling Environmental Eng		Lab Number	: L1842663	
Project Name	: WAVERLY		Project Number	: 28012	
Instrument ID	: VOA108		Calibration Date	: 10/25/18 08:59	
Lab File ID	: V08181025A02		Init. Calib. Date(s)	: 10/14/18	10/14/18
Sample No	: WG1172387-2		Init. Calib. Times	: 19:35	22:57
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.396	0.392	-	1	20	137	0
1,4-Dioxane	0.0011	0.00142	-	-29.1*	20	195	0
cis-1,3-Dichloropropene	0.43	0.403	-	6.3	20	134	0
Chlorobenzene-d5	1	1	-	0	20	151	0
Toluene-d8	1.396	1.331	-	4.7	20	144	0
Toluene	0.825	0.826	-	-0.1	20	149	0
4-Methyl-2-pentanone	0.129	0.099	-	23.3*	20	109	0
Tetrachloroethene	0.36	0.369	-	-2.5	20	152	0
trans-1,3-Dichloropropene	0.576	0.517	-	10.2	20	133	0
Ethyl methacrylate	0.38	0.293	-	22.9* NA	20	117	0
1,1,2-Trichloroethane	0.245	0.212	-	13.5	20	125	0
Chlorodibromomethane	0.364	0.376	-	-3.3	20	154	0
1,3-Dichloropropane	0.522	0.455	-	12.8	20	130	0
1,2-Dibromoethane	0.27	0.255	-	5.6	20	138	0
2-Hexanone	0.232	0.174	-	25*	20	110	0
Chlorobenzene	0.881	0.9	-	-2.2	20	152	0
Ethylbenzene	1.646	1.638	-	0.5	20	144	0
1,1,1,2-Tetrachloroethane	0.363	0.394	-	-8.5	20	161	0
p/m Xylene	0.62	0.62	-	0	20	145	0
o Xylene	0.59	0.573	-	2.9	20	143	0
Styrene	0.997	0.976	-	2.1	20	143	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	157	0
Bromoform	0.434	0.433	-	0.2	20	159	0
Isopropylbenzene	2.983	2.896	-	2.9	20	147	0
4-Bromofluorobenzene	1.011	0.931	-	7.9	20	146	0
Bromobenzene	0.726	0.743	-	-2.3	20	160	0
n-Propylbenzene	3.497	3.459	-	1.1	20	152	0
1,4-Dichlorobutane	1.237	1.05	-	15.1	20	131	0
1,1,2,2-Tetrachloroethane	0.623	0.503	-	19.3	20	125	0
4-Ethyltoluene	2.899	2.835	-	2.2	20	153	0
2-Chlorotoluene	2.468	2.45	-	0.7	20	152	0
1,3,5-Trimethylbenzene	2.625	2.548	-	2.9	20	148	0
1,2,3-Trichloropropane	0.564	0.478	-	15.2	20	131	0
trans-1,4-Dichloro-2-buten	0.245	0.208	-	15.1	20	127	0
4-Chlorotoluene	2.215	2.223	-	-0.4	20	154	0
tert-Butylbenzene	2.456	2.141	-	12.8	20	133	0
1,2,4-Trimethylbenzene	2.647	2.528	-	4.5	20	146	0
sec-Butylbenzene	2.977	2.862	-	3.9	20	146	0
p-Isopropyltoluene	2.654	2.713	-	-2.2	20	156	0
1,3-Dichlorobenzene	1.352	1.42	-	-5	20	165	0
1,4-Dichlorobenzene	1.376	1.414	-	-2.8	20	160	0
p-Diethylbenzene	1.563	1.587	-	-1.5	20	166	0
n-Butylbenzene	2.517	2.603	-	-3.4	20	160	0
1,2-Dichlorobenzene	1.269	1.321	-	-4.1	20	160	0
1,2,4,5-Tetramethylbenzene	2.615	2.571	-	1.7	20	161	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Sterling Environmental Eng		**Lab Number**	: L1842663	
Project Name	: WAVERLY		**Project Number**	: 28012	
Instrument ID	: VOA108		**Calibration Date**	: 10/25/18 08:59	
Lab File ID	: V08181025A02		**Init. Calib. Date(s)**	: 10/14/18	10/14/18
Sample No	: WG1172387-2		**Init. Calib. Times**	: 19:35	22:57
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	0.111	0.092	-	17.1	20	135	0
1,3,5-Trichlorobenzene	1.052	1.149	-	-9.2	20	178	0
Hexachlorobutadiene	0.496	0.59	-	-19	20	192	0
1,2,4-Trichlorobenzene	0.995	1.032	-	-3.7	20	172	0
Naphthalene	2.026	1.731	-	14.6	20	135	0
1,2,3-Trichlorobenzene	0.903	0.913	-	-1.1	20	161	0

* Value outside of QC limits.

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-01	Date Collected	: 10/18/18 10:20
Client ID	: OSMW-4	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 10:18
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A10	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	0.25	0.50	0.18	J
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	1.5	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	0.54	1.0	0.07	J
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	1.3	2.5	0.70	J
79-01-6	Trichloroethene	0.48	0.50	0.18	J

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-01	Date Collected	: 10/18/18 10:20
Client ID	: OSMW-4	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 10:18
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A10	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	0.75	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	4.5	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	11	10	0.27	
123-91-1	1,4-Dioxane	ND	250	61.	U
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	4.4	10	0.40	J

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-02	Date Collected	: 10/18/18 12:10
Client ID	: GZ-21D	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 09:56
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A09	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U UJ
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	52	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 UJ
71-43-2	Benzene	10	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	12	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
156-60-5	trans-1,2-Dichloroethene	2.4	2.5	0.70	J
79-01-6	Trichloroethene	ND	0.50	0.18	U

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-02	Date Collected	: 10/18/18 12:10
Client ID	: GZ-21D	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 09:56
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A09	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	0.98	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	120	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 UJ
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 UJ
110-82-7	Cyclohexane	1.7	10	0.27	J
123-91-1	1,4-Dioxane	ND	250	61.	U
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-03	Date Collected	: 10/18/18 13:45
Client ID	: GZ-22D	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 10:41
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A11	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	9.6	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	3.5	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	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
156-60-5	trans-1,2-Dichloroethene	11	2.5	0.70	
79-01-6	Trichloroethene	0.52	0.50	0.18	

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-03	Date Collected	: 10/18/18 13:45
Client ID	: GZ-22D	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 10:41
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A11	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
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	7.0	2.5	0.70	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	7.0	2.5	0.70	
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	1.6	10	0.27	J
123-91-1	1,4-Dioxane	ND	250	61.	U
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	1.4	10	0.40	J

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-04D	Date Collected	: 10/18/18 14:30
Client ID	: B6 OWD	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 11:03
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A12	Instrument ID	: VOA108
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	25	7.0	U
75-34-3	1,1-Dichloroethane	ND	25	7.0	U
67-66-3	Chloroform	ND	25	7.0	U
56-23-5	Carbon tetrachloride	ND	5.0	1.3	U
78-87-5	1,2-Dichloropropane	ND	10	1.4	U
124-48-1	Dibromochloromethane	ND	5.0	1.5	U
79-00-5	1,1,2-Trichloroethane	ND	15	5.0	U
127-18-4	Tetrachloroethene	860	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	8.5	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	ND	25	7.0	U
75-27-4	Bromodichloromethane	ND	5.0	1.9	U
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.6	U
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.4	U
75-25-2	Bromoform	ND	20	6.5	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.7	U
71-43-2	Benzene	ND	5.0	1.6	U
108-88-3	Toluene	ND	25	7.0	U
100-41-4	Ethylbenzene	ND	25	7.0	U
74-87-3	Chloromethane	ND	25	7.0	U
74-83-9	Bromomethane	ND	25	7.0	U
75-01-4	Vinyl chloride	ND	10	0.71	U
75-00-3	Chloroethane	ND	25	7.0	U
75-35-4	1,1-Dichloroethene	ND	5.0	1.7	U
156-60-5	trans-1,2-Dichloroethene	16	25	7.0	J
79-01-6	Trichloroethene	1300	5.0	1.8	

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-04D	Date Collected	: 10/18/18 14:30
Client ID	: B6 OWD	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 11:03
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A12	Instrument ID	: VOA108
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
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	360	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
76-13-1	Freon-113	ND	25	7.0	U
108-87-2	Methyl cyclohexane	ND	100	4.0	U

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-05D	Date Collected	: 10/18/18 15:40
Client ID	: OSMW-3	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/25/18 17:15
Sample Matrix	: WATER	Dilution Factor	: 25
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V08181025A24	Instrument ID	: VOA108
Sample Amount	: 0.4 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	62	18.	U
75-34-3	1,1-Dichloroethane	ND	62	18.	U
67-66-3	Chloroform	ND	62	18.	U
56-23-5	Carbon tetrachloride	ND	12	3.4	U
78-87-5	1,2-Dichloropropane	ND	25	3.4	U
124-48-1	Dibromochloromethane	ND	12	3.7	U
79-00-5	1,1,2-Trichloroethane	ND	38	12.	U
127-18-4	Tetrachloroethene	3600	12	4.5	
108-90-7	Chlorobenzene	ND	62	18.	U
75-69-4	Trichlorofluoromethane	ND	62	18.	U
107-06-2	1,2-Dichloroethane	ND	12	3.3	U
71-55-6	1,1,1-Trichloroethane	ND	62	18.	U
75-27-4	Bromodichloromethane	ND	12	4.8	U
10061-02-6	trans-1,3-Dichloropropene	ND	12	4.1	U
10061-01-5	cis-1,3-Dichloropropene	ND	12	3.6	U
75-25-2	Bromoform	ND	50	16.	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	12	4.2	U
71-43-2	Benzene	ND	12	4.0	U
108-88-3	Toluene	ND	62	18.	U
100-41-4	Ethylbenzene	ND	62	18.	U
74-87-3	Chloromethane	ND	62	18.	U
74-83-9	Bromomethane	ND	62	18.	U
75-01-4	Vinyl chloride	8.1	25	1.8	J
75-00-3	Chloroethane	ND	62	18.	U
75-35-4	1,1-Dichloroethene	ND	12	4.2	U
156-60-5	trans-1,2-Dichloroethene	ND	62	18.	U
79-01-6	Trichloroethene	500	12	4.4	

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-05D	Date Collected	: 10/18/18 15:40
Client ID	: OSMW-3	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/25/18 17:15
Sample Matrix	: WATER	Dilution Factor	: 25
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V08181025A24	Instrument ID	: VOA108
Sample Amount	: 0.4 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
95-50-1	1,2-Dichlorobenzene	ND	62	18.	U
541-73-1	1,3-Dichlorobenzene	ND	62	18.	U
106-46-7	1,4-Dichlorobenzene	ND	62	18.	U
1634-04-4	Methyl tert butyl ether	ND	62	18.	U
179601-23-1	p/m-Xylene	ND	62	18.	U
95-47-6	o-Xylene	ND	62	18.	U
156-59-2	cis-1,2-Dichloroethene	200	62	18.	
100-42-5	Styrene	ND	62	18.	U
75-71-8	Dichlorodifluoromethane	ND	120	25.	U
67-64-1	Acetone	ND	120	36.	U
75-15-0	Carbon disulfide	ND	120	25.	U
78-93-3	2-Butanone	ND	120	48.	U
108-10-1	4-Methyl-2-pentanone	ND	120	25.	U
591-78-6	2-Hexanone	ND	120	25.	U
74-97-5	Bromochloromethane	ND	62	18.	U
106-93-4	1,2-Dibromoethane	ND	50	16.	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	62	18.	U
98-82-8	Isopropylbenzene	ND	62	18.	U
87-61-6	1,2,3-Trichlorobenzene	ND	62	18.	U
120-82-1	1,2,4-Trichlorobenzene	ND	62	18.	U
79-20-9	Methyl Acetate	ND	50	5.8	U
110-82-7	Cyclohexane	30	250	6.8	J
123-91-1	1,4-Dioxane	ND	6200	1500	U
76-13-1	Freon-113	ND	62	18.	U
108-87-2	Methyl cyclohexane	ND	250	9.9	U

Form 1
VOA

Client	: Sterling Environmental Eng	**Lab Number**	: L1842663
Project Name	: WAVERLY	**Project Number**	: 28012
Lab ID	: L1842663-06D	**Date Collected**	: 10/18/18 16:30
Client ID	: GZ-23D	**Date Received**	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	**Date Analyzed**	: 10/24/18 11:48
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 1,8260C	**Analyst**	: KJD
Lab File ID	: V08181024A14	**Instrument ID**	: VOA108
Sample Amount	: 2 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	12	3.5	U
75-34-3	1,1-Dichloroethane	ND	12	3.5	U
67-66-3	Chloroform	ND	12	3.5	U
56-23-5	Carbon tetrachloride	ND	2.5	0.67	U
78-87-5	1,2-Dichloropropane	ND	5.0	0.68	U
124-48-1	Dibromochloromethane	ND	2.5	0.74	U
79-00-5	1,1,2-Trichloroethane	ND	7.5	2.5	U
127-18-4	Tetrachloroethene	7.6	2.5	0.90	
108-90-7	Chlorobenzene	ND	12	3.5	U
75-69-4	Trichlorofluoromethane	ND	12	3.5	U
107-06-2	1,2-Dichloroethane	1.6	2.5	0.66	J
71-55-6	1,1,1-Trichloroethane	ND	12	3.5	U
75-27-4	Bromodichloromethane	ND	2.5	0.96	U
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.82	U
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.72	U
75-25-2	Bromoform	ND	10	3.2	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.84	U
71-43-2	Benzene	0.82	2.5	0.80	J
108-88-3	Toluene	ND	12	3.5	U
100-41-4	Ethylbenzene	ND	12	3.5	U
74-87-3	Chloromethane	ND	12	3.5	U
74-83-9	Bromomethane	ND	12	3.5	U
75-01-4	Vinyl chloride	96	5.0	0.36	
75-00-3	Chloroethane	ND	12	3.5	U
75-35-4	1,1-Dichloroethene	ND	2.5	0.84	U
156-60-5	trans-1,2-Dichloroethene	10	12	3.5	J
79-01-6	Trichloroethene	16	2.5	0.88	

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-06D	Date Collected	: 10/18/18 16:30
Client ID	: GZ-23D	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 11:48
Sample Matrix	: WATER	Dilution Factor	: 5
Analytical Method	: 1,8260C	Analyst	: KJD
Lab File ID	: V08181024A14	Instrument ID	: VOA108
Sample Amount	: 2 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
95-50-1	1,2-Dichlorobenzene	ND	12	3.5	U
541-73-1	1,3-Dichlorobenzene	ND	12	3.5	U
106-46-7	1,4-Dichlorobenzene	ND	12	3.5	U
1634-04-4	Methyl tert butyl ether	ND	12	3.5	U
179601-23-1	p/m-Xylene	ND	12	3.5	U
95-47-6	o-Xylene	ND	12	3.5	U
156-59-2	cis-1,2-Dichloroethene	660	12	3.5	
100-42-5	Styrene	ND	12	3.5	U
75-71-8	Dichlorodifluoromethane	ND	25	5.0	U
67-64-1	Acetone	ND	25	7.3	U
75-15-0	Carbon disulfide	ND	25	5.0	U
78-93-3	2-Butanone	ND	25	9.7	U
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	U
591-78-6	2-Hexanone	ND	25	5.0	U
74-97-5	Bromochloromethane	ND	12	3.5	U
106-93-4	1,2-Dibromoethane	ND	10	3.2	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	3.5	U
98-82-8	Isopropylbenzene	ND	12	3.5	U
87-61-6	1,2,3-Trichlorobenzene	ND	12	3.5	U
120-82-1	1,2,4-Trichlorobenzene	ND	12	3.5	U
79-20-9	Methyl Acetate	ND	10	1.2	U
110-82-7	Cyclohexane	ND	50	1.4	U
123-91-1	1,4-Dioxane	ND	1200	300	U
76-13-1	Freon-113	ND	12	3.5	U
108-87-2	Methyl cyclohexane	ND	50	2.0	U

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-07D	Date Collected	: 10/18/18 00:00
Client ID	: DUP101818	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/25/18 17:38
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V08181025A25	Instrument ID	: VOA108
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	25	7.0	U
75-34-3	1,1-Dichloroethane	ND	25	7.0	U
67-66-3	Chloroform	ND	25	7.0	U
56-23-5	Carbon tetrachloride	ND	5.0	1.3	U
78-87-5	1,2-Dichloropropane	ND	10	1.4	U
124-48-1	Dibromochloromethane	ND	5.0	1.5	U
79-00-5	1,1,2-Trichloroethane	ND	15	5.0	U
127-18-4	Tetrachloroethene	950	5.0	1.8	
108-90-7	Chlorobenzene	ND	25	7.0	U
75-69-4	Trichlorofluoromethane	ND	25	7.0	U
107-06-2	1,2-Dichloroethane	9.4	5.0	1.3	
71-55-6	1,1,1-Trichloroethane	ND	25	7.0	U
75-27-4	Bromodichloromethane	ND	5.0	1.9	U
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.6	U
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.4	U
75-25-2	Bromoform	ND	20	6.5	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.7	U
71-43-2	Benzene	ND	5.0	1.6	U
108-88-3	Toluene	ND	25	7.0	U
100-41-4	Ethylbenzene	ND	25	7.0	U
74-87-3	Chloromethane	ND	25	7.0	U
74-83-9	Bromomethane	ND	25	7.0	U
75-01-4	Vinyl chloride	2.1	10	0.71	J
75-00-3	Chloroethane	ND	25	7.0	U
75-35-4	1,1-Dichloroethene	ND	5.0	1.7	U
156-60-5	trans-1,2-Dichloroethene	17	25	7.0	J
79-01-6	Trichloroethene	1400	5.0	1.8	

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-07D	Date Collected	: 10/18/18 00:00
Client ID	: DUP101818	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/25/18 17:38
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V08181025A25	Instrument ID	: VOA108
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
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	380	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
76-13-1	Freon-113	ND	25	7.0	U
108-87-2	Methyl cyclohexane	ND	100	4.0	U

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-08	Date Collected	: 10/18/18 00:00
Client ID	: TB101818	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 09:33
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A08	Instrument ID	: VOA108
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 Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U

Form 1
VOA

Client	: Sterling Environmental Eng	Lab Number	: L1842663
Project Name	: WAVERLY	Project Number	: 28012
Lab ID	: L1842663-08	Date Collected	: 10/18/18 00:00
Client ID	: TB101818	Date Received	: 10/18/18
Sample Location	: 441-442 WAVERLY AVENUE	Date Analyzed	: 10/24/18 09:33
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V08181024A08	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

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