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NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Division of Environmental Remediation

REMEDIAL SYSTEM OPTIMIZATION REPORT - SECOND QUARTER 2018

Vestal Water Supply Site

Vestal, New York (Site No. 7-04-009A)

August 2018

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New York State Department of Environmental Conservation

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1 INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) issued a Work Assignment (# D004443-4) to Arcadis CE, Inc. (Arcadis) for Operation, Maintenance, and Monitoring at the Vestal Water Supply Site (site) in New York State (Site # 7-04-009A) (Figure 1-1).

The NYSDEC is evaluating the efficiency, effectiveness, environmental benefit, and cost of existing environmental remedies by performing a Remedial System Optimization (RSO). The purpose of the RSO is to assess the site's Conceptual Site Model (CSM), provide a summary of the performance of the remedy, document current cleanup practices, provide a summary of progress toward the cleanup goals, and provide recommendations for improvements, if required.

The Well 1-1A groundwater treatment plant was shut down on February 28, 2014 as part of the RSO to evaluate the impacts to groundwater quality while the treatment plant is not operating. In particular, plume migration is being monitored to assess the effects of groundwater withdrawals from the Town of Vestal water supply wells 1-2A and 1-3 on the groundwater plume distribution and migration. In addition, soil and groundwater samples have been collected to further evaluate the horizontal and vertical distribution of VOCs in the area of the site.

This Quarterly Report has been prepared to summarize the April 2018 through June 2018 field activities.

2 INVESTIGATION ACTIVITIES

The scope of work for the RSO was designed to provide data for use in evaluation of the existing remedy and to further characterize the nature and extent of contamination in soil and groundwater at the site. The RSO provides information that is being used to assess the efficiency of the remedy and evaluate potential alternative remedial approaches. These data are summarized in the Final Focused Feasibility Study (FFS), which was submitted to the NYSDEC on September 25, 2015.

The basic scope of work included field oversight of subcontractors (i.e., driller and surveyor), preparation of daily field logs, collection of subsurface and surface soil samples, installation of monitoring wells, monitoring well development and hydraulic conductivity testing, measuring groundwater levels, installation of groundwater level data loggers, shut-down of the Well 1-1A groundwater treatment plant for a period of at least one year, collection of groundwater samples from new and existing wells, evaluation of data, and reporting of conclusions and recommendations.

Currently the investigation includes monthly pre-treatment and post treatment (Well 1-3) sampling for the Town of Vestal water supply wells 1-2A and 1-3 and quarterly groundwater sampling from the new and existing monitoring wells.

2.1 Groundwater Sampling

The quarterly groundwater monitoring is being conducted to evaluate the distribution of the VOC groundwater plume on the north side of NYS Route 17 over time. The sampling includes wells surrounding the Town of Vestal water supply wells 1-2A and 1-3 and Well 1-1 (Figure 2-2). As recommended in the 4th quarter 2016 RSO report, 2nd quarter 2018 groundwater samples were collected from a revised sample list (Table 2-1), which was approved by NYSDEC on January 26, 2017. The revised list includes three additional monitoring wells, 4009-7, 4009-8, and 4009-26. These wells were added to the sample list to evaluate whether the ERT source area is the cause of elevated benzene concentrations noted in the last several sampling events.

Groundwater samples were collected using passive diffusion bags (PDBs) in accordance with the RSO Work Plan. All samples were submitted for analysis of TCL VOCs by USEPA Method 8260 to TestAmerica-Edison following chain-of-custody sample handling procedures. The USEPA ERT monitoring wells on the ECO International property and Well 1-1A are not included on the revised sample list (discussed above) and were not sampled during this event.

2.1.1 Water Level Data

On May 31, 2018 groundwater levels were measured at all wells to be sampled using an electronic water-level meter. As indicated in Section 1, the Well 1-1A treatment plant continues to be shut down, therefore, groundwater levels are representative of static (non-pumping) conditions. Groundwater levels were used to calculate groundwater elevations and assess groundwater flow conditions across the site. A summary of groundwater elevation data is provided in Table 2-2. Groundwater flow in the shallow and intermediate groundwater monitoring zones is generally west to northwest and north to northwest in the deep groundwater monitoring zone toward the Susquehanna River.

2.1.2 June 2018 Groundwater Sampling

Groundwater samples were collected using PDBs that were deployed on May 31, 2018 in the wells identified on Table 2-1. Former treatment system Well 1-1 was also included in accordance with the fourth quarter 2014 RSO Report recommendations and subsequent NYSDEC approval in March 2015, Extraction Well 1-1A was sampled during the baseline event, but since the shutdown of the Well 1-1A treatment facility a sample is not able to be collected from this well.

2.1.2.1 June 2018 Groundwater Sampling Results

Groundwater results from the June 2018 groundwater sampling event are provided in Table 2-3. The VOCs measured at the highest concentrations were benzene, 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), and vinyl chloride (VC). VOC concentrations measured at the shallow, intermediate, and deep groundwater monitoring zones, during the June groundwater sampling event are presented on Figures 2-2, 2-3, and 2-4, respectively.

As shown in Table 2-3, VOCs were not detected in the shallow groundwater zone monitoring wells 4009-11 and 4009-30A. 1,1,1-TCA (4009-10) and benzene (4009-13A, 4009-16A) were the only VOCs detected in the shallow monitoring wells and were estimated at low concentrations less than their respective NYSDEC Class GA standard. Monitoring wells 4009-7 (45.6 µg/L) and 4009-9 (8.77 µg/L) were the only two wells screened in the shallow groundwater zone in which VOCs were detected above their respective NYSDEC Class GA standard during the June 2018 sampling event. 1,1-DCE, 1,1-DCA, trans-1,2-dichloroethene, and TCE were detected at low estimated concentrations less than their respective NYSDEC Class GA Groundwater standard (5 µg/L) in monitoring well 4009-7 and cis-1,2-DCE and VC were detected at concentrations greater than their respective standards (5 µg/L and 2 µg/L respectively). Cis-1,2-DCE was the only analyte detected in 4009-9 that exceeded its respective NYSDEC Class GA Groundwater standard (5 µg/L). TCE and VC were also detected in the groundwater sample from well 4009-9 at low estimated concentrations less than their respective NYSDEC Class GA Groundwater standard. As shown in Figure 2-2, VOCs have not been detected at concentrations greater than NYSDEC Class GA Groundwater Standard in samples from monitoring wells 4009-10, 4009-11A, 4009-13A, 4009-16A, and 4009-30A in the past five sampling events. The concentrations detailed above in 4009-7 and 4009-9 have generally been consistent the past six sampling events, showing slight fluctuations (Figure 2-2).

As shown in Figure 2-3 and Table 2-3, the highest concentrations of VOCs are in the intermediate groundwater zone, down-gradient of the source area (ECO International property). The highest total VOC concentrations in groundwater samples collected during the June 2018 sampling event were from Wells 4009-8 (1,414 µg/L) and 4009-29I (1,246 µg/L). Well 4009-8 is located on the south side of NYS Route 17, just west of the source property. Well 4009-29I is on the north side of NYS Route 17, farther downgradient of the source area where higher concentrations are typically reported for the intermediate groundwater zone. With the exception of monitoring well 4009-27I, 1,1,1-TCA, cis-1,2-DCE, and TCE were detected at concentrations greater than their respective NYSDEC Class GA Groundwater Standard in the remaining five intermediate groundwater zone monitoring wells. 1,1-DCE, 1,1-DCA, and VC were detected in four of the remaining intermediate wells, all with concentrations exceeding their respective NYSDEC Class GA Groundwater Standard. Monitoring well 4009-27I (2.43 µg/L) contained the lowest

total VOC concentration in the intermediate groundwater zone with low, estimated concentrations of 1,1,1-TCA and 1,1,2-trichloro-1,2,2-trifluoroethane and a low concentration of TCE. As shown on Figure 2-3, the majority of the detected analytes in monitoring wells 4009-27S, 4009-27I, and 4009-29I are showing consistent or slightly decreasing concentrations over the past six events. VOC concentrations in monitoring wells 4009-8, 4009-26, and 4009-29S continue to fluctuate and concentration trends will continue to be monitored during the next quarter.

The following nine monitoring wells screened in the deep groundwater monitoring zone contained concentrations of VOCs that exceeded NYSDEC Class GA Groundwater Standards; 4009-11, 4009-12, 4009-14, 4009-15, 4009-16, 4009-21, 4009-29D, 4009-30, and Well 1-1 (Figure 2-4 and Table 2-3). Benzene (discussed below) was the only VOC detected in five of the nine monitoring wells listed above at concentrations exceeding the NYSDEC Class GA Groundwater Standard of 1.0 µg/L ranging from 4.1 µg/L (4009-30) to 11 µg/L (4009-14 and 4009-21). The total VOCs measured in the remaining four deep monitoring wells where concentrations exceeded the NYSDEC Class GA Groundwater Standards is as follows; 4009-11 (138 µg/L), 4009-12, (14.6 µg/L), 4009-29D (114 µg/L), and Well 1-1 (315 µg/L). 1,1,1-TCA, 1,1-DCE, 1,1-DCA, cis-1,2-DCE, and VC were detected at concentrations greater than their respective NYSDEC Class GA Groundwater Standards in at least three of the remaining four monitoring wells and TCE was detected above its respective NYSDEC Class GA Groundwater Standard in two of the four remaining wells (Figure 2-4). VOCs were not detected in the deep groundwater zone monitoring wells 4009-13 and 4009-27D and only low estimated VOCs were detected below their respective NYSDEC Class GA Groundwater standard in monitoring wells 4009-18, 4009-19, 4009-22, and 4009-28 during the June 2018 sampling event (Table 2-3). As shown in Figure 2-4 there have been no VOC exceedances in samples from monitoring wells 4009-13, 4009-18, 4009-19, and 4009-27D for the past six events.

Quarterly groundwater monitoring data continue to indicate that there is little change in the shallow, intermediate, and deep groundwater plume distribution and migration since the shutdown of the Well 1-1A groundwater treatment plant. Total VOCs detected in the groundwater samples collected in the June 2018 sampling event are generally consistent with the range of results reported during the last six events with the exception of six wells: 4009-8, 4009-11, 4009-12, 4009-26, 4009-29S, and 4009-29D. VOC concentrations in 4009-8, 4009-11, 4009-12, 4009-29S, and 4009-29D continue to fluctuate. As shown on Figure 2-3 monitoring well 4009-26 has shown a slight increase in several analytes in the past six events, but these noted increases and fluctuations in VOC concentrations from all six wells are generally in historical range. (Table 2-3).

Concentrations of VOCs in samples from the monitoring wells in the vicinity of the Town of Vestal's water supply wells 1-2A and 1-3 (monitoring wells 4009-16/16A, 4009-18, 4009-19, 4009-21, 4009-30/30A) are generally consistent with the previous sampling events. VOCs were not detected at concentrations greater than their NYSDEC Class GA Groundwater standards in monitoring wells 4009-16A, 4009-18, 4009-19, and 4009-30A. Benzene was the only VOC detected at a concentration exceeding its respective standard (1 µg/L) in wells 4009-16 (5.7 µg/L), 4009-21 (11 µg/L), and 4009-30 (4.1 µg/L). Concentration trends will continue to be monitored during the next quarter.

Benzene concentrations have increased in the central portion of the study area over the past several years in the samples from monitoring wells, 4009-14, 4009-15, 4009-16, and 4009-21 and concentrations continue to fluctuate in 4009-11 and 4009-12. Benzene was not detected at concentrations greater than

the NYSDEC Class GA Groundwater Standard in the samples collected from the shallow and intermediate zones during the June 2018 sampling event. Benzene concentrations in the samples collected from deep monitoring wells 4009-12 (1.7 µg/L), 4009-14 (11 µg/L), 4009-15 (9.0 µg/L), 4009-16 (5.7 µg/L), 4009-21 (11 µg/L) and 4009-30 (4.1 µg/L), exceeded the NYSDEC Class GA Groundwater Standard of 1.0 µg/L during the June 2018 sampling event. As shown in Table 2-3, these concentrations are similar to previous sampling results. As noted previously, three monitoring wells were added to the first quarter 2017 sampling list in an attempt to identify the source of the benzene increases. However, benzene was not detected at concentrations greater than the NYSDEC Class GA standard in the samples from monitoring wells 4009-7, 4009-8, or 4009-26 during the 2017 and 2018 sampling events. Benzene concentrations will continue to be monitored during the next quarter.

2.1.3 Town of Vestal Municipal Well Sampling

Monthly analytical data are provided by the Town of Vestal Water Superintendent for Well 1-2A and 1-3. Samples were collected on April 6, 2018, May 21, 2018, and June 19, 2018. Pre-treatment groundwater samples were also collected by Arcadis from the Town of Vestal water supply wells 1-2A and 1-3 on April 24, 2018, May 7, 2018, and June 14, 2018. Post-treatment samples were also collected from Well 1-3 on May 7, and June 14, 2018. These samples were used to supplement the Town's monthly influent sampling data and to evaluate potential impacts to the Town's water supply wells related to the shutdown of the Well 1-1A treatment plant. Samples were collected in consultation with the Town of Vestal Water District Superintendent and submitted to TestAmerica for analysis of VOCs by USEPA Method 8260.

Until April 2018, VOCs associated with contamination from the source area had not been detected in any of the pre-treatment effluent samples collected from the Town of Vestal water supply wells 1-2A and 1-3 since the RSO evaluation has been implemented through 2017. In April 2018, 1,1,1-TCA was detected at an estimated concentration of 0.29J ug/L in Well 1-3 pretreatment sample. The NYSDEC Class GA Groundwater Standard for this compound is 5 ug/L. As part of the RSO contingency plan, Arcadis promptly collected the May 2018 pre and post treatment samples from Well 1-3 and submitted for analysis with a 48-hour turn-around time to confirm that the impacts to the Town water supply are being properly mitigated by their air stripper. A post-treatment sample was not collected from Well 1-2A during the May 2018 sampling event as the pre-treatment sample was non-detect for VOCs in April 2018. The pre-treatment sample for Well 1-2A and the post-treatment sample for Well 1-3 were both non-detect during the May 2018 sampling event; however, a low estimated concentration of 1,1,1-TCA (0.26 J ug/L) was again detected in the pre-treatment sample from Well 1-3. VOCs were not detected in any of the June 2018 samples collected from Well 1-2A, Well 1-3, and Well-1-3 post treatment. The monthly analytical data provided by the Town of Vestal Water Superintendent for Well 1-2A and 1-3 were non-detect during all three months of this reporting period (April, May, June). Based on these data, the Town of Vestal air stripper is effective at removing the low concentrations of VOCs detected in the pretreatment samples. As approved by the NYSDEC (May 24, 2018 via email), Arcadis will continue with routine monthly sampling of the pre-treatment (Well 1-2A, 1-3) and post-treatment of Well 1-3. A summary of the monthly analytical data is provided in Table 2-4. Laboratory analytical reporting forms are provided in Appendix A.

3 RECOMMENDATIONS

Town of Vestal Wells 1-2A and 1-3 (pre-and post-treatment) should continue to be sampled on a monthly basis to supplement the Town's sampling program at least until the final remedies for OU1 and OU2 are implemented. In addition, quarterly groundwater monitoring should continue while Well 1-1A treatment plant is shut down. It is recommended that the monitoring program continue to include sampling of the locations listed in the most recently revised sample list.

4 ACTIVITIES FOR NEXT QUARTER

Scheduled activities for the next quarter are summarized below.

- Monthly sampling at Town of Vestal Wells 1-2A and 1-3 (pre and post treatment).
- Quarterly groundwater sampling (September 2018).

TABLES

Table 2-1 Summary of the Groundwater Monitoring Locatons
Remedial Site Optimization Report
Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

WELL I.D.	2018 Quarterly Monitoring Locatons
4009-7	x
4009-8	x
4009-9	x
4009-10	x
4009-11	x
4009-11A	x
4009-12	x
4009-13	x
4009-13A	x
4009-14	x
4009-15	x
4009-16	x
4009-16A	x
4009-18	x
4009-19	x
4009-21	x
4009-22	x
4009-26	x
4009-27S	x
4009-27I	x
4009-27D	x
4009-28	x
4009-29S	x
4009-29I	x
4009-29D	x
4009-30	x
4009-30A	x
WELL 1-1	x

Table 2-2 Summary of Groundwater Elevation Data
Remedial Site Optimization Report / Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

ARCADIS Design & Consultancy for natural and built assets

WELL I.D.	Top of Riser (ft AMSL)	2/19/2014			3/17/2014			5/12/2014			8/11/2014			11/24/2014		
		DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)
4009-7	824.27	18.76	NP	805.51	16.28	NP	807.99	16.91	NP	807.36	20.22	NP	804.05	19.34	NP	804.93
4009-8	824.52	19.69	NP	804.83	13.28	NP	811.24	17.60	NP	806.92	20.96	NP	803.56	20.24	NP	804.28
4009-9	825.05	20.36	NP	804.69	18.00	NP	807.05	18.82	NP	806.23	21.84	NP	803.21	21.28	NP	803.77
4009-10	831.31	26.44	NP	804.87	24.28	NP	807.03	24.95	NP	806.36	27.88	NP	803.43	27.43	NP	803.88
4009-11	830.06	26.95	NP	803.11	23.75	NP	806.31	24.89	NP	805.17	28.36	NP	801.70	26.51	NP	803.55
4009-11A	830.80	15.22	NP	815.58	14.78	NP	816.02	14.56	NP	816.24	16.69	NP	814.11	20.43	NP	810.37
4009-12	823.34	18.80	NP	804.54	16.68	NP	806.66	17.52	NP	805.82	20.90	NP	802.44	19.22	NP	804.12
4009-13	816.28	12.31	NP	803.97	8.97	NP	807.31	10.42	NP	805.86	13.60	NP	802.68	12.07	NP	804.21
4009-13A	816.17	11.74	NP	804.43	8.72	NP	807.45	9.94	NP	806.23	13.00	NP	803.17	11.93	NP	804.24
4009-14	820.71	16.62	NP	804.09	13.43	NP	807.28	15.36	NP	805.35	18.07	NP	802.64	16.57	NP	804.14
4009-15	826.54	22.63	NP	803.91	19.35	NP	807.19	11.93	NP	814.61	24.18	NP	802.36	22.53	NP	804.01
4009-16	826.72	22.68	NP	804.04	19.50	NP	807.22	21.12	NP	805.60	24.30	NP	802.42	22.70	NP	804.02
4009-16A	826.84	22.45	NP	804.39	19.45	NP	807.39	21.22	NP	805.62	24.31	NP	802.53	22.72	NP	804.12
4009-18	834.78	30.59	NP	804.19	27.61	NP	807.17	29.38	NP	805.40	32.23	NP	802.55	30.73	NP	804.05
4009-19	824.94	20.79	NP	804.15	17.78	NP	807.16	19.54	NP	805.40	22.42	NP	802.52	20.91	NP	804.03
4009-21	825.02 **	18.90	NP	804.20	15.90	NP	807.20	17.65	NP	805.45	20.55	NP	802.55	19.03	NP	804.07
4009-22	817.40	13.06	NP	804.34	9.85	NP	807.55	11.50	NP	805.90	14.03	NP	803.37	13.27	NP	804.13
4009-26	824.31	19.36	NP	804.95	16.55	NP	807.76	17.39	NP	806.92	20.62	NP	803.69	19.92	NP	804.39
4009-27S	826.19	21.97	NP	804.22	18.80	NP	807.39	20.02	NP	806.17	23.29	NP	802.90	22.02	NP	804.17
4009-27I	826.03	21.93	NP	804.10	18.63	NP	807.40	19.98	NP	806.05	23.18	NP	802.85	21.85	NP	804.18
4009-27D	825.87	21.90	NP	803.97	18.43	NP	807.44	19.88	NP	805.99	23.02	NP	802.85	21.65	NP	804.22
4009-28	821.59	17.71	NP	803.88	14.45	NP	807.14	16.00	NP	805.59	19.23	NP	802.36	17.65	NP	803.94
4009-29S	825.77	21.75	NP	804.02	18.42	NP	807.35	19.75	NP	806.02	23.03	NP	802.74	21.60	NP	804.17
4009-29I	825.68	21.94	NP	803.74	18.51	NP	807.17	19.86	NP	805.82	23.22	NP	802.46	21.61	NP	804.07
4009-29D	825.67	21.92	NP	803.75	18.54	NP	807.13	19.80	NP	805.87	23.18	NP	802.49	21.60	NP	804.07
4009-30	827.50 **	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
4009-30A	826.69 **	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

Notes
fbgs - feet below ground surface
famsl - feet above mean sea level

* - Elevation data from Conceptual Site Model (Lockheed Martin, 2012).

** - Elevation data remeasured on 4/1/15 after well repairs.
NM - Not measured
NP - No product / LNAPL
Starting in 2018, only wells that are sampled will be gauged.

Corrected based on assumed LNAPL density of 0.85 g/cm3.

Table 2-2 Summary of Groundwater Elevation Data
Remedial Site Optimization Report / Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

ARCADIS Design & Consultancy for natural and built assets

WELL I.D.	Top of Riser (ft AMSL)	4/1/2015			7/13/2015			10/12/2015			3/28/2016			6/1/2016		
		DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)
4009-7	824.27	17.74	NP	806.53	16.53	NP	807.74	21.17	NP	803.10	18.35	NP	805.92	19.69	NP	804.58
4009-8	824.52	18.26	NP	806.26	17.05	NP	807.47	22.03	NP	802.49	18.97	NP	805.55	20.46	NP	804.06
4009-9	825.05	19.23	NP	805.82	18.02	NP	807.03	22.83	NP	802.22	19.84	NP	805.21	21.43	NP	803.62
4009-10	831.31	25.48	NP	805.83	24.16	NP	807.15	28.84	NP	802.47	20.95	NP	810.36	27.44	NP	803.87
4009-11	830.06	24.89	NP	805.17	24.72	NP	805.34	28.80	NP	801.26	26.25	NP	803.81	27.69	NP	802.37
4009-11A	830.80	14.94	NP	815.86	14.77	NP	816.03	16.97	NP	813.83	16.05	NP	814.75	16.60	NP	814.20
4009-12	823.34	17.45	NP	805.89	17.34	NP	806.00	21.56	NP	801.78	18.9	NP	804.44	20.26	NP	803.08
4009-13	816.28	10.37	NP	805.91	10.09	NP	806.19	14.29	NP	801.99	11.68	NP	804.60	12.98	NP	803.30
4009-13A	816.17	10.09	NP	806.08	9.38	NP	806.79	13.97	NP	802.20	11.12	NP	805.05	12.51	NP	803.66
4009-14	820.71	14.80	NP	805.91	14.66	NP	806.05	18.73	NP	801.98	16.23	NP	804.48	17.47	NP	803.24
4009-15	826.54	20.76	NP	805.78	20.85	NP	805.69	24.79	NP	801.75	22.21	NP	804.33	23.48	NP	803.06
4009-16	826.72	20.93	NP	805.79	26.87	NP	799.85	25.01	NP	801.71	22.38	NP	804.34	23.62	NP	803.10
4009-16A	826.84	20.94	NP	805.90	27.03	NP	799.81	25.18	NP	801.66	22.51	NP	804.33	23.49	NP	803.35
4009-18	834.78	26.51	NP	808.27	29.02	NP	805.76	33.04	NP	801.74	30.65	NP	804.13	31.59	NP	803.19
4009-19	824.94	19.15	NP	805.79	19.19	NP	805.75	23.31	NP	801.63	20.99	NP	803.95	21.78	NP	803.16
4009-21	825.02 **	19.33	NP	805.69	19.41	NP	805.61	23.98	NP	801.04	22.03	NP	802.99	21.98	NP	803.04
4009-22	817.40	11.55	NP	805.85	9.90	NP	807.50	13.28	NP	804.12	11.42	NP	805.98	11.95	NP	805.45
4009-26	824.31	17.94	NP	806.37	16.75	NP	807.56	21.69	NP	802.62	18.68	NP	805.63	20.12	NP	804.19
4009-27S	826.19	20.27	NP	805.92	19.56	NP	806.63	24.14	NP	802.05	21.30	NP	804.89	22.72	NP	803.47
4009-27I	826.03	20.03	NP	806.00	19.58	NP	806.45	23.98	NP	802.05	21.23	NP	804.80	22.61	NP	803.42
4009-27D	825.87	19.86	NP	806.01	19.41	NP	806.46	23.80	NP	802.07	21.05	NP	804.82	22.42	NP	803.45
4009-28	821.59	15.80	NP	805.79	15.72	NP	805.87	19.85	NP	801.74	17.3	NP	804.29	18.58	NP	803.01
4009-29S	825.77	19.80	NP	805.97	19.40	NP	806.37	23.83	NP	801.94	21.11	NP	804.66	22.43	NP	803.34
4009-29I	825.68	19.89	NP	805.79	19.63	NP	806.05	23.91	NP	801.77	21.27	NP	804.41	22.55	NP	803.13
4009-29D	825.67	19.86	NP	805.81	19.81	NP	805.86	23.89	NP	801.78	21.19	NP	804.48	22.55	NP	803.12
4009-30	827.50 **	21.32	NP	806.18	20.81	NP	806.69	25.81	NP	801.69	22.38	NP	805.12	24.26	NP	803.24
4009-30A	826.69 **	20.82	NP	805.87	20.97	NP	805.72	25.12	NP	801.57	22.41	NP	804.28	23.55	NP	803.14

Notes
fbgs - feet below ground surface
famsl - feet above mean sea level

* - Elevation data from Conceptual Site Model (Lockheed Martin, 2012).

** - Elevation data remeasured on 4/1/15 after well repairs.
NM - Not measured
NP - No product / LNAPL
Starting in 2018, only wells that are sampled will be gauged.

Corrected based on assumed LNAPL density of 0.85 g/cm3.

Table 2-2 Summary of Groundwater Elevation Data
Remedial Site Optimization Report / Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

ARCADIS Design & Consultancy for natural and built assets

WELL I.D.	Top of Riser (ft AMSL)	9/15/2016			11/3/2016			4/10/2017			6/6/2017			10/5/2017		
		DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)
4009-7	824.27	21.92	NP	802.35	19.39	NP	804.88	5.33	NP	818.94	16.22	NP	808.05	20.89	NP	803.38
4009-8	824.52	22.74	NP	801.78	19.84	NP	804.68	8.94	NP	815.58	17.04	NP	807.48	21.79	NP	802.73
4009-9	825.05	23.19	NP	801.86	21.28	NP	803.77	8.85	NP	816.20	18.16	NP	806.89	22.79	NP	802.26
4009-10	831.31	29.13	NP	802.18	27.52	NP	803.79	15.13	NP	816.18	24.32	NP	806.99	28.66	NP	802.65
4009-11	830.06	21.10	NP	808.96	26.83	NP	803.23	17.43	NP	812.63	23.93	NP	806.13	29.19	NP	800.87
4009-11A	830.80	20.63	NP	810.17	20.40	NP	810.40	11.4	NP	819.40	13.59	NP	817.21	15.26	NP	815.54
4009-12	823.34	22.51	NP	800.83	19.45	NP	803.89	9.25	NP	814.09	16.16	NP	807.18	21.80	NP	801.54
4009-13	816.28	15.23	NP	801.05	11.80	NP	804.48	2.23	NP	814.05	8.84	NP	807.44	14.44	NP	801.84
4009-13A	816.17	14.73	NP	801.44	12.25	NP	803.92	1.24	NP	814.93	9.02	NP	807.15	13.88	NP	802.29
4009-14	820.71	9.71	NP	811.00	16.68	NP	804.03	6.85	NP	813.86	14.02	NP	806.69	18.94	NP	801.77
4009-15	826.54	25.79	NP	800.75	22.68	NP	803.86	12.59	NP	813.95	19.31	NP	807.23	25.03	NP	801.51
4009-16	826.72	26.08	NP	800.64	22.80	NP	803.92	13.08	NP	813.64	24.04	NP	802.68	25.23	NP	801.49
4009-16A	826.84	26.49	NP	800.35	22.70	NP	804.14	12.85	NP	813.99	19.97	NP	806.87	25.29	NP	801.55
4009-18	834.78	34.24	NP	800.54	30.77	NP	804.01	20.99	NP	813.79	27.95	NP	806.83	33.10	NP	801.68
4009-19	824.94	24.76	NP	800.18	21.00	NP	803.94	11.2	NP	813.74	18.16	NP	806.78	23.33	NP	801.61
4009-21	825.02 **	24.96	NP	800.06	21.17	NP	803.85	11.55	NP	813.47	18.41	NP	806.61	23.46	NP	801.56
4009-22	817.40	13.85	NP	803.55	13.09	NP	804.31	2.21	NP	815.19	9.41	NP	807.99	11.56	NP	805.84
4009-26	824.31	22.39	NP	801.92	19.62	NP	804.69	5.72	NP	818.59	16.85	NP	807.46	21.48	NP	802.83
4009-27S	826.19	24.96	NP	801.23	21.97	NP	804.22	11.31	NP	814.88	18.9	NP	807.29	24.21	NP	801.98
4009-27I	826.03	24.83	NP	801.20	21.87	NP	804.16	11.58	NP	814.45	18.75	NP	807.28	24.10	NP	801.93
4009-27D	825.87	24.65	NP	801.22	21.70	NP	804.17	11.54	NP	814.33	18.52	NP	807.35	23.92	NP	801.95
4009-28	821.59	20.79	NP	800.80	17.78	NP	803.81	7.35	NP	814.24	14.52	NP	807.07	20.13	NP	801.46
4009-29S	825.77	24.71	NP	801.06	21.72	NP	804.05	11.39	NP	814.38	18.51	NP	807.26	23.95	NP	801.82
4009-29I	825.68	24.79	NP	800.89	21.80	NP	803.88	11.44	NP	814.24	18.48	NP	807.20	24.14	NP	801.54
4009-29D	825.67	24.79	NP	800.88	21.75	NP	803.92	12.29	NP	813.38	18.39	NP	807.28	24.08	NP	801.59
4009-30	827.50 **	26.6	NP	800.90	23.32	NP	804.18	12.29	NP	815.21	20.86	NP	806.64	25.98	NP	801.52
4009-30A	826.69 **	26.32	NP	800.37	22.73	NP	803.96	12.83	NP	813.86	19.83	NP	806.86	25.23	NP	801.46

Notes
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** - Elevation data remeasured on 4/1/15 after well repairs.
NM - Not measured
NP - No product / LNAPL
Starting in 2018, only wells that are sampled will be gauged.

Corrected based on assumed LNAPL density of 0.85 g/cm3.

Table 2-2 Summary of Groundwater Elevation Data
Remedial Site Optimization Report / Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

WELL I.D.	Top of Riser (ft AMSL)	12/12/2017			3/16/2018			5/31/2018		
		DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)	DTW (fbgs)	DTP (fbgs)	GW ELEV (famsl)
4009-7	824.27	19.29	NP	804.98	17.27	NP	807.00	17.64	NP	806.63
4009-8	824.52	20.06	NP	804.46	16.81	NP	807.71	18.36	NP	806.16
4009-9	825.05	21.12	NP	803.93	18.09	NP	806.96	19.57	NP	805.48
4009-10	831.31	27.23	NP	804.08	26.41	NP	804.90	25.65	NP	805.66
4009-11	830.06	26.89	NP	803.17	24.55	NP	805.51	26.65	NP	803.41
4009-11A	830.80	17.15	NP	813.65	13.91	NP	816.89	14.54	NP	816.26
4009-12	823.34	19.58	NP	803.76	17.23	NP	806.11	18.57	NP	804.77
4009-13	816.28	12.35	NP	803.93	8.86	NP	807.42	11.44	NP	804.84
4009-13A	816.17	12.02	NP	804.15	9.24	NP	806.93	10.74	NP	805.43
4009-14	820.71	16.82	NP	803.89	14.51	NP	806.20	16.87	NP	803.84
4009-15	826.54	22.81	NP	803.73	20.49	NP	806.05	22.08	NP	804.46
4009-16	826.72	22.94	NP	803.78	20.72	NP	806.00	22.23	NP	804.49
4009-16A	826.84	22.91	NP	803.93	20.84	NP	806.00	21.81	NP	805.03
4009-18	834.78	30.93	NP	803.85	28.89	NP	805.89	30.27	NP	804.51
4009-19	824.94	21.13	NP	803.81	19.05	NP	805.89	20.43	NP	804.51
4009-21	825.02 **	21.3	NP	803.72	19.53	NP	805.49	20.63	NP	804.39
4009-22	817.40	11.78	NP	805.62	9.93	NP	807.47	10.51	NP	806.89
4009-26	824.31	19.73	NP	804.58	16.60	NP	807.71	18.09	NP	806.22
4009-27S	826.19	22.12	NP	804.07	19.46	NP	806.73	20.98	NP	805.21
4009-27I	826.03	22.01	NP	804.02	19.47	NP	806.56	20.96	NP	805.07
4009-27D	825.87	21.84	NP	804.03	19.26	NP	806.61	20.81	NP	805.06
4009-28	821.59	17.92	NP	803.67	15.56	NP	806.03	17.16	NP	804.43
4009-29S	825.77	21.84	NP	803.93	19.32	NP	806.45	20.83	NP	804.94
4009-29I	825.68	21.91	NP	803.77	19.29	NP	806.39	21.04	NP	804.64
4009-29D	825.67	21.89	NP	803.78	19.46	NP	806.21	21.01	NP	804.66
4009-30	827.50 **	23.74	NP	803.76	21.56	NP	805.94	30.02	NP	797.48
4009-30A	826.69 **	23.05	NP	803.64	20.73	NP	805.96	22.16	NP	804.53

Notes
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* - Elevation data from Conceptual Site Model (Lockheed Martin, 2012).

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Starting in 2018, only wells that are sampled will be gauged.

Corrected based on assumed LNAPL density of 0.85 g/cm3.

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-7	4009-7	4009-7	4009-7	4009-7	4009-7	4009-7	4009-7	4009-7	4009-7	4009-7	4009-8	4009-8	4009-8	4009-8	4009-8	4009-8	4009-8	4009-8	4009-8	4009-8
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**790 D**	**1000**	**2900 DJ**	**1500**	**560**	**490**	**2500**	**2100**	**1100**	**800**
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	14	13 J	20 UDJ	17 J	5.1 J	10 U	16	13	40 U	6.7
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 J	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,1-Dichloroethane	5	1.0 J	0.48 J	1.0 UJ	3.3 U	1.1	0.59 J	0.44 J	0.63 J	0.47 J	0.59 J	**40**	**62**	**72 DJ**	**58**	**51**	**45**	**96**	**80**	**51**	**44**
1,1-Dichloroethene	5	1.0 U	0.29 J	1.0 UJ	3.3 U	0.44 J	0.38 J	0.39 J	0.67 J	1.0 U	0.41 J	**31**	**120**	**94 DJ**	**120**	**31**	**80**	**80**	**70**	**47**	**34**
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 UJ	17 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	130 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 UJ	6.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	50 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
2-Butanone (MEK)	50	10 U	1.4 J	10 UJ	33 U	10 U *	10 U	5.0 U	10 U	10 U *	5.0 U	10 U	200 U	200 UDJ	250 U	100 U *	100 U	50 U	100 U	400 U *	10 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 UJ	33 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	100 U	100 UDJ	250 U	50 U	50 U	50 U	50 U	200 U	10 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 UJ	33 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	100 U	100 UDJ	250 U	50 U	50 U	50 U	50 U	200 U	10 U*
Acetone	50*	5.3 J	7.1 J	14 J	33 U	3.4 J	4.7 J	1.4 J	10 U	10 U	5.0 U	9.6 J	200 U	200 UDJ	250 U	100 U	100 U	50 U	100 U	400 U	10 U
Benzene	1	**1.1**	1.0 U	0.41 J	3.3 U	1.0 U	1.0 U	0.28 J	0.43 J	1.0 U	1.0 U	0.67 J	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U*	10 U	10 U	10 U	10 U	40 U	2.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Chloroethane	5	1.0 U	0.3 J	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	20 U	20 UDJ	25 U	**7.8 J**	3.7 J	4.4 J	10 U	40 U	**5.2**
Chloroform	7	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.6 J	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	0.66 J
Chloromethane		1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
cis-1,2-Dichloroethene	5	**20**	**46**	**36 J**	**38**	**42**	**41**	**36**	**53**	**26**	**38**	**440 D**	**310**	**550 DJ**	**490**	**230**	**190**	**500**	**680**	**490**	**320**
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Cyclohexane		1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 UJ	3.3 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 UJ	33 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	50 U	50 UDJ	250 U	25 U	25 U	50 U	10 U	100 U	10 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	**9.1 DJ**	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Styrene	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 UJ	3.3 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	20 U	20 UDJ	25 U	10 U	10 U	3.3 J	10 U	40 U	1.6 J
Toluene	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	0.29 J	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	0.29 J	1.0 U	1.0 U	0.28 J	1.1	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	1.2 J
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 UJ	3.3 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Trichloroethene	5	2.1	4.1	3.3 J	2.7 J	0.93 J	1.2	0.76 J	1.1	1.0 U	0.72 J	**19**	20 U	20 UDJ	**7.1 J**	**150**	**160**	**300**	**300**	**300**	**190**
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	20 U	20 UDJ	25 U	10 U	10 U	10 U	10 U	40 U	2.0 U
Vinyl chloride	2	**2.5**	**3.1**	**3.1 J**	**3.0 J**	**22**	**4.6**	**4.3**	**10**	1.0 U	**5.6**	**44**	**140**	**92 DJ**	**44**	**30**	**15**	**19**	**24**	40 U	**11**
Xylenes, Total		2.0 U	2.0 U	2.0 UJ	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	40 U	40 UDJ	50 U	20 U	20 U	20 U	20 U	80 U	4.0 U
Total VOCs		32.0	62.8	56.8	43.7	69.9	52.5	44.2	65.8	26.5	45.6	1394	1645	3717	2236	1065	984	3519	3267	1988	1414
Total VOCs (w/o Acteone or Methlyene Chloride)		26.7	55.7	42.8	43.7	66.5	47.8	42.8	65.8	26.5	45.6	1384	1645	3717	2236	1065	984	3519	3267	1988	1414

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-9	4009-10	4009-10	4009-10
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014
Groundwater Monitoring Zone	Standard	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.43 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.38 J	1.0 U	0.39 J	1.0 U	1.0 U	1.0 U	1.0 U	0.40 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
2-Butanone (MEK)	50	1.4 J	10 U	10 UJ	10 U	10 U	10.0 U	10.0 U	10.0 U	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U	10 U *	5.0 U	10 U	10 U	10 UJ
2-Hexanone	50*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 UJ
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 UJ
Acetone	50*	12	3.3 J	11 J	10 U	7.1 J	10.0 U	10.0 U	3.5 J	10 U	10 U	10 U	3.5 J	3.1 J	2.2 J	10 U	10 U	5.0 U	10	3.2 J	7.5 J
Benzene	1	1.0 U	1.0 U	**1.3 J**	**1.3**	1.0 U	**3.4**	**2.5**	1.0 U	1.0 U	**3.7**	**1.3**	1.0 U	1.0 U	0.15 J	1.0 U	1.0 U	1.0 U	0.6 J	0.53 J	**2.3 J**
Bromodichloromethane	50	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Bromoform	50*	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Bromomethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Carbon disulfide		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Chlorobenzene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Chloroethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Chloroform	7	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Chloromethane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
cis-1,2-Dichloroethene	5	**6.3**	4.0	**13 J**	**7.0**	1.9	**15**	**21**	4.0	**21**	**22**	**19**	**8.2**	**10**	**21**	**11**	2.6	**8.2**	1.0 U	1.0 U	1.0 UJ
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Cyclohexane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Dibromochloromethane	50	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Ethylbenzene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Methyl Acetate		2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 UJ
Methyl Cyclohexane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Methylene Chloride	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Styrene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Tetrachloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Toluene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0	1.0 U	1.0 UJ
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Trichloroethene	5	0.5 J	0.66 J	0.67 J	0.80 J	0.52 J	0.59 J	0.52 J	0.74 J	0.65 J	0.57 J	0.81 J	0.97 J	1.0 U	1.3	1.0 U	1.0 U	0.32 J	1.0 U	1.0 U	1.0 UJ
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Vinyl chloride	2	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.25 J	1.0 U	1.0 U	1.0 UJ
Xylenes, Total		1.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ
Total VOCs		20.2	7.96	26.0	9.10	9.52	19.0	24.4	8.24	22.0	26.3	21.1	12.7	13.1	25.5	11.0	2.60	8.77	12.6	3.73	9.80
Total VOCs (w/o Acteone or Methlyene Chloride)		8.24	4.66	15.0	9.10	2.42	19.0	24.4	4.74	22.0	26.3	21.1	9.17	10.0	23.3	11.0	2.60	8.77	2.60	0.53	2.30

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-11	4009-11	4009-11	4009-11	4009-11	4009-11
Sampling Date	GA	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015
Groundwater Monitoring Zone	Standard	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	0.32 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.41 J	1.0 U	1.0 U	0.31 J	1.0 U	1.0 U	1.9 J	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U *	10 U	5.0 U	10 U	10 U *	5.0 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2-Hexanone	50*	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U
Acetone	50*	10 U	9.2 J	10 U	10 U	10 U	10 U	10 U	10 U	3.4 J	10 U	3.1 J	10 U	10 U	5.0 U	7.8 J	4.6 J	10 UJ	10 U	6.7 J	10 U
Benzene	1	**26**	1.0 U	**1.8**	0.97 J	1.0 U	**1.9**	0.65 J	**3.4**	1.0 U	1.0 U	0.45 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	**7.8**	**5.6**	**8.4**
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Methyl Acetate		10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0	1.0	1.0
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U
Total VOCs		26.3	9.20	1.80	0.97	0.00	1.90	0.65	3.40	3.40	0.00	3.96	0.00	0.00	0.31	7.80	4.60	1.90	8.80	13.3	9.40
Total VOCs (w/o Acteone or Methlyene Chloride)		26.3	0.00	1.80	0.97	0.00	1.90	0.65	3.40	0.00	0.00	0.86	0.00	0.00	0.31	0.00	0.00	1.90	8.80	6.60	9.40

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-11	4009-11	4009-11	4009-11	4009-11	4009-11	4009-11	4009-11	4009-11	4009-11	4009-11	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A
Sampling Date	GA	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	**79**	1.0 U	**57**	**87**	1.0 U	1.0 U	**170**	**65**	1.0 U	**88**	**68**	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	0.74 J	1.2	1.0 U	1.0 U	2.9	1.4	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	**20**	0.76 J	**13**	**21**	2.1	2.8	**43**	**18**	**2.1**	**24**	**21**	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	**8.7**	1.0 U	3.4	5.4	1.0 U	1.0 U	**27**	5.0	1.0 U	**7.2**	**6.4**	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U*	10 U	5.0 U	10 U	10 U*	5.0 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	10 U	4.4 J	10 U	10 U	10 U	3.7 J	3.6 J	5.0 U	4.5 J	10 U	5.0 U	9.8 J	4.1 J	10 J	10 U	7.6 J	10 U	10 U	4.6 J	3.5 J
Benzene	1	1.0 U	**18**	1.0 U	**1.3**	**16**	**15**	1.0 U	1.0 U	**6.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.5	1.5	1.2	1.8	1.0 U	1.0 U	1.8	0.9 J	1.0 U	1.3	1.2	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	**12**	1.0 U	**8.8**	**15**	1.0 U	1.0 U	**35**	**15**	1.0 U	**23**	**20**	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	0.79 J	1.0 U	1.0 U	0.82 J	0.85 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	0.5 J	1.0 U	1.6	1.1	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	**19**	1.0 U	**14**	**17**	2.0 U	1.1	**37**	**13**	1.0 U	**17**	**19**	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		140	25.5	98.1	150	18.9	23.5	322	119	13.1	162	138	9.80	4.10	10.0	0.00	7.60	0.00	0.00	4.60	3.50
Total VOCs (w/o Acteone or Methlyene Chloride)		140	21.1	98.1	150	18.9	19.8	318	119	8.60	162	138	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Sample ID	4009-11A
Sampling Date	6/30/2016
Groundwater Monitoring Zone	Shallow
Units	ug/L
1,1,1-Trichloroethane	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.0 U
1,1,2-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,2,3-Trimethylbenzene	1.0 U
1,2,4-Trichlorobenzene	1.0 U
1,2,4-Trimethylbenzne	1.0 U
1,2-Dibromo-3-Chloropropane	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	1.0 U
1,2-Dichlorobenzene	1.0 U
1,2-Dichloroethane	1.0 U
1,2-Dichloropropane	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	1.0 U
1,3-Dichlorobenzene	1.0 U
1,4-Dichlorobenzene	1.0 U
2-Butanone (MEK)	10 U
2-Hexanone	5.0 U
4-Methyl-2-pentanone (MIBK)	5.0 U
Acetone	4.6 J
Benzene	1.0 U
Bromodichloromethane	1.0 U
Bromoform	1.0 U
Bromomethane	1.0 U
Carbon disulfide	1.0 U
Carbon tetrachloride	1.0 U
Chlorobenzene	1.0 U
Chloroethane	1.0 U
Chloroform	1.0 U
Chloromethane	1.0 U
cis-1,2-Dichloroethene	1.0 U
cis-1,3-Dichloropropene	1.0 U
Cyclohexane	1.0 U
Dibromochloromethane	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzne (Cumene)	1.0 U
Methyl Acetate	2.5 U
Methyl Cyclohexane	1.0 U
Methylene Chloride	1.0 U
Methyl Tert Butyl Ether	1.0 U
Styrene	1.0 U
Tetrachloroethene	1.0 U
Toluene	1.0 U
trans-1,2-Dichloroethene	1.0 U
trans-1,3-Dichloropropene	1.0 U
Trichloroethene	1.0 U
Trichlorofluoromethane	1.0 U
Vinyl chloride	1.0 U
Xylenes, Total	2.0 U
Total VOCs	3.50
Total VOCs (w/o Acteone or Methlyene Chloride)	0.00

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A	4009-11A	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12
Sampling Date	GA	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017
Groundwater Monitoring Zone	Standard	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**32**	**43**	1.0 U	**290**	1.0 U	**180**	**67**	1.0 U	1.0 U	1.0 U	1.0 U	**100**	**45**
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9 J	1.0 J
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0	**6.5**	1.0 U	**29**	1.8	**25**	**29**	3.1	2.9	2.4	2.9	**18**	**9.2**
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.4	**6.1**	1.0 U	**30**	1.0 U	**20**	**8.5**	1.0 U	1.0 U	1.0 U	1.0 U	3.2	**7.7**
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	110 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	44 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U *	10 U	5.0 U	10 U	10 U *	5.0 U	10 U	10 U	10 U	220 U	10 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U *	20 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	220 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	220 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U
Acetone	50*	10 U	10 U	4.1 J	5.4 J	5.0 U	10 U	10 U	5.0 U	5.8 J	3.8 J	7.0 J	220 U	7.1 J	50 U	10 U	10 U	10 U	10 U	10 U	5.5 J	20 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5**	**1.6**	22 U	**2.7**	**2.9 J**	**2.4**	**6.7**	**7.5**	**8.7**	**9.1**	**3.6**	**2.8**
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U*	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	0.83 J	1.0 U	1.0 U	1.0 U	1.1	1.0 U	2.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**13**	**9.5**	**8.5**	**63**	4.1	**41**	**18**	1.5	1.1	1.0	0.95 J	**11**	**8.7**
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	220 U	2.5 U	13 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	0.50 JB	1.0 U	1.0 U	1.0 U	1.0 U	1.0 J
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8 J	0.74 J	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**17**	**18**	1.0 U	**64**	1.0 U	**39**	**11**	0.77 J	0.81 J	0.55 J	0.60 J	3.0	**10**
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.1**	**3.7**	0.9 J	**30**	**2.3**	**51**	**41**	1.7	1.4	1.1	1.6	**5.7**	**22**
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	44 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U
Total VOCs		0.00	0.00	4.10	5.40	0.00	0.00	0.00	0.00	81.3	93.9	18.7	506	18.0	359	178	14.3	13.7	13.8	15.2	153	107
Total VOCs (w/o Acteone or Methlyene Chloride)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.5	90.1	11.7	506	10.9	359	178	13.8	13.7	13.8	15.2	148	106

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-12	4009-12	4009-12	4009-12	DUP-1	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13	4009-13
Sampling Date	GA	10/23/2017	12/28/2017	3/30/2018	6/14/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/26/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	**330**	**45**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	5.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	**5.6**	**46**	**13**	**6.2**	**5.2**	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	0.53 J	**16**	5.0	0.54 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U	10 UJ	10 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U	10 U*	5.0 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
Acetone	50*	3.3 J	10 U	10 U	5.0 U	5.0 U	8.4 J	3.8 J	10 UJ	10 U	8.9 J	10 U	10 U	10 U	3.5 J	10 U	10 U	10 U	4.2 J	3.4 J	10 U	10 U	5.0 U
Benzene	1	**2.5**	0.51 J	**2.5**	**1.7**	**1.6**	1.0 U	0.42 J	**4.8 J**	**1.0**	0.96 J	**1.7**	**3.2**	**3.2**	**2.4**	**1.9**	**1.9**	0.41 J	1.0 U	0.2 J	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	4.9	0.88 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	2.0	**62**	**15**	2.0	2.0	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		5.0 U	2.5 U	2.5 U	5.0 U	5.0 U	2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	0.26 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.7	2.7 J	0.55 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.9	**69**	**14**	1.6	1.7	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.3	**96**	**38**	**2.6**	2.0	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		17.4	630	133	14.6	12.5	8.40	7.92	7.50	1.55	9.90	1.70	3.20	3.20	5.90	1.90	1.90	0.41	4.20	3.60	0.00	0.00	0.00
Total VOCs (w/o Acteone or Methlyene Chloride)		14.1	630	133	14.6	12.5	0.00	4.12	7.50	1.55	1.00	1.70	3.20	3.20	2.40	1.90	1.90	0.41	0.00	0.20	0.00	0.00	0.00

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A	4009-13A
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/26/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	10 U	10 U*	5.0 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
Acetone	50*	8.4 J	10 U	11 J	10 U	6.8 J	10 U	10 U	10 U	10 U	10 U	10 U	3.0 J	4.1 J	2.6 J	10 U	10 U	5.0 U
Benzene	1	1.0 U	0.58 J	1.0 UJ	0.96 J	1.0 U	1.0 U	0.44 J	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.90 J
Bromodichloromethane	50	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		8.40	0.58	11.0	0.96	6.80	0.00	0.44	1.20	0.00	0.00	0.00	3.00	4.10	2.60	0.00	0.00	0.90
Total VOCs (w/o Acteone or Methlyene Chloride)		0.00	0.58	0.00	0.96	0.00	0.00	0.44	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-14	4009-14	4009-14	4009-14	4009-14	4009-14	4009-14	4009-14	4009-14	4009-14	4009-14	4009-14^	4009-14	4009-14	4009-14	4009-14	4009-14	4009-15	4009-15	4009-15
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 J	0.53 J	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10.0 U	5.0 U	10 U	10 U	5.0 U	10 U	1.3 J	10 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U
Acetone	50*	6.3 J	4.3 J	11	10 U	7.1 J	10 U	3.1 J	10 U	4.1 J	10 U	10 U	NS	3.4 J	3.3 J	10 U	10 U	5.0 U	7.5 J	5.1 J	7.2 J
Benzene	1	1.0 U	1.0 U	1.0 U	0.54 J	**1.2**	**4.0**	**12**	**18**	**14**	**15**	**17**	NS	**9.2**	**11**	**12**	**13**	**11**	1.0 U	1.0 U	0.5 J
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	NS	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	0.91 J	1.0	0.92 J	1.0	1.2	1.2	0.78 J	1.0 U	0.55 J	1.0 U	NS	1.0 U	0.31 J	1.0 U	1.0 U	1.0 U	1.0 U	0.56 J	0.61 J
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		6.30	5.21	12.0	1.46	9.30	5.20	16.3	18.8	18.1	15.6	17.0	-	12.6	14.6	12.0	13.0	11.0	8.02	7.49	8.31
Total VOCs (w/o Acteone or Methlyene Chloride)		0.00	0.91	1.00	1.46	2.20	5.20	13.2	18.8	14.0	15.6	17.0	-	9.2	11.3	12.0	13.0	11.0	0.52	2.39	1.11

Sample ID	4009-15
Sampling Date	8/28/2014
Groundwater Monitoring Zone	Deep
Units	ug/L
1,1,1-Trichloroethane	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.0 U
1,1,2-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,2,3-Trimethylbenzene	1.0 U
1,2,4-Trichlorobenzene	1.0 U
1,2,4-Trimethylbenzne	1.0 U
1,2-Dibromo-3-Chloropropane	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	1.0 U
1,2-Dichlorobenzene	1.0 U
1,2-Dichloroethane	1.0 U
1,2-Dichloropropane	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	1.0 U
1,3-Dichlorobenzene	1.0 U
1,4-Dichlorobenzene	1.0 U
2-Butanone (MEK)	10 U
2-Hexanone	5.0 U
4-Methyl-2-pentanone (MIBK)	5.0 U
Acetone	7.2 J
Benzene	0.5 J
Bromodichloromethane	1.0 U
Bromoform	1.0 U
Bromomethane	1.0 U
Carbon disulfide	1.0 U
Carbon tetrachloride	1.0 U
Chlorobenzene	1.0 U
Chloroethane	1.0 U
Chloroform	1.0 U
Chloromethane	1.0 U
cis-1,2-Dichloroethene	1.0 U
cis-1,3-Dichloropropene	1.0 U
Cyclohexane	1.0 U
Dibromochloromethane	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzne (Cumene)	1.0 U
Methyl Acetate	2.5 U
Methyl Cyclohexane	1.0 U
Methylene Chloride	1.0 U
Methyl Tert Butyl Ether	1.0 U
Styrene	1.0 U
Tetrachloroethene	1.0 U
Toluene	0.61 J
trans-1,2-Dichloroethene	1.0 U
trans-1,3-Dichloropropene	1.0 U
Trichloroethene	1.0 U
Trichlorofluoromethane	1.0 U
Vinyl chloride	1.0 U
Xylenes, Total	2.0 U
Total VOCs	8.31
Total VOCs (w/o Acteone or Methlyene Chloride)	1.11

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-16	4009-16	4009-16	4009-16	4009-16	4009-16
Sampling Date	GA	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.98 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U*	10 U	5.0 U	10 U	10 U	5.0 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50*	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U
Acetone	50*	10 U	5.8 J	10 U	4.9 J	5.1 J	9.1 J	4.3 J	8.4 J	4.5 J	9.5 J	9.7	5.1 J	4.4 J	5.0 U	5.9 J	3.5 J	7.1 J	10 U	6.0 J	10 U
Benzene	1	0.86 J	**1.8**	**9.1**	**8.0**	**9.1**	**8.5**	**7.8**	**9.0**	0.97 J	**12**	**10**	**9.1**	**9.3**	**9.0**	1.0 U	1.0 U	**8.2**	0.39 J	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U
Toluene	5	0.72 J	0.77 J	1.0	0.84 J	0.57 J	1.0 U	0.61 J	1.0 U	1.0 U	1.0 U	0.34 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		1.58	8.37	10.1	13.7	14.8	17.6	12.7	17.4	7.55	21.5	20.0	14.2	13.7	9.00	5.90	3.50	16.8	0.39	6.00	0.00
Total VOCs (w/o Acteone or Methlyene Chloride)		1.58	2.57	10.1	8.84	9.67	8.50	8.41	9.00	3.05	12.0	10.3	9.10	9.30	9.00	0.00	0.00	9.70	0.39	0.00	0.00

Notes

NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard

- Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or reported concentration is estimated

µg/L - Micrograms per Liter

B - Analyte detected in the method blank and sample

E - Estimated value

D- Result of diluted sample shown

M - Manual integrated compound

* - Laboratory control sample / duplicate exceeds control limits.

2-This is a duplicate sample from 4009-25D

[1]-This is a duplicate sample from 4009-12

[2]-This is a duplicate sample from 4009-27I

**-Revised results due to mislabeling 27 and 29 clusters in field.

^- PDB was compromised when sample was collected

NS - Not Sampled

NA- Not Analyzed

*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-16	4009-16	4009-16	4009-16	4009-16	4009-16^	4009-16^	4009-16	4009-16	4009-16	4009-16	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A
Sampling Date	GA	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018***	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	NS	10.0 U	5.0 U	10 U	10 U	5.0 U	1.6 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	10 U	10 U	4.5 J	10 U	10 U	NS	4.2 J	3.3 J	10 U	10 U	5.0 U	12	4.0 J	7.6 J	10 U	6.4 J	10 U	10 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	**8.4**	**8.0**	**1.8**	NS	**18.0**	**1.5**	**5.8**	**1.1**	**5.7**	1.0 U	**1.9**	**7.2**	**8.0**	**5.7**	**11**	**3.0**	**4.2**	0.49 J
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	NS	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	0.69 J	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		0.00	0.00	12.9	8.69	1.80	-	22.2	4.80	5.80	1.10	5.70	13.6	5.90	14.8	8.00	12.1	11.0	3.00	4.20	0.49
Total VOCs (w/o Acteone or Methlyene Chloride)		0.00	0.00	8.40	8.69	1.80	-	18.0	1.50	5.80	1.10	5.70	1.60	1.90	7.20	8.00	5.70	11.0	3.00	4.20	0.49

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A	4009-16A	4009-18	4009-18	4009-18	4009-18	4009-18	4009-18	4009-18	4009-18	4009-18	4009-18	4009-18	4009-18	4009-18
Sampling Date	GA	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	5/6/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	0.31 J	1.0 U	1.0 U	1.0 U	0.86 J	1.0	1.0 U	1.0 U	0.83 J	1.0 U	1.0 U	0.83 J	1.0 U	0.69 J	1.0 U	0.88 J	0.57 J
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U*	10 U	5.0 U	10 U	10 U	5.0 U	3.3 J	10 U	10 U	10 U	10 U	10 U	10 U*	10 U	5.0 U	10 U	10 U	5.0 U	10 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
Acetone	50*	10 U	10 U	5.0 J	3.8 J	5.0 U	10 U	10 U	5.0 U	10	10 U	10 U	10 U	10 U	10 U	10 U	6.4 J	4.1 J	2.9 J	10 U	10 U	5.0 U
Benzene	1	**1.4**	**36**	**1.8**	1.0 U	0.23 J	1.0 U	1.0 U	0.56 J	1.0 U	1.0 U	1.0 U	1.0 U	0.41 J	1.0 U	0.47 J	**1.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.58 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		1.40	36.0	6.80	3.80	0.54	0.00	0.00	0.56	14.2	1.00	0.00	0.99	0.83	0.47	1.70	7.23	4.10	3.59	0.00	0.88	0.57
Total VOCs (w/o Acteone or Methlyene Chloride)		1.40	36.0	1.80	0.00	0.54	0.00	0.00	0.56	4.16	1.00	0.00	0.41	0.83	0.47	1.70	0.83	0.00	0.69	0.00	0.88	0.57

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-19	4009-21	4009-21	4009-21	4009-21	4009-21	4009-21	4009-21	4009-21^
Sampling Date	GA	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U*	10 U	5.0 U	10 U	10 U	5.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U*
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	8.5 J	10 U	10 U	10 U	10 U	10 U	10 U	4.2 J	3.4 J	5.0 U	10 U	10 U	5.0 U	7.9 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	7.1 J
Benzene	1	**2.7**	**1.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**11**	**31**	**21**	**21**	**19**	**24**
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.26 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.64 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		11.2	1.00	0.00	0.00	0.00	0.00	0.00	4.20	3.40	0.00	0.00	0.00	0.26	7.90	0.00	11.0	31.6	21.0	21.0	19.0	31.1
Total VOCs (w/o Acteone or Methlyene Chloride)		2.70	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	11.0	31.0	21.0	21.0	19.0	24.0

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-21^	4009-21	4009-21	4009-21	4009-21	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22	4009-22
Sampling Date	GA	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	12/3/2013	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	5.0 U	10 U	10 U	5.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U*	10 U	2.3 J	10 U	10 U	5.0 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.90 J	5.0 U	5.0 U	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
Acetone	50*	4.5 J	3.0 J	10 U	10 U	5.0 U	3.1 J	12	10 U	11	10 U	6.5 J	10.0 U	10.0 U	10.0 U	4.0 J	10 U	10 U	6.5 J	4.2 J	3.5 J	10 U	10 U	5.0 U
Benzene	1	**25**	**18**	**18**	**17**	**11**	0.7 J	0.7 J	0.92 J	0.98 J	0.82 J	**1.2**	**1.1**	**1.2**	**1.6**	**1.3**	**1.3**	**1.1**	**1.1**	**1.1**	**1.1**	**1.0**	**1.2**	0.96 J
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	1.0 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	0.44 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J	1.0 U	1.0 U	1.8	0.69 J	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.7 J	0.6 J	1.1	0.83 J	0.64 J	0.93 J	1.1	0.81 J	0.92 J	1.0 U	0.90 J	1.3	1.0	0.88 J	0.85 J	1.0	0.72 J	0.55 J
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		29.9	21.0	18.0	17.0	11.0	4.44	13.2	2.02	12.8	1.46	8.63	2.20	2.01	2.98	5.30	2.20	2.40	10.4	6.87	8.65	2.0	1.92	1.51
Total VOCs (w/o Acteone or Methlyene Chloride)		25.0	18.0	18.0	17.0	11.0	1.34	1.24	2.02	1.81	1.46	2.13	2.20	2.01	2.52	1.30	2.20	2.40	2.10	1.98	5.15	2.0	1.92	1.51

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-26	4009-26	4009-26	4009-26	4009-26	4009-26	4009-26	4009-26	4009-26	4009-26	4009-27S	4009-27S	4009-27S	4009-27S	4009-27S	4009-27S	4009-27S	4009-27S	4009-27S	4009-27S
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016
Groundwater Monitoring Zone	Standard	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	**98**	**370**	**150 DJ**	**92**	**100**	**350**	**140**	**82**	**290**	**280**	**54**	**61**	**65 J**	**49**	**61**	**62**	**61**	**58**	**54**	**54**
1,1,2,2-Tetrachloroethane	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		7.7	13	6.0 DJ	7.7	5.3	5.7	6.6	3.4	8.8	8.4	2.8	3.4	2.3 J	2.6	3.3	3.3	3.5	2.9	2.7	2.4
1,1,2-Trichloroethane	1	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	**27**	**39**	**16 DJ**	**14**	**30**	**43**	**12**	**14**	**35**	**32**	1.9	2.2	2.2 J	1.9 J	2.6	2.7	2.4	2.4	2.1	2.0
1,1-Dichloroethene	5	**6.0**	**46**	**9.9 DJ**	**7.8**	3.8	**34**	4.5	2.9	**8.5**	**8.7**	**5.7**	**8.9**	**5.6 J**	4.6	**6.2**	**10**	**7.0**	4.5	5.0	4.9
1,2,3-Trimethylbenzene		2.0 UD	8.0 U	2.0 UDJ	10 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	8.0 U	2.0 UDJ	2 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	2.0 UD	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	8.0 U	2.0 UDJ	4.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	**0.9 J**	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	2.0 UD	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	80 U	20 UDJ	20 U	20 U *	20 U	5.0 U	20 U	20 U *	5.0 U	10 U	10 U	10 UJ	20 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50*	5.0 U	40 U	10 UDJ	20 U	10 U	10 U	5.0 U	10 U	10 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		5.0 U	40 U	10 UDJ	20 U	10 U	10 U	5.0 U	10 U	10 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	10	80 U	20 UDJ	20 U	7.4 J	20 U	1.3 J	20 U	20 U	5.0 U	9.9 J	3.8 J	8.1 UJ	20 U	8.1 J	10 U	10 U	10 U	10 U	10 U
Benzene	1	0.81 J	8.0 U	2.0 UDJ	0.55 J	2.0 U	0.87 J	0.27 J	2.0 U	2.0 U	0.53 J	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	8.0 U	2.0 UDJ	2.0 U*	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	3.6	3.1	0.65 J	2.0 U	0.91 J	2.3	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	0.29 J	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	**120 D**	**190**	**96 DJ**	**85**	**81**	**130**	**59**	**54**	**120**	**110**	**18**	**20**	**19 J**	**19**	**21**	**24**	**21**	**22**	**20**	**20**
cis-1,3-Dichloropropene	0.4	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	3.9	**5.8 J**	**5.0 DJ**	2.8	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	20 U	5.0 UDJ	20 U	5.0 U	5 U	5.0 U	2.0 U	5.0 U	5.0 U	2.5 U	2.5 U	2.5 UJ	20 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	**8.4**	2.0 UDJ	2.0 U	2.0 U	1.8 J	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	0.48 J	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.1	8.0 U	0.97 DJ	0.89 J	0.84 J	1.1 J	0.84 J	2.0 U	1.3 J *	1.2	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	0.41 J	2.0 U	2.0 U	0.74 J	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	**45**	**71**	**47 DJ**	**49**	**45**	**63**	**57**	**49**	**88**	**65**	**25**	**28**	**24 J**	**22**	**25**	**28**	**25**	**24**	**23**	**22**
Trichlorofluoromethane	5	1.0 U	8.0 U	2.0 UDJ	2.0 U	2.0 U	2 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	**12**	**21**	**13 DJ**	**9.4**	**5.2**	**11**	**5.1**	**4.6**	**9.9**	**8.1**	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U
Xylenes, Total		2.0 U	16.0 U	4.0 UDJ	4.0 U	4.0 U	4 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		332	764	344	269	282	644	283	210	562	517	117	128	126	99.1	127	130	120	114	108	105
Total VOCs (w/o Acteone or Methlyene Chloride)		322	756	344	269	275	642	282	210	562	517	107	124	118	99.1	119	130	120	114	108	105

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-27S	4009-27S**	4009-27S**	4009-27S	4009-27S	4009-27S	4009-27S	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I**
Sampling Date	GA	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017
Groundwater Monitoring Zone	Standard	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	**61**	**54**	**46**	**53**	**53**	**52**	**43**	1.0 U	1.0 U	1.0 U	1.3 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		2.6	3.0	2.4	3.5	3.1	2.4	2.6	1.0 U	0.37 J	1.0 UJ	1.0 U	1.0 U	0.31 J	1.0 U	0.39 J	0.40 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	2.5	2.4	2.1	2.3	2.3	2.2	1.9	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	**8.8**	**5.1**	**9.1**	4.8	4.8	4.4	4.1	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	20 U*	20 U	5.0 U	20 U	20 U	5.0 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U*
2-Hexanone	50*	5.0 U	10 U	10 U	5.0 U	10 U	10 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		5.0 U	10 U	10 U	5.0 U	10 U	10 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	10 U	20 U	20 U	3.5 J	20 U	20 U	5.0 U	5.8 J	10 U	7.9 J	10 U	9.3 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.3 J	
Benzene	1	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.71 J	1.0 U	1.0 U	1.0 U	0.61 J	1.0 U	0.95 J	**4.6**	**1.5**	1.0 U		
Bromodichloromethane	50	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	2.0 U	2.0 U	1.0 UT	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.86 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	2.0 U	2.0 U	0.27 J	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	**23**	**20**	**17**	**20**	**22**	**21**	**18**	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	2.0 U	1.2 J	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.77 J	0.87 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	2.0 U	2.0 U	0.19 J	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	**24**	**22**	**24**	**22**	**27**	**26**	**20**	1.4	1.1	1.2 J	0.34 J	1.0 U	1.9	1.0 U	1.4	0.84 J	1.0 U	1.0 U	1.0 U	0.74 J	
Trichlorofluoromethane	5	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U		
Total VOCs		119	107	102	110	112	108	89.6	7.20	1.47	11.1	1.97	10.2	2.21	0.61	1.79	3.49	4.60	1.50	6.04		
Total VOCs (w/o Acteone or Methlyene Chloride)		119	107	101	106	112	108	89.6	1.40	1.47	3.21	1.97	0.87	2.21	0.61	1.79	3.49	4.60	1.50	0.74		

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-27I	4009-27I	4009-27I	4009-27I	4009-27I	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D**	4009-27D	4009-27D	4009-27D	4009-27D	4009-27D
Sampling Date	GA	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0	1.0 U	1.0 U	0.61 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.4 J	0.68 J	1.0 U	1.0 U	0.42 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	5.0 U	10 U	10 U *	5.0 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U *	10 U	5.0 U	10 U	10 U	5.0 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
Acetone	50*	3.3 J	5.0 U	10 U	10 U	5.0 U	9.8 J	4.8 J	8.0 J	10 U	7.1 J	10.0 U	10.0 U	10.0 U	10 U	10 U	10 U	3.9 J	3.5 J	5.0 U	10 U	10 U	5.0 U
Benzene	1	1.0 U	0.12 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UT	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	0.41 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.7	0.98 J	0.73 J	1.6	1.4	1.0 U	1.0 U	0.48 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		5.40	3.19	0.73	1.60	2.43	9.80	4.80	8.48	0.00	7.10	0.00	0.00	0.60	0.00	0.00	0.00	3.90	3.50	0.00	0.00	0.00	0.00
Total VOCs (w/o Acteone or Methlyene Chloride)		2.10	3.19	0.73	1.60	2.43	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28	4009-28
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.3	2.7	1.0 U	3.0	2.9	2.9	2.3	1.9	2.5	2.5	2.5	1.0 U	1.0 U	2.5	1.0 U	2.9	2.5
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	0.28 J	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	0.3 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U *	10 U	5.0 U	10 U	10 U	5.0 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
Acetone	50*	7.9 J	3.7 J	6.8 J	10 U	6.1 J	10 U	10.0 U	10.0 U	10 U	10 U	10 U	9.3 J	4.4 J	1.7 J	10 U	10 U	5.0 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.9**	**1.6**	1.0 U	1.0 U	1.0 U	0.61 J
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35 J	1.0 U	1.0 U	0.41 J
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.8	2.2	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		9.20	6.71	6.80	3.53	9.22	2.90	0.00	2.90	2.50	2.50	2.50	14.0	8.40	4.55	0.00	2.9	3.5
Total VOCs (w/o Acteone or Methlyene Chloride)		1.30	3.01	0.00	3.53	3.12	2.90	0.00	2.90	2.50	2.50	2.50	4.70	4.00	2.85	0.00	2.9	3.5

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S**	4009-29S	4009-29S	4009-29S	4009-29S	4009-29S
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	**710 D**	**650**	**1000 DJ**	**480**	**830**	**850**	**760**	**800 D**	**460**	**430**	**23**	**480**	**440**	**390**	**490**	**650**	**420**
1,1,2,2-Tetrachloroethane	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		12	10 U	7.1 DJ	17 U	8.7 J	7.3 J	20 U	7.1	20 U	1.0 U	2.0 U	5.0	5.5 J	3.9	9.0 J	5.8 J	4.3
1,1,2-Trichloroethane	1	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	0.49 J	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,1-Dichloroethane	5	**130 D**	**35**	**46 D**	**29**	**38**	**55**	**49**	**58**	**69**	**52**	**50**	**82**	**52**	**36**	**76**	**97**	**58**
1,1-Dichloroethene	5	**92**	**89**	**62 D**	**33**	**37**	**130**	**84**	**45**	**33**	**27**	3.2	**32**	**67**	**26**	**37**	**51**	**37**
1,2,3-Trimethylbenzene		1.0 U	10 U	10 UD	83 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,2,4-Trichlorobenzene	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,2,4-Trimethylbenzne	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	10 U	10 UD	33 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,2-Dichlorobenzene	3	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,2-Dichloroethane	0.6	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,2-Dichloropropane	1	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,3-Dichlorobenzene	3	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
1,4-Dichlorobenzene	3	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
2-Butanone (MEK)	50	10 U	100 U	100 UD	170 U	200 U	200 U	200 U	200 U	200 U	10 U	20 U	10 U *	100 U	10 U	100 U	100 U	10 U
2-Hexanone	50*	5.0 U	50 U	50 UD	170 U	100 U	100 U	100 U	100 U	100 U	5.0 U	10 U	5.0 U	50 U	10 U	50 U	50 U	10 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	50 U	50 UD	170 U	100 U	100 U	100 U	100 U	100 U	5.0 U	10 U	5.0 U	50 U	10 U	50 U	50 U	10 U*
Acetone	50*	6.0 J	100 U	100 UD	170 U	200 U	200 U	200 U	200 U	200 U	10 U	8.0 J	4.9 J	100 U	10 U	100 U	100 U	10 U
Benzene	1	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	**98**	**2.7**	10 U	0.3 J	10 U	10 U	2.0 U
Bromodichloromethane	50	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Bromoform	50*	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Bromomethane	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Carbon disulfide		1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	0.23 J	10 U	2.0 U	10 U	10 U	2.0 U
Carbon tetrachloride	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Chlorobenzene	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Chloroethane	5	2.9	10 U	10 UD	17 U	20 U	20 U	20 U	1.5	20 U	1.0 U	2.0 U	2.1	10 U	1.6 J	10 U	10 U	2.0
Chloroform	7	0.69 J	10 U	10 UD	17 U	20 U	20 U	20 U	0.49 J	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Chloromethane		1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
cis-1,2-Dichloroethene	5	**260 D**	**340**	**410 D**	**270**	**320**	**480**	**310**	**390 D**	**190**	**200**	**59**	**180**	**210**	**170**	**250**	**350**	**260**
cis-1,3-Dichloropropene	0.4	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Cyclohexane		1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Dibromochloromethane	50	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Dichlorodifluoromethane	5	1.3	10 U	10 UD	17 U	20 U	20 U	20 U	1.5	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Ethylbenzene	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Isopropylbenzne (Cumene)	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Methyl Acetate		2.5 U	25 U	25 UD	170 U	20 U	20 U	50 U	50 U	50 U	2.5 U	5.0 U	2.5 U	25 U	10 U	25 U	25 U	10 U
Methyl Cyclohexane		1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Methylene Chloride	5	1.0 U	10 U	10 UD	**5.6 J***	20 U	20 U	20 U	0.58 J	20 U	1.0 U	2.0 U	1.0 U	7.1 J	2.0 U	10 U	10 U	2.0 U
Methyl Tert Butyl Ether	10	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Styrene	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Tetrachloroethene	5	0.95 J	10 U	10 UD	17 U	20 U	20 U	20 U	0.42 J	20 U	1.0 U	2.0 U	0.36 J	10 U	2.0 U	10 U	10 U	2.0 U
Toluene	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	1.5	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
trans-1,2-Dichloroethene	5	1.5	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	0.87 J	10 U	10 U	0.78 J
trans-1,3-Dichloropropene	0.4	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	2.0 U	10 U	10 U	2.0 U
Trichloroethene	5	**300 D**	10 U	**27 D**	3.5 J	20 U	20 U	20 U	**9.2**	20 U	1.0 U	2.0 U	**17**	**27**	**94**	**110**	**48**	**19**
Trichlorofluoromethane	5	1.0 U	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	2.0 U	1.0 U	10 U	0.37 J	10 U	10 U	2.0 U
Vinyl chloride	2	**43**	**15**	**42 D**	**16 J**	**24**	**65**	**82**	**120 D**	**78**	**95**	**2.5**	**130**	**68**	**32**	**100**	**120**	**74**
Xylenes, Total		2.0 U	20 U	20 UD	33 U	40 U	40 U	40 U	40 U	40 U	2.0 U	4.0 U	2.0 U	20 U	4.0 U	20 U	20 U	4.0 U
Total VOCs		1560	1129	1594	837	1257.7	1587	1285	1434	830	804	245	936	877	755	1072	1322	875
Total VOCs (w/o Acteone or Methlyene Chloride)		1554	1129	1594	832	1257.7	1587	1285	1434	830	804	237	931	870	755	1072	1322	875

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I**	4009-29I	4009-29I	4009-29I	4009-29I	4009-29I	DUP-2
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	**1700 D**	**1600**	**130 DJ**	**1100**	**1500**	**1700**	**1400**	**1400 D**	**1200**	1.0 U	2.0 U	**1000**	**1200**	**970**	**1100**	**1200**	**620**	**660**
1,1,2,2-Tetrachloroethane	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		21	25 U	2.0 UDJ	15 J	15 J	40 U	40 U	14	15 J	1.0 U	2.0 U	12	14 J	11	16 J	20 U	7.5	7.5
1,1,2-Trichloroethane	1	0.86 J	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	0.57 J	25 U	1.0 U	2.0 U	0.60 J	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,1-Dichloroethane	5	**83**	**96**	**21 DJ**	**82**	**100**	**100**	**90**	**69**	**71**	4.4	3.9	**89**	**82**	**72**	**92**	**93**	**50**	**53**
1,1-Dichloroethene	5	**150 D**	**230**	**6.4 DJ**	**92**	**85**	**240**	**200**	**77**	**93**	1.9	2.0 U	**80**	**190**	**62**	**71**	**95**	**50**	**51**
1,2,3-Trimethylbenzene		1.0 U	25 U	2.0 UDJ	200 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,2,4-Trimethylbenzne	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	25 U	2.0 UDJ	80 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,2-Dichlorobenzene	3	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	0.41 J	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,2-Dichloropropane	1	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U*
1,3-Dichlorobenzene	3	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
2-Butanone (MEK)	50	10 U	250 U	20 UDJ	400 U	400 U	400 U	400 U	10 U	250 U	10 U	20 U	10 U *	200 U	25 U	200 U	200 U	10 U	10 U
2-Hexanone	50*	5.0 U	130 U	10 UDJ	400 U	200 U	200 U	200 U	5.0 U	130 U	5.0 U	10 U	5.0 U	100 U	25 U	100 U	100 U	10 U*	10 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	130 U	10 UDJ	400 U	200 U	200 U	200 U	5.0 U	130 U	5.0 U	10 U	5.0 U	100 U	25 U	100 U	100 U	10 U*	10 U*
Acetone	50*	11	250 U	12 DJ	400 U	400 U	400 U	400 U	10 U	250 U	5.6 J	6.1 J	5.2 J	200 U	25 U	200 U	200 U	10 U	10 U
Benzene	1	0.59 J	25 U	**41 DJ**	40 U	40 U	40 U	40 U	0.48 J	25 U	**75**	**120**	0.71 J	20 U	0.57 J	20 U	20 U	2.0 U	2.0 U
Bromodichloromethane	50	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Bromoform	50*	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Bromomethane	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Carbon disulfide		1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	0.35 J	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Carbon tetrachloride	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Chlorobenzene	5	1.6	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.3	25 U	1.0 U	2.0 U	1.1	20 U	1.7 J	20 U	20 U	0.91 J	1.1 J
Chloroethane	5	5.0	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	2.7	25 U	**51**	**29**	3.9	20 U	3.6 J	20 U	20 U	2.2	2.3
Chloroform	7	1.1	25 U	1.1 DJ	40 U	40 U	40 U	40 U	0.77 J	25 U	1.0 U	2.0 U	0.67 J	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Chloromethane		1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	5	**400 D**	**400**	**53 DJ**	**330**	**380**	**530**	**410**	**420 D**	**340**	**45**	**41**	**330**	**360**	**330**	**390**	**400**	**250**	**270**
cis-1,3-Dichloropropene	0.4	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U*
Cyclohexane		1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Dibromochloromethane	50	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Dichlorodifluoromethane	5	1.2	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.9	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Ethylbenzene	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Isopropylbenzne (Cumene)	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Methyl Acetate		2.5 U	63 U	5.0 UDJ	400 U	100 U	100 U	100 U	2.5 U	63 U	2.5 U	5.0 U	2.5 U	50 U	25 U	50 U	50 U	10 U	10 U
Methyl Cyclohexane		1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Methylene Chloride	5	1.0 U	25 U	1.2 DJ	**14 J***	**18 J**	40 U	40 U	0.60 J	25 U	1.0 U	2.0 U	1.0 U	**15 J**	5.0 U	20 U	20 U	2.0 U	2.0 U
Methyl Tert Butyl Ether	10	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Styrene	5	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U
Tetrachloroethene	5	2.1	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.8	25 U	1.0 U	2.0 U	1.4	20 U	1.8 J	20 U	20 U	1.1 J	1.4 J
Toluene	5	1.0 U	25 U	3.7 DJ	40 U	40 U	40 U	40 U	1.0 U	25 U	2.2	1.7 J	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U*
trans-1,2-Dichloroethene	5	3.4	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.3	25 U	1.0 U	2.0 U	1.2	20 U	1.8 J	20 U	20 U	0.95 J	1.0 J
trans-1,3-Dichloropropene	0.4	1.0 U	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	1.0 U	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U	2.0 U*
Trichloroethene	5	**450 D**	**460**	**34 DJ**	**360**	**410**	**550**	**480**	**450 D**	**370**	3.5	2.0	**340**	**390**	**290**	**410**	**420**	**200**	**220**
Trichlorofluoromethane	5	0.94 J	25 U	2.0 UDJ	40 U	40 U	40 U	40 U	0.92 J	25 U	1.0 U	2.0 U	1.0 U	20 U	5.0 U	20 U	20 U	2.0 U*	2.0 U
Vinyl chloride	2	**85**	**85**	**6.6 DJ**	**78**	**92**	**140**	**110**	**94**	**85**	2.0	2.0	**130**	**110**	**96**	**120**	**92**	**63**	**62**
Xylenes, Total		2.0 U	50 U	4.0 UDJ	80 U	80 U	80 U	80 U	2.0 U	50 U	2.0 U	4.0 U	2.0 U	40 U	10 U	40 U	40 U	4.0 U	4.0 U
Total VOCs		2917	2871	310	2071	2600	3260	2690	2536	2174	191	206	1995	2361	1840	2199	2300	1246	1329
Total VOCs (w/o Acteone or Methlyene Chloride)		2906	2871	297	2057	2582	3260	2690	2536	2174	185	200	1990	2346	1840	2199	2300	1246	1329

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D**	4009-29D	4009-29D	4009-29D	4009-29D	4009-29D
Sampling Date	GA	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	**80**	**1200 DJ**	**170**	**290**	**30**	**14**	**23**	**16**	**14**	**21**	**270**	**31**	**7.6**	**13**	**280**	**41**
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.1	14	2.9 J	3.6 J	1.0 U	1.0 U	0.40 J	1.0 U	1.0 U	1.0 U	4.2	1.0 U	1.0 U	1.0 U	3.5	0.67 J
1,1,2-Trichloroethane	1	1.0 U	1.0 U	0.65 J	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.1	**16**	**150 DJ**	**27**	**51**	**12**	4.2	**5.5**	4.0	3.7	**6.3**	**44**	**8.1**	1.8	2.9	**38**	**11**
1,1-Dichloroethene	5	1.0 U	**12**	**130 DJ**	**27**	**29**	**5.7**	2.0	2.0	1.3	1.1	2.8	**26**	2.0	0.37 J	0.88 J	**42**	**5.3**
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	29 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	11 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	0.72 J	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	57 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U *	10 U	2.3 J	10 U	10 U *	5.0 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	57 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	57 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*
Acetone	50*	6.9 J	10 U	10 U	57 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U	4.5 J	3.5 J	1.3 J	10 U	10 U	5.0 U
Benzene	1	1.0 U	1.0 U	0.72 J	5.7 U	5.0 U	0.70 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.4	**8.8 DJ**	5.7 U	2.5 J	1.0 U	1.2	1.2	1.5	2.0	1.0 U	4.4	2.2	3.0	2.3	2.7	3.0
Chloroform	7	1.0 U	1.0 U	0.83 J	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.4	**25**	**400 DJ**	**150**	**210**	**37**	**8.0**	**9.9**	**5.7**	**5.4**	**9.5**	**130**	**10**	1.5	3.3	**180**	**26**
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.5	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	57 U	13 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	2.0 J*	5.0 U	1.0 U	1.0 U	0.48 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.8	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 J	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.8	**17**	**400 DJ**	**26**	**20**	0.78 J	0.94 J	3.3	2.0	1.8	1.7	**61**	**7.2**	2.0	3.5	**120**	**10**
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	**4.7**	**12**	**170 DJ**	**34**	**55**	**7.8**	**7.2**	**8.3**	**7.5**	**6.5**	**15**	**73**	**11**	**8.4**	**9.4**	**72**	**17**
Xylenes, Total		2.0 U	2.0 U	2.0 U	11 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		15.9	165	2480	439	674	94.0	37.5	54.1	38.0	34.5	56.3	613	75.0	28.3	35.3	739	114
Total VOCs (w/o Acteone or Methlyene Chloride)		9.00	165	2480	437	674	94.0	37.5	53.6	38.0	34.5	56.3	613	71.5	27.0	35.3	739	114

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-30	4009-30	4009-30	4009-30	4009-30	4009-30	4009-30	4009-30^	4009-30^	4009-30	4009-30	4009-30	4009-30	4009-30	4009-30A	4009-30A	4009-30A	4009-30A	4009-30A	4009-30A
Sampling Date	GA	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	0.98 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	0.86 J	0.82 J	0.52 J	0.91 J	0.65 J	0.52 J	0.93 J	1.3	0.8 J	0.77 J	0.66 J	0.71 J	0.61 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.51 J
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U *	10 U	5.0 U	10.0 U	10.0 U *	5.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	7.0 J	10 U	10 U	10 U	7.3 J	4.9 J	10 U	7.2 J	5.3 J	5.0 U	10.0 U	10.0 U	5.0 U	6.9 J	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	0.44 J	1.0 U	0.44 J	0.56 J	1.0	1.0 U	**1.1**	**2.5**	**6.4**	**5.3**	**4.1**	0.75 J	**2.5**	0.60 J	**2.2**	0.43 J	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	0.49 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.28 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		8.84	0.82	0.96	1.40	8.39	5.98	1.93	8.50	7.19	3.55	7.06	6.01	4.71	7.65	2.50	0.60	2.20	0.43	0.51
Total VOCs (w/o Acteone or Methlyene Chloride)		1.84	0.82	0.96	0.91	1.09	1.08	1.93	1.30	1.89	3.55	7.06	6.01	4.71	0.75	2.50	0.60	2.20	0.43	0.51

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2018
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-30A	4009-30A	4009-30A	4009-30A	4009-30A	4009-30A	4009-30A	Well 1-1	Well 1-1	Well 1-1	Well 1-1	Well 1-1	Well 1-1	Well 1-1	Well 1-1^	Well 1-1	Well 1-1	Well 1-1	Well 1-1	Well 1-1
Sampling Date	GA	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018	4/20/2015	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	10/23/2017	12/28/2017	3/30/2018	6/14/2018
Groundwater Monitoring Zone	Standard	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**220**	**240**	**350**	**250**	**210**	**310**	**220**	NS	**360**	**210**	**170**	**230**	**170**
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	5.0 U	5.0 U	4.3 J	4.3 J	6.3	5.0 U	NS	7.1	5.7	4.4	4.0 U	4.2
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,1-Dichloroethane	5	0.63 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**15**	**18**	**28**	**22**	**14**	**22**	**18**	NS	**32**	**17**	**18**	**21**	**17**
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**10**	**30**	**41**	**16**	5.0 U	**20**	**31**	NS	**57**	**13**	**13**	**16**	**14**
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U *	10 U	5.0 U	10 U	10 U *	5.0 U	40 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5.0 U	10 U	40 U *	5.0 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	20 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	25 U	5.0 U	5.0 U	20 U	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U*	20 U	25 U	25 U	25 U	25 U	25 U	25 U	NS	25 U	5.0 U	5.0 U	20 U	5.0 U*
Acetone	50*	10 U	5.6 J	3.6 J	5.0 U	10 U	10 U	5.0 U	40 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U	5.0 U	10 U	40 U	5.0 U
Benzene	1	1.0 U	1.0 U	1.0 U	0.23 J	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	0.46 J
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	0.27 J	1.0 U	4.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**39**	**66**	**82**	**68**	**52**	**77**	**62**	NS	**96**	**55**	**59**	**69**	**56**
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	5.0 U	10 U	13 U	13 U	13 U	13 U	13 U	13 U	NS	13 U	5.0 U	2.5 U	10 U	5.0 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	**5.9 B**	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	0.21 J	1.0 U	4.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	0.28 J	1.0 U	4.0 U	0.35 J
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**41**	**64**	**81**	**59**	**56**	**69**	**66**	NS	**89**	**59**	**61**	**73**	**53**
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	0.19 J	1.0 U	4.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NS	5.0 U	0.17 J	1.0 U	4.0 U	0.29 J
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	8.0 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10 U	2.0 U	2.0 U	8.0 U	2.0 U
Total VOCs		0.63	5.60	3.60	0.23	0.00	0.00	0.00	329	418	582	425	336	504	397	-	641	361	325	409	315
Total VOCs (w/o Acteone or Methlyene Chloride)		0.63	0.00	0.00	0.23	0.00	0.00	0.00	329	418	582	419	336	504	397	-	641	361	325	409	315

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
 - Concentration exceeds NYSDEC Class GA Standard
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
µg/L - Micrograms per Liter
B - Analyte detected in the method blank and sample
E - Estimated value
D- Result of diluted sample shown
M - Manual integrated compound
* - Laboratory control sample / duplicate exceeds control limits.
2-This is a duplicate sample from 4009-25D
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
**-Revised results due to mislabeling 27 and 29 clusters in field.
^- PDB was compromised when sample was collected
NS - Not Sampled
NA- Not Analyzed
*** - 4009-16 was sampled via low flow on this date

Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

ARCADIS Design & Consultancy for natural and built assets

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-2A Influent 7/22/2014 ug/L	Well 1-2A Influent 7/30/2014 ug/L	Well 1-2A Influent 8/18/2014 ug/L	Well 1-2A Influent 8/28/2014 ug/L	Well 1-2A Influent 9/29/2014 ug/L	Well 1-2A Influent 9/30/2014 ug/L	Well 1-2A Influent 10/21/2014 ug/L	Well 1-2A Influent 10/28/2014 ug/L	Well 1-2A Influent 11/11/2014 ug/L	Well 1-2A Influent 11/24/2014 ug/L	Well 1-2A Influent 12/9/2014 ug/L	Well 1-2A Influent 12/18/2014 ug/L	Well 1-2A Influent 1/20/2015 ug/L	Well 1-2A Influent 1/29/2015 ug/L	Well 1-2A Influent 2/25/2015** ug/L	Well 1-2A Influent 2/25/2015** ug/L	Well 1-2A Influent 3/12/2015** ug/L	Well 1-2A Influent 3/19/2015** ug/L	Well 1-2A Influent 4/9/2015 ug/L	Well 1-2A Influent 4/20/2015 ug/L
1,1,1-Trichloroethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,1,2,2-Tetrachloroethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
1,1,2-Trichloroethane	1	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,1-Dichloroethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,1-Dichloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,2,3-Trimethylbenzene		NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	5.0 U	NA	NA	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,2,4-Trichlorobenzene	5	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,2,4-Trimethylbenzne	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	2.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
1,2-Dichlorobenzene	3	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,2-Dichloroethane	0.6	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,2-Dichloropropane	1	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,3-Dichlorobenzene	3	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
1,4-Dichlorobenzene	3	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
2-Butanone (MEK)	50	NA	10 U	NA	10 U	10.0 U	NA	10 U	NA	NA	10 U	10 U	NA	NA	10 U	NS	NS	NS	NS	NA	10 U
2-Hexanone	50*	NA	5.0 U	NA	5.0 U	10.0 U	NA	5.0 U	NA	NA	5.0 U *	10 U	NA	NA	5.0 U	NS	NS	NS	NS	NA	5.0 U
4-Methyl-2-pentanone (MIBK)		NA	5.0 U	NA	5.0 U	10.0 U	NA	5.0 U	NA	NA	5.0 U	10 U	NA	NA	5.0 U	NS	NS	NS	NS	NA	5.0 U
Acetone	50*	NA	10 U	NA	10 U	10 U	NA	10 U	NA	NA	10 U	10 U	NA	NA	10 U	NS	NS	NS	NS	NA	10 U
Benzene	1	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Bromodichloromethane	50	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
Bromoform	50*	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
Bromomethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Carbon disulfide		0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
Carbon tetrachloride	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Chlorobenzene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Chloroethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Chloroform	7	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
Chloromethane		0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
cis-1,2-Dichloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
cis-1,3-Dichloropropene	0.4	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Cyclohexane		NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
Dibromochloromethane	50	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U*	NA	NA	1.0 U *	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
Dichlorodifluoromethane	5	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U *	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Ethylbenzene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Isopropylbenzne (Cumene)	5	NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Methyl Acetate		NA	NA	NA	2.5 U	NA U	NA	2.5 U	NA	NA	2.5 U	10 U	NA	NA	2.5 U	NS	NS	NS	NS	NA	2.5 U
Methyl Cyclohexane		NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	NS	NS	NS	NA	1.0 U
Methylene Chloride	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Methyl Tert Butyl Ether	10	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Styrene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Tetrachloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Toluene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
trans-1,2-Dichloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
trans-1,3-Dichloropropene	0.4	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Trichloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Trichlorofluoromethane	5	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Vinyl chloride	2	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	NS	NS	NS	0.5 U	1.0 U
Xylenes, Total		0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	0.5 U	2.0 U	1.5 U	0.5 U	2.0 U	2.0 U	0.5 U	0.5 U	2.0 U	NS	NS	NS	NS	0.5 U	2.0 U
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-2A Influent 5/6/2015 ug/L	Well 1-2A Influent 5/12/2015 ug/L	Well 1-2A Influent 6/9/2015 ug/L	Well 1-2A Influent 6/25/2015 ug/L	Well 1-2A Influent 7/29/2015 ug/L	Well 1-2A Influent 8/11/2015 ug/L	Well 1-2A Influent 8/28/2015 ug/L	Well 1-2A Influent 9/15/2015 ug/L	Well 1-2A Influent 9/24/2015 ug/L	Well 1-2A Influent 10/12/2015 ug/L	Well 1-2A Influent 11/4/2015 ug/L	Well 1-2A Influent 11/10/2015 ug/L	Well 1-2A Influent 12/21/2015 ug/L	Well 1-2A Influent 1/19/2016 ug/L	Well 1-2A Influent 1/27/2016 ug/L	Well 1-2A Influent 2/16/2016 ug/L	Well 1-2A Influent 2/26/2016 ug/L	Well 1-2A Influent 3/22/2016 ug/L	Well 1-2A Influent 3/28/2016 ug/L	Well 1-2A Influent 4/20/2016 ug/L
1,1,1-Trichloroethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2,2-Tetrachloroethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,1,2-Trichloroethane	1	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,3-Trimethylbenzene		1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	5.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2,4-Trichlorobenzene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,4-Trimethylbenzne	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	2.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dichlorobenzene	3	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloroethane	0.6	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloropropane	1	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3-Dichlorobenzene	3	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,4-Dichlorobenzene	3	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
2-Butanone (MEK)	50	10 U	NA	NA	10 U	10 U	NA	10 U	NA	10 U	10 U	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
2-Hexanone	50*	5.0 U	NA	NA	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	NA	10.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
4-Methyl-2-pentanone (MIBK)		5.0 U	NA	NA	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	NA	10.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
Acetone	50*	10 U	NA	NA	10 U	10 U	NA	10 U	NA	10 U	10 U	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
Benzene	1	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Bromodichloromethane	50	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Bromoform	50*	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Bromomethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Carbon disulfide		1.0 U	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Carbon tetrachloride	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chlorobenzene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroform	7	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Chloromethane		1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
cis-1,2-Dichloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
cis-1,3-Dichloropropene	0.4	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Cyclohexane		1.0 U	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dibromochloromethane	50	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dichlorodifluoromethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Ethylbenzene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Isopropylbenzne (Cumene)	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Methyl Acetate		2.5 U	NA	NA	2.5 U	2.5 U	NA	2.5 U	NA	2.5 U	2.5 U	2.5 U	NA	10 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA
Methyl Cyclohexane		1.0 U	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Methylene Chloride	5	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Tert Butyl Ether	10	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Styrene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Tetrachloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Toluene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,2-Dichloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,3-Dichloropropene	0.4	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichlorofluoromethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Vinyl chloride	2	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Xylenes, Total		2.0 U	1.5 U	0.5 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

ARCADIS Design & Consultancy for natural and built assets

Sample ID	NYSDEC GA Standard	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent	Well 1-2A Influent
Sampling Date		4/22/2016	5/20/2016	5/23/2016	6/21/2016	6/22/2016	7/20/2016	7/28/2016	8/16/2016	8/18/2016	9/6/2016	9/15/2016	10/18/2016	10/31/2016	11/8/2016	11/28/2016	12/16/2016	12/29/2016	1/13/2017	1/31/2017	2/7/2017
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2,2-Tetrachloroethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,1,2-Trichloroethane	1	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,3-Trimethylbenzene		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2,4-Trichlorobenzene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,4-Trimethylbenzne	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloroethane	0.6	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloropropane	1	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,4-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
2-Butanone (MEK)	50	10 U	NA	10 U	10 U	NA	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
2-Hexanone	50*	5.0 U	NA	5.0 U	5.0 U	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
4-Methyl-2-pentanone (MIBK)		5.0 U	NA	5.0 U	5.0 U	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
Acetone	50*	10 U	NA	10 U	10 U	NA	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
Benzene	1	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Bromodichloromethane	50	1.0 U	0.5 U	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromoform	50*	1.0 U	0.5 U	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromomethane	5	1.0 U	0.5 U	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon disulfide		1.0 U	0.5 U	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon tetrachloride	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chlorobenzene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroform	7	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Chloromethane		1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	NA	1.0 U	NA
cis-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
cis-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Cyclohexane		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dibromochloromethane	50	1.0 U	NA	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dichlorodifluoromethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Ethylbenzene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Isopropylbenzne (Cumene)	5	1.0 U	NA	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Acetate		2.5 U	NA	2.5 U	2.5 U	NA	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA
Methyl Cyclohexane		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Methylene Chloride	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Tert Butyl Ether	10	1.0 U	NA	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Styrene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Tetrachloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Toluene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichlorofluoromethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Vinyl chloride	2	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Xylenes, Total		2.0 U	0.5 U	2.0 U	2.0 U	0.5 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-2A Influent 2/27/2017 ug/L	Well 1-2A Influent 3/7/2017 ug/L	Well 1-2A Influent 3/23/2017 ug/L	Well 1-2A Influent 4/4/2017 ug/L	Well 1-2A Influent 4/26/2017 ug/L	Well 1-2A Influent 5/19/2017 ug/L	Well 1-2A Influent 5/24/2017 ug/L	Well 1-2A Influent 6/20/2017 ug/L	Well 1-2A Influent 6/21/2017 ug/L	Well 1-2A Influent 7/19/2017 ug/L	Well 1-2A Influent 7/31/2017 ug/L	Well 1-2A Influent 8/18/2017 ug/L	Well 1-2A Influent 8/28/2017 ug/L	Well 1-2A Influent 9/15/2017 ug/L	Well 1-2A Influent 9/20/2017 ug/L	Well 1-2A Influent 10/3/2017 ug/L	Well 1-2A Influent 10/23/2017 ug/L	Well 1-2A Influent 11/10/2017 ug/L	Well 1-2A Influent 11/28/2017 ug/L	Well 1-2A Influent 12/27/2017 ug/L
1,1,1-Trichloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2,2-Tetrachloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,1,2-Trichloroethane	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,3-Trimethylbenzene		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2,4-Trichlorobenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,4-Trimethylbenzne	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloroethane	0.6	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloropropane	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,4-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
2-Butanone (MEK)	50	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U*	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
2-Hexanone	50*	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U*	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
4-Methyl-2-pentanone (MIBK)		5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
Acetone	50*	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	4.2 J	NA	10 U	NA
Benzene	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Bromodichloromethane	50	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromoform	50*	1.0 U	NA	1.0 U	NA	1.0 U*	NA	1.0 U*	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromomethane	5	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon disulfide		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon tetrachloride	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chlorobenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroform	7	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Chloromethane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
cis-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
cis-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Cyclohexane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dibromochloromethane	50	1.0 U	NA	1.0 U	NA	1.0 U*	NA	1.0 U*	NA	1.0 U	NA	1.0 U	NA	1.0 U*	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dichlorodifluoromethane	5	1.0 U*	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Ethylbenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Isopropylbenzne (Cumene)	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Acetate		2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA
Methyl Cyclohexane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Methylene Chloride	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Tert Butyl Ether	10	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Styrene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Tetrachloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Toluene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichlorofluoromethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Vinyl chloride	2	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Xylenes, Total		2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.2	0	0	0

Notes
NYSDEC GA GW Standard - New York State Department
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µg/L - Micrograms per Liter
NA - Not Analyzed
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U - Compound was not detected at the indicated concentration
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Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-2A Influent 12/28/2017 ug/L	Well 1-2A ** Influent 1/15/2018 ug/L	Well 1-2A Influent 1/29/2018 ug/L	Well 1-2A Influent 2/20/2018 ug/L	Well 1-2A Influent 2/26/2018 ug/L	Well 1-2A Influent 3/12/2018 ug/L	Well 1-2A Influent 3/30/2018 ug/L	Well 1-2A Influent 4/6/2018 ug/L	Well 1-2A Influent 4/24/2018 ug/L	Well 1-2A Influent 5/21/2018 ug/L	Well 1-2A Influent 5/7/2018 ug/L	Well 1-2A Influent 6/19/2018 ug/L	Well 1-2A Influent 6/14/2018 ug/L
1,1,1-Trichloroethane	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 UT	NA	1.0 U
1,1,2-Trichloroethane	1	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,1-Dichloroethane	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,1-Dichloroethene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	10 U	NA	10 U	NA	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U
1,2-Dichlorobenzene	3	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2-Dichloropropane	1	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
2-Butanone (MEK)	50	10 U	NS	10 U	NA	10 U	NA	10 U	NA	50 U	NA	50 U	NA	10 U
2-Hexanone	50*	5.0 U	NS	5.0 U	NA	5.0 U	NA	5.0 U	NA	10 U	NA	10 U	NA	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	NS	5.0 U	NA	5.0 U	NA	5.0 U	NA	10 U	NA	10 U	NA	5.0 U*
Acetone	50*	10 U	NS	10 U	NA	10 U	NA	10 U	NA	25 U	NA	25 U	NA	10 U
Benzene	1	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Bromodichloromethane	50	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U
Bromoform	50*	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U
Bromomethane	5	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U
Carbon disulfide		1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U*	NA	1.0 U
Carbon tetrachloride	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Chlorobenzene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Chloroethane	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Chloroform	7	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U
Chloromethane		1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Cyclohexane		1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	5.0 U	NA	5 U*	NA	1.0 U
Dibromochloromethane	50	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U
Dichlorodifluoromethane	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Ethylbenzene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Methyl Acetate		2.5 U	NS	2.5 U	NA	2.5 U	NA	2.5 U	NA	10 U	NA	10 U	NA	2.5 U
Methyl Cyclohexane		1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U	NA	5.0 U	NA	5.0 U*	NA	1.0 U
Methylene Chloride	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	5.0 U	0.5 U	5.0 U*	0.5 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Styrene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Tetrachloroethene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Toluene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Trichloroethene	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U*	0.5 U	1.0 U
Trichlorofluoromethane	5	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Vinyl chloride	2	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Xylenes, Total		2.0 U	NS	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	3.0 U	0.5 U	3.0 U	0.5 U	2.0 U
Total VOCs		0	NS	0	0	0	0	0	0	0	0	0	0	0

Notes
NYSDEC GA GW Standard - New York State Department
of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

ARCADIS Design & Consultancy for natural and built assets

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-3 Influent 7/22/2014 ug/L	Well 1-3 Influent 7/30/2014 ug/L	Well 1-3 Influent 8/18/2014 ug/L	Well 1-3 Influent 8/28/2014 ug/L	Well 1-3 Influent 9/29/2014 ug/L	Well 1-3 Influent 9/30/2014 ug/L	Well 1-3 Influent 10/21/2014 ug/L	Well 1-3 Influent 10/28/2014 ug/L	Well 1-3 Influent 11/11/2014 ug/L	Well 1-3 Influent 11/24/2014 ug/L	Well 1-3 Influent 12/9/2014 ug/L	Well 1-3 Influent 12/18/2014 ug/L	Well 1-3 Influent 1/20/2015 ug/L	Well 1-3 Influent 1/29/2015 ug/L	Well 1-3 Influent 2/25/2015 ug/L	Well 1-3 Influent 2/25/2015 ug/L	Well 1-3 Influent 3/12/2015 ug/L	Well 1-3 Influent 3/19/2015 ug/L	Well 1-3 Influent 4/9/2015 ug/L	Well 1-3 Influent 4/20/2015 ug/L
1,1,1-Trichloroethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,1,2,2-Tetrachloroethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U
1,1,2-Trichloroethane	1	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,1-Dichloroethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,1-Dichloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2,3-Trimethylbenzene		NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	5.0 U	NA	NA	1.0 U	NS	1.0 U	0.5 U	1.0 U	NA	1.0 U
1,2,4-Trichlorobenzene	5	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2,4-Trimethylbenzne	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	2.0 U	NA	NA	1.0 U	NS	1.0 U	0.5 U	1.0 U	NA	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	1.0 U	0.5 U	1.0 U	NA	1.0 U
1,2-Dichlorobenzene	3	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2-Dichloroethane	0.6	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,2-Dichloropropane	1	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,3-Dichlorobenzene	3	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
1,4-Dichlorobenzene	3	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
2-Butanone (MEK)	50	NA	10 U	NA	10 U	10.0 U	NA	10 U	NA	NA	10 U	10 U	NA	NA	10 U	NS	10 U	NA	10 U	NA	10 U
2-Hexanone	50*	NA	5.0 U	NA	5.0 U	10.0 U	NA	5.0 U	NA	NA	5.0 U *	10 U	NA	NA	5.0 U	NS	5.0 U	NA	5.0 U	NA	5.0 U
4-Methyl-2-pentanone (MIBK)		NA	5.0 U	NA	5.0 U	10.0 U	NA	5.0 U	NA	NA	5.0 U	10 U	NA	NA	5.0 U	NS	5.0 U	NA	5.0 U	NA	5.0 U
Acetone	50*	NA	10 U	NA	10 U	10.0 U	NA	10 U	NA	NA	10 U	10 U	NA	NA	10 U	NS	10 U	NA	10 U	NA	10 U
Benzene	1	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Bromodichloromethane	50	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	1.0 U	0.5 U	1.0 U	NA	1.0 U
Bromoform	50*	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	1.0 U	0.5 U	1.0 U	NA	1.0 U
Bromomethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Carbon disulfide		0.5 U	1.0 U	0.5 U	1 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U
Carbon tetrachloride	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Chlorobenzene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	NA	1.0 U	0.5 U	1.0 U
Chloroethane	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Chloroform	7	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	1.0 U	0.5 U	1.0 U	NA	1.0 U
Chloromethane		0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
cis-1,2-Dichloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
cis-1,3-Dichloropropene	0.4	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Cyclohexane		NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U
Dibromochloromethane	50	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U*	NA	NA	1.0 U *	1.0 U	NA	NA	1.0 U	NS	1.0 U	0.5 U	1.0 U	NA	1.0 U
Dichlorodifluoromethane	5	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U *	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Ethylbenzene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Isopropylbenzne (Cumene)	5	NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Methyl Acetate		NA	NA	NA	2.5 U	NA U	NA	2.5 U	NA	NA	2.5 U	10 U	NA	NA	2.5 U	NS	2.5 U	NA	2.5 U	NA	2.5 U
Methyl Cyclohexane		NA	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	NA	1.0 U	1.0 U	NA	NA	1.0 U	NS	1.0 U	NA	1.0 U	NA	1.0 U
Methylene Chloride	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Methyl Tert Butyl Ether	10	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	1 U	1.0 U	0.5 U	1.0 U
Styrene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Tetrachloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Toluene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
trans-1,2-Dichloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
trans-1,3-Dichloropropene	0.4	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Trichloroethene	5	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Trichlorofluoromethane	5	0.5 U	NA	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Vinyl chloride	2	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	NS	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U
Xylenes, Total		0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	0.5 U	2.0 U	1.5 U	0.5 U	2.0 U	2.0 U	0.5 U	0.5 U	2.0 U	NS	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-3 Influent 5/6/2015 ug/L	Well 1-3 Influent 5/12/2015 ug/L	Well 1-3 Influent 6/9/2015 ug/L	Well 1-3 Influent 6/25/2015 ug/L	Well 1-3 Influent 7/29/2015 ug/L	Well 1-3 Influent 8/11/2015 ug/L	Well 1-3 Influent 8/28/2015 ug/L	Well 1-3 Influent 9/15/2015 ug/L	Well 1-3 Influent 9/24/2015 ug/L	Well 1-3 Influent 10/12/2015 ug/L	Well 1-3 Influent 11/4/2015 ug/L	Well 1-3 Influent 11/10/2015 ug/L	Well 1-3 Influent 12/21/2015 ug/L	Well 1-3 Influent 1/19/2016 ug/L	Well 1-3 Influent 1/27/2016 ug/L	Well 1-3 Influent 2/16/2016 ug/L	Well 1-3 Influent 2/26/2016 ug/L	Well 1-3 Influent 3/22/2016 ug/L	Well 1-3 Influent 3/28/2016 ug/L	Well 1-3 Influent 4/20/2016 ug/L
1,1,1-Trichloroethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2,2-Tetrachloroethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,1,2-Trichloroethane	1	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,3-Trimethylbenzene		1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	5.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2,4-Trichlorobenzene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,4-Trimethylbenzne	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	2.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dichlorobenzene	3	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloroethane	0.6	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloropropane	1	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3-Dichlorobenzene	3	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,4-Dichlorobenzene	3	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
2-Butanone (MEK)	50	10 U	NA	NA	10 U	10 U	NA	10 U	NA	10 U	10 U	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
2-Hexanone	50*	5.0 U	NA	NA	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	NA	10.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
4-Methyl-2-pentanone (MIBK)		5.0 U	NA	NA	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	NA	10.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
Acetone	50*	10 U	NA	NA	10 U	10 U	NA	10 U	NA	10 U	10 U	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
Benzene	1	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Bromodichloromethane	50	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromoform	50*	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromomethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon disulfide		1.0 U	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon tetrachloride	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chlorobenzene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroform	7	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Chloromethane		1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
cis-1,2-Dichloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
cis-1,3-Dichloropropene	0.4	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Cyclohexane		1.0 U	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dibromochloromethane	50	1.0 U	NA	NA	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Dichlorodifluoromethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Ethylbenzene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Isopropylbenzne (Cumene)	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Acetate		2.5 U	NA	NA	2.5 U	2.5 U	NA	2.5 U	NA	2.5 U	2.5 U	2.5 U	NA	10 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA
Methyl Cyclohexane		1.0 U	NA	NA	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Methylene Chloride	5	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Tert Butyl Ether	10	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Styrene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Tetrachloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Toluene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,2-Dichloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,3-Dichloropropene	0.4	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichloroethene	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichlorofluoromethane	5	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Vinyl chloride	2	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Xylenes, Total		2.0 U	1.5 U	0.5 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
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Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-3 Influent 4/22/2016 ug/L	Well 1-3 Influent 5/20/2016 ug/L	Well 1-3 Influent 5/23/2016 ug/L	Well 1-3 Influent 6/21/2016 ug/L	Well 1-3 Influent 6/22/2016 ug/L	Well 1-3 Influent 7/20/2016 ug/L	Well 1-3 Influent 7/28/2016 ug/L	Well 1-3 Influent 8/16/2016 ug/L	Well 1-3 Influent 8/18/2016 ug/L	Well 1-3 Influent 9/6/2016 ug/L	Well 1-3 Influent 9/15/2016 ug/L	Well 1-3 Influent 10/18/2016 ug/L	Well 1-3 Influent 10/31/2016 ug/L	Well 1-3 Influent 11/8/2016 ug/L	Well 1-3 Influent 11/28/2016 ug/L	Well 1-3 Influent 12/16/2016 ug/L	Well 1-3 Influent 12/29/2016 ug/L	Well 1-3 Influent 1/13/2017 ug/L	Well 1-3 Influent 1/31/2017 ug/L	Well 1-3 Influent 2/7/2017 ug/L
1,1,1-Trichloroethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2,2-Tetrachloroethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,1,2-Trichloroethane	1	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,3-Trimethylbenzene		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2,4-Trichlorobenzene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,4-Trimethylbenzne	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloroethane	0.6	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloropropane	1	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,4-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
2-Butanone (MEK)	50	10 U	NA	10 U	10 U	NA	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
2-Hexanone	50*	5.0 U	NA	5.0 U	5.0 U	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
4-Methyl-2-pentanone (MIBK)		5.0 U	NA	5.0 U	5.0 U	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
Acetone	50*	10 U	NA	10 U	10 U	NA	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
Benzene	1	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Bromodichloromethane	50	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromoform	50*	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromomethane	5	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon disulfide		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon tetrachloride	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chlorobenzene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroform	7	1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Chloromethane		1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	NA	1.0 U	NA
cis-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
cis-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Cyclohexane		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dibromochloromethane	50	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dichlorodifluoromethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Ethylbenzene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Isopropylbenzne (Cumene)	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Acetate		2.5 U	NA	2.5 U	2.5 U	NA	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA
Methyl Cyclohexane		1.0 U	NA	1.0 U	1.0 U	NA	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Methylene Chloride	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Tert Butyl Ether	10	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Styrene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Tetrachloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Toluene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichloroethene	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichlorofluoromethane	5	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Vinyl chloride	2	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Xylenes, Total		2.0 U	0.5 U	2.0 U	2.0 U	0.5 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes
NYSDEC GA GW Standard - New York State Department
of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-3 Influent 2/27/2017 ug/L	Well 1-3 Influent 3/7/2017 ug/L	Well 1-3 Influent 3/23/2017 ug/L	Well 1-3 Influent 4/4/2017 ug/L	Well 1-3 Influent 4/26/2017 ug/L	Well 1-3 Influent 5/19/2017 ug/L	Well 1-3 Influent 5/24/2017 ug/L	Well 1-3 Influent 6/20/2017 ug/L	Well 1-3 Influent 6/21/2017 ug/L	Well 1-3 Influent 7/19/2017 ug/L	Well 1-3 Influent 7/31/2017 ug/L	Well 1-3 Influent 8/18/2017 ug/L	Well 1-3 Influent 8/28/2017 ug/L	Well 1-3 Influent 9/15/2017 ug/L	Well 1-3 Influent 9/20/2017 ug/L	Well 1-3 Influent 10/3/2017 ug/L	Well 1-3 Influent 10/23/2017 ug/L	Well 1-3 Influent 11/10/2017 ug/L	Well 1-3 Influent 11/28/2017 ug/L	Well 1-3 Influent 12/27/2017 ug/L
1,1,1-Trichloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2,2-Tetrachloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,1,2-Trichloroethane	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,1-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,3-Trimethylbenzene		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2,4-Trichlorobenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2,4-Trimethylbenzne	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
1,2-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloroethane	0.6	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,2-Dichloropropane	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,3-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
1,4-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
2-Butanone (MEK)	50	10 U*	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U*	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA
2-Hexanone	50*	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U*	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
4-Methyl-2-pentanone (MIBK)		5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA
Acetone	50*	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	10 U	NA	3.3 J	NA	1.9 J	NA
Benzene	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Bromodichloromethane	50	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromoform	50*	1.0 U	NA	1.0 U	NA	1.0 U*	NA	1.0 U*	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Bromomethane	5	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon disulfide		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Carbon tetrachloride	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chlorobenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Chloroform	7	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Chloromethane		1.0 U*	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
cis-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
cis-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Cyclohexane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dibromochloromethane	50	1.0 U	NA	1.0 U	NA	1.0 U*	NA	1.0 U*	NA	1.0 U	NA	1.0 U	NA	1.0 U*	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Dichlorodifluoromethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Ethylbenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Isopropylbenzne (Cumene)	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Acetate		2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA
Methyl Cyclohexane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA
Methylene Chloride	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Methyl Tert Butyl Ether	10	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Styrene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Tetrachloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Toluene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
trans-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Trichlorofluoromethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Vinyl chloride	2	1.0 U*	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U
Xylenes, Total		2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.3	0	1.9	0	

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

Table 2-4 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Units	NYSDEC GA Standard ug/L	Well 1-3 Influent 12/28/2017 ug/L	Well 1-3 Influent 1/15/2018 ug/L	Well 1-3 Influent 1/29/2018 ug/L	Well 1-3 Influent 2/20/2018 ug/L	Well 1-3 Influent 2/26/2018 ug/L	Well 1-3 Influent 3/12/2018 ug/L	Well 1-3 Influent 3/30/2018 ug/L	Well 1-3 Influent 4/6/2018 ug/L	Well 1-3 Influent 4/24/2018 ug/L	Well 1-3 Influent 5/21/2018 ug/L	Well 1-3 Influent 5/7/2018 ug/L	Well 1-3 (post) Influent 5/7/2018 ug/L	Well 1-3 Influent 6/19/2018 ug/L	Well 1-3 Influent 6/14/2018 ug/L	Well 1-3 (post) Influent 6/14/2018 ug/L
1,1,1-Trichloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	0.29 J	0.5 U	0.26 J	1.0 U	0.5 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U*	1.0 U*	NA	1.0 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,2,3-Trimethylbenzene		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	10 U	NA	10 U	10 U	NA	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	NA	10 U	NA	10 U	NA	10 U	NA	50 U	NA	50 U	50 U	NA	10 U	10 U
2-Hexanone	50*	5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	10 U	NA	10 U	10 U	NA	5.0 U*	5.0 U*
4-Methyl-2-pentanone (MIBK)		5.0 U	NA	5.0 U	NA	5.0 U	NA	5.0 U	NA	10 U	NA	10 U	10 U	NA	5.0 U*	5.0 U*
Acetone	50*	10 U	NA	3.4 J	NA	10 U	NA	10 U	NA	25 U	NA	25 U	25 U	NA	10 U	10 U
Benzene	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U
Bromoform	50*	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U
Bromomethane	5	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U
Carbon disulfide		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U*	1.0 U*	NA	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Chloroform	7	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U
Chloromethane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Cyclohexane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	5.0 U	NA	5.0 U*	5.0 U*	NA	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	NA	2.5 U	NA	2.5 U	NA	2.5 U	NA	10 U	NA	10 U	10 U	NA	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	5.0 U	NA	5.0 U*	5.0 U*	NA	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	5.0 U	0.5 U	5.0 U*	5.0 U*	0.5 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Styrene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Toluene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U*	1.0 U*	0.5 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U
Xylenes, Total		2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	3.0 U	0.5 U	3.0 U	3.0 U	0.5 U	2.0 U	2.0 U
Total VOCs		0	0	3.4	0	0	0	0	0	0.29	0	0.26	0	0	0.0	0.0

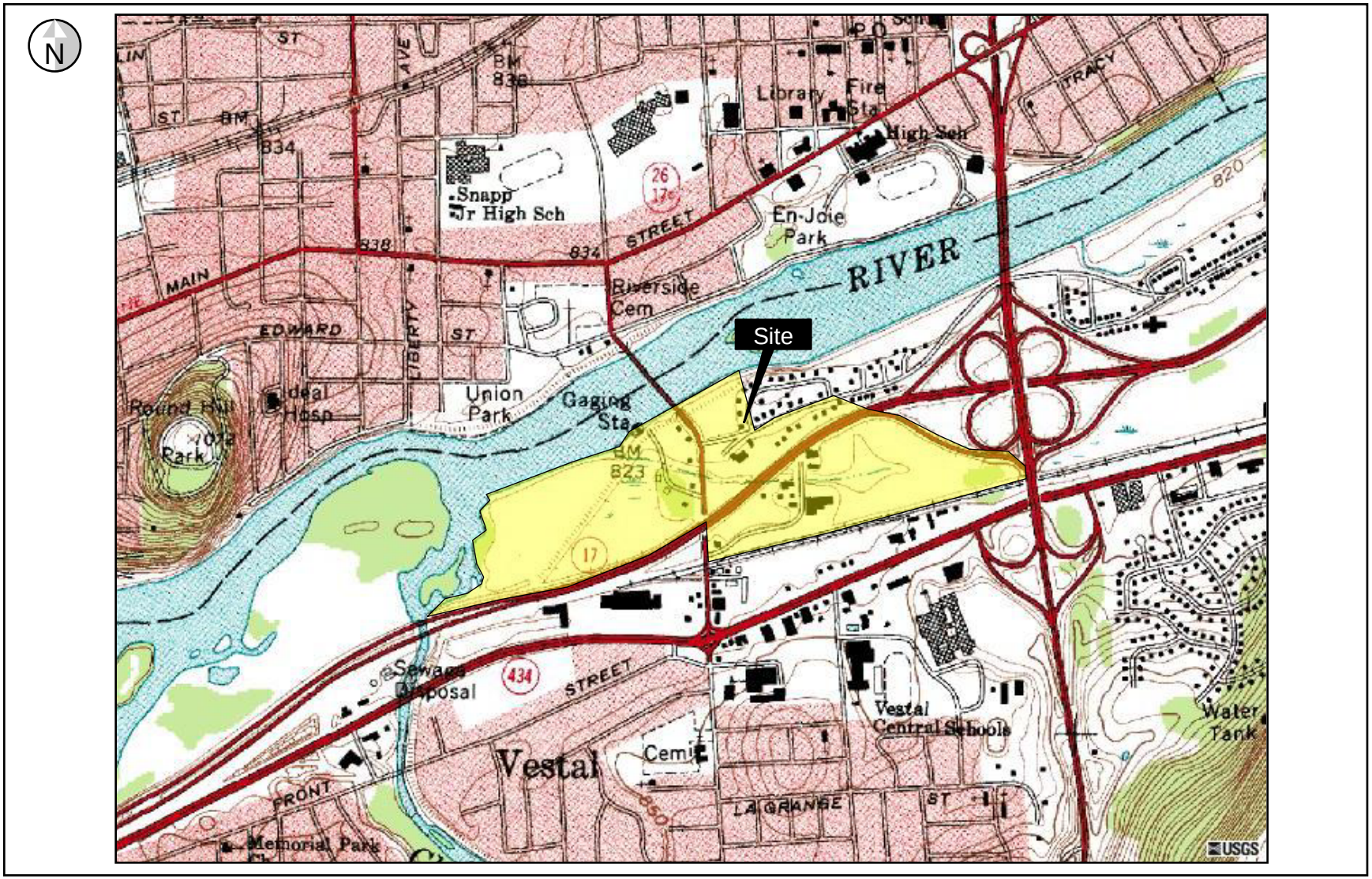
Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

FIGURES

ARCADIS

Figure 1-1
Site Location
Vestal Water Supply Site
Vestal, New York
NYSDEC Site # 7-04-009A

0 2,000 ft



Source: USGS 7.5-minute Series Topographic Quadrangle, Endicott (1988).

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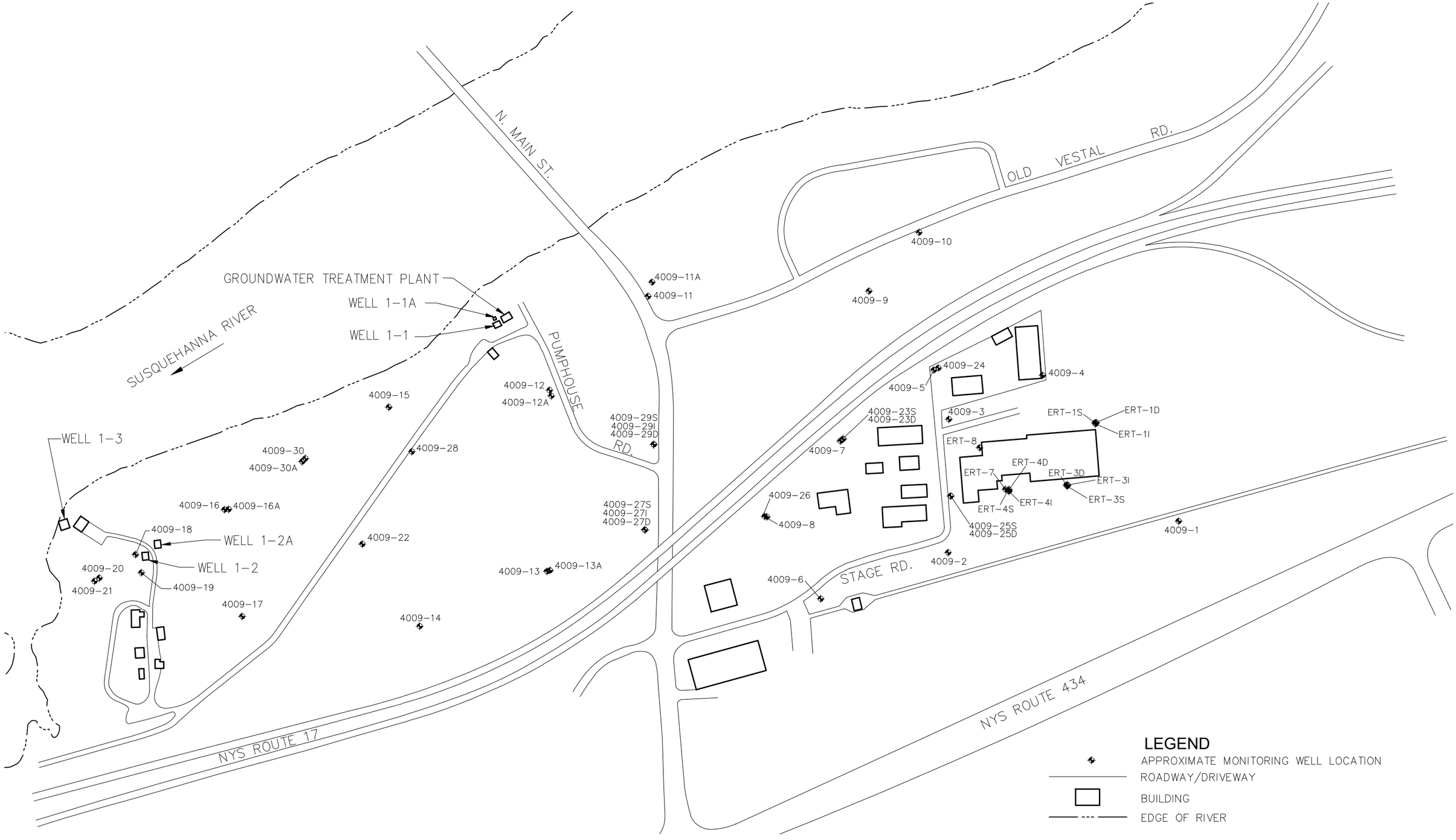


SOURCE: BASE MAP DIGITIZED USING AERIAL ORTHIMAGERY FROM NYS GIS CLEARINGHOUSE, DATED 2011

ARCADIS Design & Consultancy for natural and built assets

NYSDEC STANDBY CONTRACT NO. D007618-7
NYSDEC SITE NO. 7-04-009

VESTAL WATER SUPPLY
VESTAL, NEW YORK

MONITORING WELL LOCATION MAP

SCALE: AS SHOWN

MARCH 2018

FIGURE 2-1

4009-16A VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
Benzene	1	**1.8**	1.0 U	0.23 J	1.0 U	1.0 U	0.56 J

4009-11A VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

4009-7 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
cis-1,2-Dichloroethene	5	**42**	**41**	**36**	**53**	**26**	**38**
Vinyl chloride	2	**22**	**4.6**	**4.3**	**10**	1.0 U	**5.6**

4009-10 VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

4009-9 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
cis-1,2-Dichloroethene	5	**8.2**	**10**	**21**	**11**	2.6	**8.2**

4009-13A VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

4009-30A VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

N. MAIN ST.
OLD VESTAL RD.
GROUNDWATER TREATMENT PLANT
WELL 1-1A
WELL 1-1
WELL 1-2A
WELL 1-2
WELL 1-3
SUSQUEHANNA RIVER
PUMPHOUSE RD.
STAGE RD.
NYS ROUTE 17
4009-1
4009-2
4009-3
4009-4
4009-5
4009-6
4009-7
4009-8
4009-9
4009-10
4009-11
4009-11A
4009-12
4009-12A
4009-13
4009-13A
4009-14
4009-15
4009-16
4009-16A
4009-17
4009-18
4009-19
4009-20
4009-21
4009-22
4009-23S
4009-23D
4009-24
4009-25S
4009-25D
4009-26
4009-27S
4009-27I
4009-27D
4009-28
4009-29S
4009-29I
4009-29D
4009-30
4009-30A
ERT-1S
ERT-1D
ERT-1I
ERT-3S
ERT-3D
ERT-3I
ERT-4S
ERT-4I
ERT-4D
ERT-7
ERT-8

LEGEND

- APPROXIMATE MONITORING WELL LOCATION
- ROADWAY/DRIVEWAY
- BUILDING
- EDGE OF RIVER

0 150' 300' 600'

ND – Not detected above NYSDEC GA Standard
U – Compound was not detected at the indicated concentration
J – Indicates an estimated value.
NYSDEC GA GW Standard – New York State Department of Environmental Conservation Groundwater Standard
VOC – Volatile Organic Compounds
ug/L – micrograms per liter
– Shaded values exceed the corresponding NYSDEC GA GW Standard

SOURCE: BASE MAP DIGITIZED USING AERIAL ORTHIMAGERY FROM NYS GIS CLEARINGHOUSE, DATED 2011

USER: HAUSMANN FILENAME: G:\ACAD\PROJ\00266401.0000\FIGURES\FIGURE 2-2 VOC SHALLOW JUN 2018.DWG SAVE DATE: 7/30/2018 4:19 AM PLOT DATE: 7/30/2018 4:19 AM

ARCADIS Design & Consultancy for natural and built assets

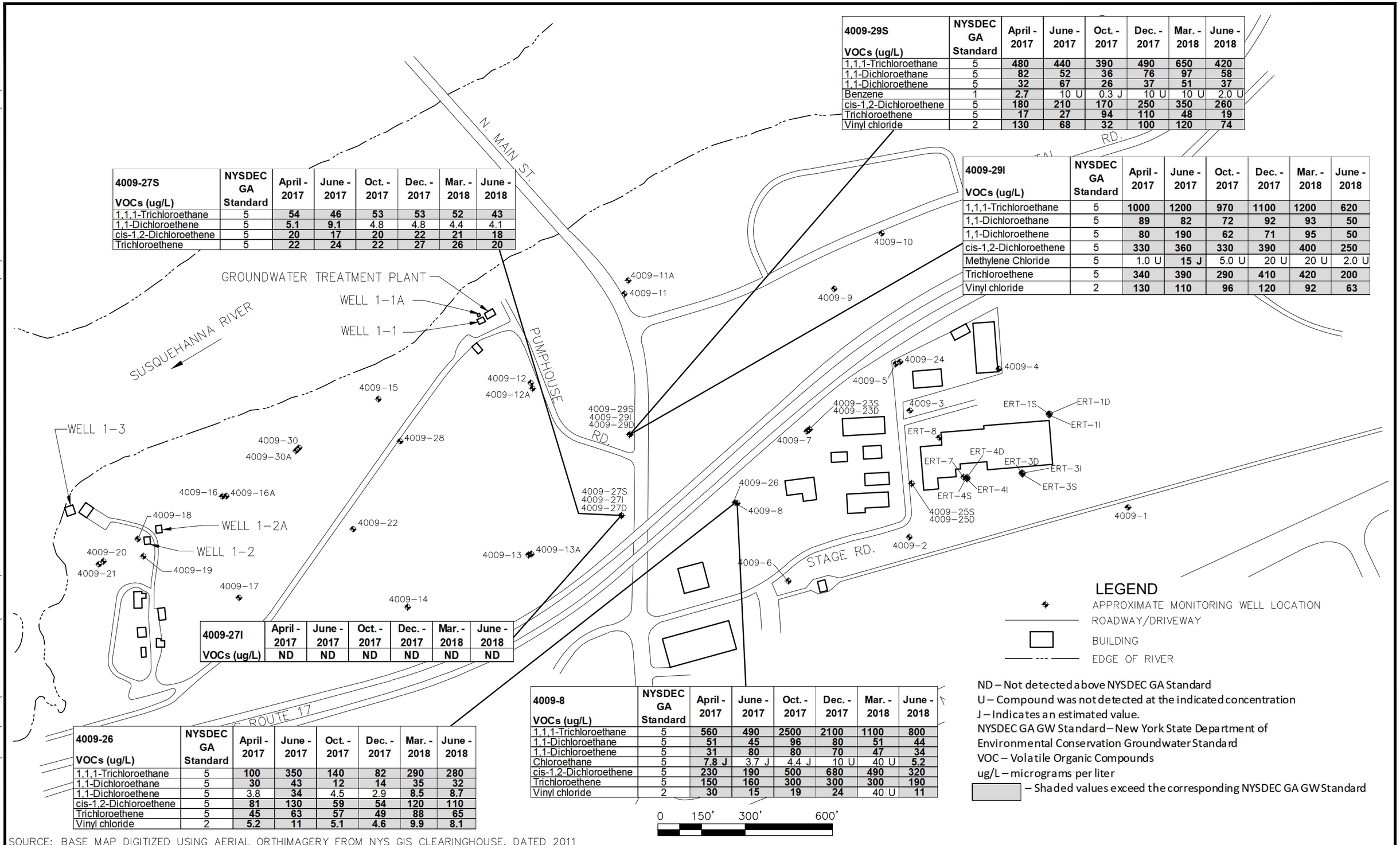
NYSDEC STANDBY CONTRACT NO. D007618-7
NYSDEC SITE NO. 7-04-009
VESTAL WATER SUPPLY
VESTAL, NEW YORK

SUMMARY OF VOC RESULTS - SHALLOW WELLS

SCALE: AS SHOWN

JULY 2018

FIGURE 2-2



4009-27S VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	**54**	**46**	**53**	**53**	**52**	**43**
1,1-Dichloroethene	5	**5.1**	**9.1**	4.8	4.8	4.4	4.1
cis-1,2-Dichloroethene	5	**20**	**17**	**20**	**22**	**21**	**18**
Trichloroethene	5	**22**	**24**	**22**	**27**	**26**	**20**

4009-29S VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	**480**	**440**	**390**	**490**	**650**	**420**
1,1-Dichloroethane	5	**82**	**52**	**36**	**76**	**97**	**58**
1,1-Dichloroethene	5	**32**	**67**	**26**	**37**	**51**	**37**
Benzene	1	**2.7**	10 U	0.3 J	10 U	10 U	2.0 U
cis-1,2-Dichloroethene	5	**180**	**210**	**170**	**250**	**350**	**260**
Trichloroethene	5	**17**	**27**	**94**	**110**	**48**	**19**
Vinyl chloride	2	**130**	**68**	**32**	**100**	**120**	**74**

4009-29I VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	**1000**	**1200**	**970**	**1100**	**1200**	**620**
1,1-Dichloroethane	5	**89**	**82**	**72**	**92**	**93**	**50**
1,1-Dichloroethene	5	**80**	**190**	**62**	**71**	**95**	**50**
cis-1,2-Dichloroethene	5	**330**	**360**	**330**	**390**	**400**	**250**
Methylene Chloride	5	1.0 U	**15 J**	5.0 U	20 U	20 U	2.0 U
Trichloroethene	5	**340**	**390**	**290**	**410**	**420**	**200**
Vinyl chloride	2	**130**	**110**	**96**	**120**	**92**	**63**

4009-27I VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

4009-26 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	**100**	**350**	**140**	**82**	**290**	**280**
1,1-Dichloroethane	5	**30**	**43**	**12**	**14**	**35**	**32**
1,1-Dichloroethene	5	3.8	**34**	4.5	2.9	**8.5**	**8.7**
cis-1,2-Dichloroethene	5	**81**	**130**	**59**	**54**	**120**	**110**
Trichloroethene	5	**45**	**63**	**57**	**49**	**88**	**65**
Vinyl chloride	2	**5.2**	**11**	**5.1**	**4.6**	**9.9**	**8.1**

4009-8 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	**560**	**490**	**2500**	**2100**	**1100**	**800**
1,1-Dichloroethane	5	**51**	**45**	**96**	**80**	**51**	**44**
1,1-Dichloroethene	5	**31**	**80**	**80**	**70**	**47**	**34**
Chloroethane	5	**7.8 J**	3.7 J	4.4 J	10 U	40 U	**5.2**
cis-1,2-Dichloroethene	5	**230**	**190**	**500**	**680**	**490**	**320**
Trichloroethene	5	**150**	**160**	**300**	**300**	**300**	**190**
Vinyl chloride	2	**30**	**15**	**19**	**24**	40 U	**11**

LEGEND

- APPROXIMATE MONITORING WELL LOCATION
- ROADWAY/DRIVEWAY
- BUILDING
- EDGE OF RIVER

ND – Not detected above NYSDEC GA Standard
U – Compound was not detected at the indicated concentration
J – Indicates an estimated value.
NYSDEC GA GW Standard – New York State Department of Environmental Conservation Groundwater Standard
VOC – Volatile Organic Compounds
ug/L – micrograms per liter
– Shaded values exceed the corresponding NYSDEC GA GW Standard

SOURCE: BASE MAP DIGITIZED USING AERIAL ORTHIMAGERY FROM NYS GIS CLEARINGHOUSE, DATED 2011

ARCADIS Design & Consultancy for natural and built assets

NYSDEC STANDBY CONTRACT NO. D007618-7
NYSDEC SITE NO. 7-04-009

VESTAL WATER SUPPLY
VESTAL, NEW YORK

SUMMARY OF VOC SAMPLING RESULTS - INTERMEDIATE WELLS

SCALE: AS SHOWN

JULY 2018

FIGURE 2-3

Well 1-1 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	NS	360	210	170	230	170
1,1-Dichloroethane	5	NS	32	17	18	21	17
1,1-Dichloroethene	5	NS	57	13	13	16	14
cis-1,2-Dichloroethene	5	NS	96	55	59	69	56
Trichloroethene	5	NS	89	59	61	73	53

4009-11 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	1.0 U	170	65	1.0 U	88	68
1,1-Dichloroethane	5	2.8	43.0	18	2.1	24	21
1,1-Dichloroethene	5	1.0 U	27	5.0	1.0 U	7.2	6.4
Benzene	1	15	1.0 U	1.0 U	6.5	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	35	15	1.0 U	23	20
Vinyl chloride	2	1.1	37	13	1.0 U	17	19

4009-15 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
Benzene	1	0.97 J	12	10	9.1	9.3	9.0

4009-16 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
Benzene	1	NS	18.0	1.5	5.8	1.1	5.7

4009-12 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	100	45	1.0 U	330	45	1.0 U
1,1-Dichloroethane	5	18	9.2	5.6	46	13	6.2
1,1-Dichloroethene	5	3.2	7.7	0.53 J	16	5.0	0.54 J
Benzene	1	3.6	2.8	2.5	0.51 J	2.5	1.7
cis-1,2-Dichloroethene	5	11	8.7	2.0	62	15	2.0
Trichloroethene	5	3.0	10	1.9	69	14	1.6
Vinyl chloride	2	5.7	22	1.3	96	38	2.6

4009-29D VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
1,1,1-Trichloroethane	5	270	31	7.6	13	280	41
1,1-Dichloroethane	5	44	8.1	1.8	2.9	38	11
1,1-Dichloroethene	5	26	2.0	0.37 J	0.88 J	42	5.3
cis-1,2-Dichloroethene	5	130	10	1.5	3.3	180	26
Trichloroethene	5	61	7.2	2.0	3.5	120	10
Vinyl chloride	2	73	11	8.4	9.4	72	17

4009-14 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
Benzene	1	NS	9.2	11	12	13	11

4009-19 VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

4009-18 VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

4009-21 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
Benzene	1	24	25	18	18	17	11

4009-27D VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

4009-13 VOCs (ug/L)	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
	ND	ND	ND	ND	ND	ND

4009-28 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
Benzene	1	2.9	1.6	1.0 U	1.0 U	1.0 U	0.61 J

4009-30 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
Benzene	1	1.0 U	1.1	2.5	6.4	5.3	4.1

4009-22 VOCs (ug/L)	NYSDEC GA Standard	April - 2017	June - 2017	Oct. - 2017	Dec. - 2017	Mar. - 2018	June - 2018
Benzene	1	1.1	1.1	1.1	1.0	1.2	0.96 J

N. MAIN ST.
GROUNDWATER TREATMENT PLANT
WELL 1-1A
WELL 1-1
WELL 1-2A
WELL 1-2
WELL 1-3
PUMPHOUSE RD.
STAGE RD.
SUSQUEHANNA RIVER
4009-1
4009-2
4009-3
4009-4
4009-5
4009-6
4009-7
4009-8
4009-9
4009-10
4009-11
4009-11A
4009-12
4009-12A
4009-13
4009-13A
4009-14
4009-15
4009-16
4009-16A
4009-17
4009-18
4009-19
4009-20
4009-21
4009-22
4009-23S
4009-23D
4009-24
4009-25S
4009-25D
4009-26
4009-27S
4009-27I
4009-27D
4009-28
4009-29S
4009-29I
4009-29D
4009-30
4009-30A
ERT-1S
ERT-1D
ERT-1I
ERT-3I
ERT-3S
ERT-3D
ERT-4D
ERT-4I
ERT-4S
ERT-7
ERT-8

LEGEND

- APPROXIMATE MONITORING WELL LOCATION
- ROADWAY/DRIVEWAY
- BUILDING
- EDGE OF RIVER

ND – Not detected above NYSDEC GA Standard
U – Compound was not detected at the indicated concentration
J – Indicates an estimated value
NYSDEC GA GW Standard – New York State Department of Environmental Conservation Groundwater Standard
VOC – Volatile Organic Compounds
ug/L – micrograms per liter
NS- Not Sampled
– Shaded values exceed the corresponding NYSDEC GA GW Standard

0 150' 300' 600'

SOURCE: BASE MAP DIGITIZED USING AERIAL ORTHIMAGERY FROM NYS GIS CLEARINGHOUSE, DATED 2011

USER: HAUSMANN FILENAME: G:\ACAD\PROJ\00266401.0000\FIGURES\FIGURE 2-4 VOC DEEP JUN 2018.DWG SAVE DATE: 7/30/2018 4:21 AM PLOT DATE: 7/30/2018 4:22 AM

ARCADIS Design & Consultancy for natural and built assets

NYSDEC STANDBY CONTRACT NO. D007618-7
NYSDEC SITE NO. 7-04-009
VESTAL WATER SUPPLY
VESTAL, NEW YORK

SUMMARY OF VOC SAMPLING RESULTS - DEEP WELLS
SCALE: AS SHOWN

JULY 2018
FIGURE 2-4

APPENDIX A

Analytical Reporting Forms (TestAmerica Laboratories, Inc. and Microbac Laboratory Services)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-134787-1
Client Project/Site: NYSDEC-Standby VESTAL

For:
ARCADIS U.S. Inc
855 Route 146
Suite 210
Clifton Park, New York 12065

Attn: Mr. Jeremy Wyckoff

Joseph V. Giacomazza

Authorized for release by:
5/3/2018 4:32:41 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager
(484)685-0868
judy.stone@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
J	Indicates an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Job ID: 480-134787-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-134787-1

Receipt
The samples were received on 4/25/2018 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Client Sample ID: WELL 1-2A — Lab Sample ID: 480-134787-1

No Detections.

Client Sample ID: WELL 1-3 — Lab Sample ID: 480-134787-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.29	J	1.0	0.19	ug/L	1		8260C	Total/NA

Client Sample ID: TRIP BLANK 042418 — Lab Sample ID: 480-134787-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Client Sample ID: WELL 1-2A
Date Collected: 04/24/18 08:00
Date Received: 04/25/18 10:20

Lab Sample ID: 480-134787-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 19:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 19:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.15	ug/L			05/02/18 19:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 19:01	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/02/18 19:01	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/02/18 19:01	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/02/18 19:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/02/18 19:01	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/02/18 19:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/02/18 19:01	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/02/18 19:01	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/02/18 19:01	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/02/18 19:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/02/18 19:01	1
2-Hexanone	10	U	10	1.3	ug/L			05/02/18 19:01	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/02/18 19:01	1
Acetone	25	U	25	2.7	ug/L			05/02/18 19:01	1
Benzene	1.0	U	1.0	0.20	ug/L			05/02/18 19:01	1
Bromoform	1.0	U	1.0	0.29	ug/L			05/02/18 19:01	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/02/18 19:01	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/02/18 19:01	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/02/18 19:01	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/02/18 19:01	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/02/18 19:01	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/02/18 19:01	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/02/18 19:01	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/02/18 19:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/02/18 19:01	1
Cyclohexane	5.0	U	5.0	0.13	ug/L			05/02/18 19:01	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/02/18 19:01	1
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/02/18 19:01	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/02/18 19:01	1
Methyl acetate	10	U	10	0.58	ug/L			05/02/18 19:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
Methylcyclohexane	5.0	U	5.0	0.090	ug/L			05/02/18 19:01	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			05/02/18 19:01	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/02/18 19:01	1
Toluene	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/02/18 19:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			05/02/18 19:01	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/02/18 19:01	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/02/18 19:01	1
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/02/18 19:01	1

Client Sample ID: WELL 1-2A
Date Collected: 04/24/18 08:00
Date Received: 04/25/18 10:20

Lab Sample ID: 480-134787-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/02/18 19:01	1
Styrene	1.0	U	1.0	0.28	ug/L			05/02/18 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/02/18 19:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/02/18 19:01*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*05/02/18 19:01*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*05/02/18 19:01*	*1*

Client Sample ID: WELL 1-3
Date Collected: 04/24/18 08:10
Date Received: 04/25/18 10:20

Lab Sample ID: 480-134787-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.29**	**J**	1.0	0.19	ug/L			05/02/18 18:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 18:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.15	ug/L			05/02/18 18:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 18:35	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/02/18 18:35	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/02/18 18:35	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/02/18 18:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/02/18 18:35	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/02/18 18:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/02/18 18:35	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/02/18 18:35	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/02/18 18:35	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/02/18 18:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/02/18 18:35	1
2-Hexanone	10	U	10	1.3	ug/L			05/02/18 18:35	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/02/18 18:35	1
Acetone	25	U	25	2.7	ug/L			05/02/18 18:35	1
Benzene	1.0	U	1.0	0.20	ug/L			05/02/18 18:35	1
Bromoform	1.0	U	1.0	0.29	ug/L			05/02/18 18:35	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/02/18 18:35	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/02/18 18:35	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/02/18 18:35	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/02/18 18:35	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/02/18 18:35	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/02/18 18:35	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/02/18 18:35	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/02/18 18:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/02/18 18:35	1
Cyclohexane	5.0	U	5.0	0.13	ug/L			05/02/18 18:35	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/02/18 18:35	1

Client Sample ID: WELL 1-3
Date Collected: 04/24/18 08:10
Date Received: 04/25/18 10:20

Lab Sample ID: 480-134787-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/02/18 18:35	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/02/18 18:35	1
Methyl acetate	10	U	10	0.58	ug/L			05/02/18 18:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
Methylcyclohexane	5.0	U	5.0	0.090	ug/L			05/02/18 18:35	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			05/02/18 18:35	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/02/18 18:35	1
Toluene	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/02/18 18:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			05/02/18 18:35	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/02/18 18:35	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/02/18 18:35	1
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/02/18 18:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/02/18 18:35	1
Styrene	1.0	U	1.0	0.28	ug/L			05/02/18 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*05/02/18 18:35*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/02/18 18:35*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*05/02/18 18:35*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/02/18 18:35*	*1*

Client Sample ID: TRIP BLANK 042418
Date Collected: 04/24/18 00:00
Date Received: 04/25/18 10:20

Lab Sample ID: 480-134787-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 18:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 18:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.15	ug/L			05/02/18 18:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 18:08	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/02/18 18:08	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/02/18 18:08	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/02/18 18:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/02/18 18:08	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/02/18 18:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/02/18 18:08	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/02/18 18:08	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/02/18 18:08	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/02/18 18:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/02/18 18:08	1
2-Hexanone	10	U	10	1.3	ug/L			05/02/18 18:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/02/18 18:08	1
Acetone	25	U	25	2.7	ug/L			05/02/18 18:08	1
Benzene	1.0	U	1.0	0.20	ug/L			05/02/18 18:08	1

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Client Sample ID: TRIP BLANK 042418
Date Collected: 04/24/18 00:00
Date Received: 04/25/18 10:20

Lab Sample ID: 480-134787-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	1.0	U	1.0	0.29	ug/L			05/02/18 18:08	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/02/18 18:08	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/02/18 18:08	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/02/18 18:08	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/02/18 18:08	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/02/18 18:08	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/02/18 18:08	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/02/18 18:08	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/02/18 18:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/02/18 18:08	1
Cyclohexane	5.0	U	5.0	0.13	ug/L			05/02/18 18:08	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/02/18 18:08	1
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/02/18 18:08	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/02/18 18:08	1
Methyl acetate	10	U	10	0.58	ug/L			05/02/18 18:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
Methylcyclohexane	5.0	U	5.0	0.090	ug/L			05/02/18 18:08	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			05/02/18 18:08	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/02/18 18:08	1
Toluene	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/02/18 18:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			05/02/18 18:08	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/02/18 18:08	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/02/18 18:08	1
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/02/18 18:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/02/18 18:08	1
Styrene	1.0	U	1.0	0.28	ug/L			05/02/18 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*05/02/18 18:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/02/18 18:08*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*05/02/18 18:08*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*05/02/18 18:08*	*1*

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-134787-1	WELL 1-2A	94	99	93	101
480-134787-2	WELL 1-3	92	100	92	100
480-134787-3	TRIP BLANK 042418	93	98	93	102
LCS 490-512159/3	Lab Control Sample	90	103	93	100
MB 490-512159/5	Method Blank	94	103	91	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-512159/5
Matrix: Water
Analysis Batch: 512159

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 13:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 13:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.15	ug/L			05/02/18 13:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/02/18 13:22	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/02/18 13:22	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/02/18 13:22	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/02/18 13:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/02/18 13:22	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/02/18 13:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/02/18 13:22	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/02/18 13:22	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/02/18 13:22	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/02/18 13:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/02/18 13:22	1
2-Hexanone	10	U	10	1.3	ug/L			05/02/18 13:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/02/18 13:22	1
Acetone	25	U	25	2.7	ug/L			05/02/18 13:22	1
Benzene	1.0	U	1.0	0.20	ug/L			05/02/18 13:22	1
Bromoform	1.0	U	1.0	0.29	ug/L			05/02/18 13:22	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/02/18 13:22	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/02/18 13:22	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/02/18 13:22	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/02/18 13:22	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/02/18 13:22	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/02/18 13:22	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/02/18 13:22	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/02/18 13:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/02/18 13:22	1
Cyclohexane	5.0	U	5.0	0.13	ug/L			05/02/18 13:22	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/02/18 13:22	1
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/02/18 13:22	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/02/18 13:22	1
Methyl acetate	10	U	10	0.58	ug/L			05/02/18 13:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
Methylcyclohexane	5.0	U	5.0	0.090	ug/L			05/02/18 13:22	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			05/02/18 13:22	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/02/18 13:22	1
Toluene	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/02/18 13:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			05/02/18 13:22	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/02/18 13:22	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/02/18 13:22	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 490-512159/5
Matrix: Water
Analysis Batch: 512159

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/02/18 13:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/02/18 13:22	1
Styrene	1.0	U	1.0	0.28	ug/L			05/02/18 13:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/02/18 13:22*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*05/02/18 13:22*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*05/02/18 13:22*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/02/18 13:22*	*1*

Lab Sample ID: LCS 490-512159/3
Matrix: Water
Analysis Batch: 512159

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.5		ug/L		97	78 - 135
1,1,2,2-Tetrachloroethane	20.0	19.6		ug/L		98	69 - 131
1,1,2-Trichloro-1,2,2-trifluoroetha ne	20.0	20.5		ug/L		102	77 - 129
1,1,2-Trichloroethane	20.0	18.8		ug/L		94	80 - 124
1,1-Dichloroethane	20.0	19.3		ug/L		96	78 - 125
1,1-Dichloroethene	20.0	19.9		ug/L		99	79 - 124
1,2,3-Trimethylbenzene	20.0	17.7		ug/L		89	70 - 130
1,2,4-Trichlorobenzene	20.0	22.9		ug/L		115	63 - 133
1,2,4-Trimethylbenzene	20.0	17.7		ug/L		88	77 - 126
1,2-Dibromo-3-Chloropropane	20.0	24.8		ug/L		124	54 - 125
1,2-Dichlorobenzene	20.0	18.2		ug/L		91	80 - 121
1,2-Dichloroethane	20.0	18.3		ug/L		92	77 - 121
1,2-Dichloropropane	20.0	19.4		ug/L		97	75 - 120
1,3,5-Trimethylbenzene	20.0	17.7		ug/L		89	77 - 127
1,3-Dichlorobenzene	20.0	18.0		ug/L		90	80 - 122
1,4-Dichlorobenzene	20.0	18.4		ug/L		92	80 - 120
2-Butanone (MEK)	100	108		ug/L		108	62 - 133
2-Hexanone	100	93.3		ug/L		93	60 - 142
4-Methyl-2-pentanone (MIBK)	100	94.1		ug/L		94	60 - 137
Acetone	100	97.5		ug/L		98	54 - 145
Benzene	20.0	20.2		ug/L		101	80 - 121
Bromoform	20.0	18.5		ug/L		92	46 - 145
Bromomethane	20.0	22.2		ug/L		111	41 - 150
Carbon disulfide	20.0	20.8		ug/L		104	77 - 126
Carbon tetrachloride	20.0	19.8		ug/L		99	64 - 147
Chlorobenzene	20.0	18.5		ug/L		92	80 - 120
Dibromochloromethane	20.0	19.5		ug/L		97	69 - 133
Chloroethane	20.0	17.9		ug/L		90	72 - 120
Chloroform	20.0	19.4		ug/L		97	73 - 129
Chloromethane	20.0	17.4		ug/L		87	12 - 150
cis-1,2-Dichloroethene	20.0	20.8		ug/L		104	76 - 125
Cyclohexane	20.0	20.5		ug/L		103	73 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-512159/3
Matrix: Water
Analysis Batch: 512159

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	20.0	20.6		ug/L		103	75 - 129
Dichlorodifluoromethane	20.0	18.5		ug/L		93	37 - 127
Ethylbenzene	20.0	18.2		ug/L		91	80 - 130
1,2-Dibromoethane	20.0	19.1		ug/L		95	80 - 129
Isopropylbenzene	20.0	17.7		ug/L		89	80 - 141
Methyl acetate	40.0	35.1		ug/L		88	64 - 150
Methyl tert-butyl ether	20.0	20.8		ug/L		104	72 - 133
Methylcyclohexane	20.0	21.8		ug/L		109	71 - 129
Methylene Chloride	20.0	20.7		ug/L		104	79 - 123
Tetrachloroethene	20.0	19.5		ug/L		97	80 - 126
Toluene	20.0	18.2		ug/L		91	80 - 126
trans-1,2-Dichloroethene	20.0	19.9		ug/L		99	79 - 126
trans-1,3-Dichloropropene	20.0	19.1		ug/L		95	63 - 134
Trichloroethene	20.0	21.2		ug/L		106	80 - 123
Trichlorofluoromethane	20.0	17.8		ug/L		89	65 - 124
Vinyl chloride	20.0	18.5		ug/L		92	68 - 120
cis-1,3-Dichloropropene	20.0	19.4		ug/L		97	74 - 140
Styrene	20.0	18.3		ug/L		91	80 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

GC/MS VOA

Analysis Batch: 512159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134787-1	WELL 1-2A	Total/NA	Water	8260C	
480-134787-2	WELL 1-3	Total/NA	Water	8260C	
480-134787-3	TRIP BLANK 042418	Total/NA	Water	8260C	
MB 490-512159/5	Method Blank	Total/NA	Water	8260C	
LCS 490-512159/3	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Client Sample ID: WELL 1-2A

Lab Sample ID: 480-134787-1

Date Collected: 04/24/18 08:00

Matrix: Water

Date Received: 04/25/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	512159	05/02/18 19:01	P1B	TAL NSH

Client Sample ID: WELL 1-3

Lab Sample ID: 480-134787-2

Date Collected: 04/24/18 08:10

Matrix: Water

Date Received: 04/25/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	512159	05/02/18 18:35	P1B	TAL NSH

Client Sample ID: TRIP BLANK 042418

Lab Sample ID: 480-134787-3

Date Collected: 04/24/18 00:00

Matrix: Water

Date Received: 04/25/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	512159	05/02/18 18:08	P1B	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18 *

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-19
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-18
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2LA)	06-30-18
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-18 *
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18 *
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-18
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-18
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-18 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-18
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
5030C	Purge and Trap	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 480-134787-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-134787-1	WELL 1-2A	Water	04/24/18 08:00	04/25/18 10:20
480-134787-2	WELL 1-3	Water	04/24/18 08:10	04/25/18 10:20
480-134787-3	TRIP BLANK 042418	Water	04/24/18 00:00	04/25/18 10:20

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. Whalen	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-109618-18034.1
Client Contact: Ms. Katie Bidwell	Phone: 315-436-5041	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: ARCADIS U.S. Inc				Job #:

Address: 855 Route 146 Suite 210	Due Date Requested:
City: Clifton Park	TAT Requested (days): STD
State, Zip: NY, 12065	
Phone: 518-250-7300(Tel)	PO #: Project 00266401.0000
Email: katie.bidwell@arcadis-us.com	WO #: Contract D007618
Project Name: NYSDEC-Standby VESTAL	Project #: 48005198
Site:	SSOW#:

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn A
D - Nitri
E - NaH
F - MeO
G - Amc
H - Asco
I - Ice
J - DI Wa
K - EDTA
L - EDA
M - Hexane
hydrate
480-134787 COC
Other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - (MOD) TCL list OLM04.2	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
Well 1-2A	4/24/18	0800	G	Water			X		
Well 1-3	4/24/18	0810	G	Water			X		
Trip Blank 042418	4/24/18	-	-	Water			X		

Possible Hazard Identification
[x] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [x] Disposal By Lab [ ] Archive For _____ Months

Deliverable Requested: I, II, III, (V) Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
L. Whalen	4/24/18 / 1400		Christine Kolb	4/25/18 1020	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.3 #1 FCE

Ver: 08/04/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN
STAYWOK/369

COOLER RECEIPT FORM

480-134787 Chain of Custody

Cooler Received/Opened On 5/2/2018 @ 0955

Time Samples Removed From Cooler 14:58 Time Samples Placed In Storage 15:00 (2 Hour Window)

1. Tracking # 8155 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160406069 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 3.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) JD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) JD

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) JD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) JD

I certify that I attached a label with the unique LIMS number to each container (intial) JD

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

480-134787

estAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	IC No: 30-41862.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com	State of Origin: New York
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - New York	Page: Page 1 of 1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 5/7/2018		Job #: 480-134787-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: NYSDEC-Standby VESTAL	Project #: 48005198		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5030C (MOD) TCL list OLM04.2	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
WELL 1-2A (480-134787-1)	4/24/18	08:00 Eastern		Water			X	3	
WELL 1-3 (480-134787-2)	4/24/18	08:10 Eastern		Water			X	3	
TRIP BLANK 042418 (480-134787-3)	4/24/18	Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	5/1/18 1630	[illegible]	[signature] Jordan	05/02/18 0915	TA-NAS
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.1

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-134787-1

Login Number: 134787

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-151433-1
Client Project/Site: NYSDEC-Standby VESTAL

For:
ARCADIS U.S. Inc
855 Route 146
Suite 210
Clifton Park, New York 12065

Attn: Mr. Jeremy Wyckoff

Joseph V. Giacomazza

Authorized for release by:
5/9/2018 1:30:18 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager
(484)685-0868
judy.stone@testamericainc.com

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Indicates an estimated value.
U	Analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 490-151433-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-151433-1

Receipt
The samples were received on 5/8/2018 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS VOA
Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 490-513393 recovered outside control limits for the following analytes: Carbon disulfide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 490-513393 recovered outside control limits for the following analytes: Carbon disulfide, Cyclohexane, Methylene Chloride, 1,1,2-Trichloro-1,2,2-trifluoroethane, Trichloroethene and Methylcyclohexane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Client Sample ID: Well 1-3 050718 — Lab Sample ID: 490-151433-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.26	J	1.0	0.19	ug/L	1		8260C	Total/NA

Client Sample ID: Well 1-3 Post 050718 — Lab Sample ID: 490-151433-2

No Detections.

Client Sample ID: Well 1-2A 050718 — Lab Sample ID: 490-151433-3

No Detections.

Client Sample ID: TB 050718 — Lab Sample ID: 490-151433-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: Well 1-3 050718
Date Collected: 05/07/18 11:50
Date Received: 05/08/18 09:40

Lab Sample ID: 490-151433-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.26**	**J**	1.0	0.19	ug/L			05/08/18 18:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	1.0	0.15	ug/L			05/08/18 18:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 18:58	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/08/18 18:58	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/08/18 18:58	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/08/18 18:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/08/18 18:58	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/08/18 18:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/08/18 18:58	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/08/18 18:58	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/08/18 18:58	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 18:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/08/18 18:58	1
2-Hexanone	10	U	10	1.3	ug/L			05/08/18 18:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/08/18 18:58	1
Acetone	25	U	25	2.7	ug/L			05/08/18 18:58	1
Benzene	1.0	U	1.0	0.20	ug/L			05/08/18 18:58	1
Bromoform	1.0	U	1.0	0.29	ug/L			05/08/18 18:58	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/08/18 18:58	1
Carbon disulfide	1.0	U *	1.0	0.22	ug/L			05/08/18 18:58	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/08/18 18:58	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 18:58	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/08/18 18:58	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/08/18 18:58	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/08/18 18:58	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/08/18 18:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/08/18 18:58	1
Cyclohexane	5.0	U *	5.0	0.13	ug/L			05/08/18 18:58	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/08/18 18:58	1
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/08/18 18:58	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/08/18 18:58	1
Methyl acetate	10	U	10	0.58	ug/L			05/08/18 18:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
Methylcyclohexane	5.0	U *	5.0	0.090	ug/L			05/08/18 18:58	1
Methylene Chloride	5.0	U *	5.0	1.0	ug/L			05/08/18 18:58	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/08/18 18:58	1
Toluene	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/08/18 18:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
Trichloroethene	1.0	U *	1.0	0.20	ug/L			05/08/18 18:58	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/08/18 18:58	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/08/18 18:58	1
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/08/18 18:58	1

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Client Sample ID: Well 1-3 050718
Date Collected: 05/07/18 11:50
Date Received: 05/08/18 09:40

Lab Sample ID: 490-151433-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 18:58	1
Styrene	1.0	U	1.0	0.28	ug/L			05/08/18 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*05/08/18 18:58*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*05/08/18 18:58*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*05/08/18 18:58*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*05/08/18 18:58*	*1*

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Client Sample ID: Well 1-3 Post 050718
Date Collected: 05/07/18 11:55
Date Received: 05/08/18 09:40

Lab Sample ID: 490-151433-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 18:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	1.0	0.15	ug/L			05/08/18 18:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 18:32	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/08/18 18:32	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/08/18 18:32	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/08/18 18:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/08/18 18:32	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/08/18 18:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/08/18 18:32	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/08/18 18:32	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/08/18 18:32	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 18:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/08/18 18:32	1
2-Hexanone	10	U	10	1.3	ug/L			05/08/18 18:32	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/08/18 18:32	1
Acetone	25	U	25	2.7	ug/L			05/08/18 18:32	1
Benzene	1.0	U	1.0	0.20	ug/L			05/08/18 18:32	1
Bromoform	1.0	U	1.0	0.29	ug/L			05/08/18 18:32	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/08/18 18:32	1
Carbon disulfide	1.0	U *	1.0	0.22	ug/L			05/08/18 18:32	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/08/18 18:32	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 18:32	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/08/18 18:32	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/08/18 18:32	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/08/18 18:32	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/08/18 18:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/08/18 18:32	1
Cyclohexane	5.0	U *	5.0	0.13	ug/L			05/08/18 18:32	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/08/18 18:32	1
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/08/18 18:32	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/08/18 18:32	1
Methyl acetate	10	U	10	0.58	ug/L			05/08/18 18:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
Methylcyclohexane	5.0	U *	5.0	0.090	ug/L			05/08/18 18:32	1
Methylene Chloride	5.0	U *	5.0	1.0	ug/L			05/08/18 18:32	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/08/18 18:32	1
Toluene	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/08/18 18:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
Trichloroethene	1.0	U *	1.0	0.20	ug/L			05/08/18 18:32	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/08/18 18:32	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/08/18 18:32	1
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/08/18 18:32	1

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Client Sample ID: Well 1-3 Post 050718
Date Collected: 05/07/18 11:55
Date Received: 05/08/18 09:40

Lab Sample ID: 490-151433-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 18:32	1
Styrene	1.0	U	1.0	0.28	ug/L			05/08/18 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*05/08/18 18:32*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*05/08/18 18:32*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*05/08/18 18:32*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*05/08/18 18:32*	*1*

Client Sample ID: Well 1-2A 050718
Date Collected: 05/07/18 12:00
Date Received: 05/08/18 09:40

Lab Sample ID: 490-151433-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 18:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 18:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	1.0	0.15	ug/L			05/08/18 18:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 18:05	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/08/18 18:05	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/08/18 18:05	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/08/18 18:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/08/18 18:05	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/08/18 18:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/08/18 18:05	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/08/18 18:05	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/08/18 18:05	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 18:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/08/18 18:05	1
2-Hexanone	10	U	10	1.3	ug/L			05/08/18 18:05	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/08/18 18:05	1
Acetone	25	U	25	2.7	ug/L			05/08/18 18:05	1
Benzene	1.0	U	1.0	0.20	ug/L			05/08/18 18:05	1
Bromoform	1.0	U	1.0	0.29	ug/L			05/08/18 18:05	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/08/18 18:05	1
Carbon disulfide	1.0	U *	1.0	0.22	ug/L			05/08/18 18:05	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/08/18 18:05	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 18:05	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/08/18 18:05	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/08/18 18:05	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/08/18 18:05	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/08/18 18:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/08/18 18:05	1
Cyclohexane	5.0	U *	5.0	0.13	ug/L			05/08/18 18:05	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/08/18 18:05	1
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/08/18 18:05	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/08/18 18:05	1
Methyl acetate	10	U	10	0.58	ug/L			05/08/18 18:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
Methylcyclohexane	5.0	U *	5.0	0.090	ug/L			05/08/18 18:05	1
Methylene Chloride	5.0	U *	5.0	1.0	ug/L			05/08/18 18:05	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/08/18 18:05	1
Toluene	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/08/18 18:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
Trichloroethene	1.0	U *	1.0	0.20	ug/L			05/08/18 18:05	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/08/18 18:05	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/08/18 18:05	1
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/08/18 18:05	1

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Client Sample ID: Well 1-2A 050718
Date Collected: 05/07/18 12:00
Date Received: 05/08/18 09:40

Lab Sample ID: 490-151433-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 18:05	1
Styrene	1.0	U	1.0	0.28	ug/L			05/08/18 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*05/08/18 18:05*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*05/08/18 18:05*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*05/08/18 18:05*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*05/08/18 18:05*	*1*

Client Sample ID: TB 050718
Date Collected: 05/07/18 01:01
Date Received: 05/08/18 09:40

Lab Sample ID: 490-151433-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 17:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 17:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	1.0	0.15	ug/L			05/08/18 17:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 17:39	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/08/18 17:39	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/08/18 17:39	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/08/18 17:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/08/18 17:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/08/18 17:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/08/18 17:39	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/08/18 17:39	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/08/18 17:39	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 17:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/08/18 17:39	1
2-Hexanone	10	U	10	1.3	ug/L			05/08/18 17:39	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/08/18 17:39	1
Acetone	25	U	25	2.7	ug/L			05/08/18 17:39	1
Benzene	1.0	U	1.0	0.20	ug/L			05/08/18 17:39	1
Bromoform	1.0	U	1.0	0.29	ug/L			05/08/18 17:39	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/08/18 17:39	1
Carbon disulfide	1.0	U *	1.0	0.22	ug/L			05/08/18 17:39	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/08/18 17:39	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 17:39	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/08/18 17:39	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/08/18 17:39	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/08/18 17:39	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/08/18 17:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/08/18 17:39	1
Cyclohexane	5.0	U *	5.0	0.13	ug/L			05/08/18 17:39	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/08/18 17:39	1
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/08/18 17:39	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/08/18 17:39	1
Methyl acetate	10	U	10	0.58	ug/L			05/08/18 17:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
Methylcyclohexane	5.0	U *	5.0	0.090	ug/L			05/08/18 17:39	1
Methylene Chloride	5.0	U *	5.0	1.0	ug/L			05/08/18 17:39	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/08/18 17:39	1
Toluene	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/08/18 17:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
Trichloroethene	1.0	U *	1.0	0.20	ug/L			05/08/18 17:39	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/08/18 17:39	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/08/18 17:39	1
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/08/18 17:39	1

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Client Sample ID: TB 050718
Date Collected: 05/07/18 01:01
Date Received: 05/08/18 09:40

Lab Sample ID: 490-151433-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 17:39	1
Styrene	1.0	U	1.0	0.28	ug/L			05/08/18 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*05/08/18 17:39*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*05/08/18 17:39*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*05/08/18 17:39*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*05/08/18 17:39*	*1*

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
490-151433-1	Well 1-3 050718	103	103	89	109
490-151433-2	Well 1-3 Post 050718	98	106	90	105
490-151433-3	Well 1-2A 050718	99	106	89	107
490-151433-3 MS	Well 1-2A 050718	101	105	89	107
490-151433-3 MSD	Well 1-2A 050718	100	105	88	109
490-151433-4	TB 050718	101	104	91	108
LCS 490-513393/5	Lab Control Sample	100	104	91	108
LCSD 490-513393/6	Lab Control Sample Dup	97	105	91	107
MB 490-513393/8	Method Blank	98	104	88	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-513393/8
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 15:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 15:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.15	ug/L			05/08/18 15:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.19	ug/L			05/08/18 15:27	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			05/08/18 15:27	1
1,1-Dichloroethene	1.0	U	1.0	0.25	ug/L			05/08/18 15:27	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.10	ug/L			05/08/18 15:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.20	ug/L			05/08/18 15:27	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
1,2-Dibromo-3-Chloropropane	10	U	10	0.94	ug/L			05/08/18 15:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			05/08/18 15:27	1
1,2-Dichloroethane	1.0	U	1.0	0.20	ug/L			05/08/18 15:27	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			05/08/18 15:27	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 15:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
2-Butanone (MEK)	50	U	50	2.6	ug/L			05/08/18 15:27	1
2-Hexanone	10	U	10	1.3	ug/L			05/08/18 15:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.81	ug/L			05/08/18 15:27	1
Acetone	25	U	25	2.7	ug/L			05/08/18 15:27	1
Benzene	1.0	U	1.0	0.20	ug/L			05/08/18 15:27	1
Bromoform	1.0	U	1.0	0.29	ug/L			05/08/18 15:27	1
Bromomethane	1.0	U	1.0	0.35	ug/L			05/08/18 15:27	1
Carbon disulfide	1.0	U	1.0	0.22	ug/L			05/08/18 15:27	1
Carbon tetrachloride	1.0	U	1.0	0.18	ug/L			05/08/18 15:27	1
Chlorobenzene	1.0	U	1.0	0.18	ug/L			05/08/18 15:27	1
Dibromochloromethane	1.0	U	1.0	0.25	ug/L			05/08/18 15:27	1
Chloroethane	1.0	U	1.0	0.36	ug/L			05/08/18 15:27	1
Chloroform	1.0	U	1.0	0.23	ug/L			05/08/18 15:27	1
Chloromethane	1.0	U	1.0	0.36	ug/L			05/08/18 15:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.21	ug/L			05/08/18 15:27	1
Cyclohexane	5.0	U	5.0	0.13	ug/L			05/08/18 15:27	1
Bromodichloromethane	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
Ethylbenzene	1.0	U	1.0	0.19	ug/L			05/08/18 15:27	1
1,2-Dibromoethane	1.0	U	1.0	0.21	ug/L			05/08/18 15:27	1
Isopropylbenzene	1.0	U	1.0	0.33	ug/L			05/08/18 15:27	1
Methyl acetate	10	U	10	0.58	ug/L			05/08/18 15:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
Methylcyclohexane	5.0	U	5.0	0.090	ug/L			05/08/18 15:27	1
Methylene Chloride	5.0	U	5.0	1.0	ug/L			05/08/18 15:27	1
Tetrachloroethene	1.0	U	1.0	0.14	ug/L			05/08/18 15:27	1
Toluene	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.23	ug/L			05/08/18 15:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			05/08/18 15:27	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			05/08/18 15:27	1
Vinyl chloride	1.0	U	1.0	0.18	ug/L			05/08/18 15:27	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 490-513393/8
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	3.0	U	3.0	0.58	ug/L			05/08/18 15:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.17	ug/L			05/08/18 15:27	1
Styrene	1.0	U	1.0	0.28	ug/L			05/08/18 15:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*05/08/18 15:27*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*05/08/18 15:27*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*05/08/18 15:27*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*05/08/18 15:27*	*1*

Lab Sample ID: LCS 490-513393/5
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	23.6		ug/L		118	78 - 135
1,1,2,2-Tetrachloroethane	20.0	18.0		ug/L		90	69 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	25.6		ug/L		128	77 - 129
1,1,2-Trichloroethane	20.0	18.5		ug/L		93	80 - 124
1,1-Dichloroethane	20.0	22.6		ug/L		113	78 - 125
1,1-Dichloroethene	20.0	24.4		ug/L		122	79 - 124
1,2,3-Trimethylbenzene	20.0	17.8		ug/L		89	70 - 130
1,2,4-Trichlorobenzene	20.0	21.3		ug/L		106	63 - 133
1,2,4-Trimethylbenzene	20.0	18.1		ug/L		90	77 - 126
1,2-Dibromo-3-Chloropropane	20.0	22.5		ug/L		113	54 - 125
1,2-Dichlorobenzene	20.0	17.7		ug/L		88	80 - 121
1,2-Dichloroethane	20.0	22.0		ug/L		110	77 - 121
1,2-Dichloropropane	20.0	21.8		ug/L		109	75 - 120
1,3,5-Trimethylbenzene	20.0	17.7		ug/L		88	77 - 127
1,3-Dichlorobenzene	20.0	17.5		ug/L		88	80 - 122
1,4-Dichlorobenzene	20.0	17.7		ug/L		88	80 - 120
2-Butanone (MEK)	100	118		ug/L		118	62 - 133
2-Hexanone	100	90.0		ug/L		90	60 - 142
4-Methyl-2-pentanone (MIBK)	100	90.0		ug/L		90	60 - 137
Acetone	100	97.7		ug/L		98	54 - 145
Benzene	20.0	23.1		ug/L		115	80 - 121
Bromoform	20.0	19.0		ug/L		95	46 - 145
Bromomethane	20.0	21.9		ug/L		110	41 - 150
Carbon disulfide	20.0	25.4	*	ug/L		127	77 - 126
Carbon tetrachloride	20.0	24.6		ug/L		123	64 - 147
Chlorobenzene	20.0	18.6		ug/L		93	80 - 120
Dibromochloromethane	20.0	19.9		ug/L		100	69 - 133
Chloroethane	20.0	20.4		ug/L		102	72 - 120
Chloroform	20.0	23.0		ug/L		115	73 - 129
Chloromethane	20.0	16.7		ug/L		84	12 - 150
cis-1,2-Dichloroethene	20.0	24.0		ug/L		120	76 - 125
Cyclohexane	20.0	23.9		ug/L		119	73 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-513393/5
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	20.0	24.4		ug/L		122	75 - 129
Dichlorodifluoromethane	20.0	18.9		ug/L		94	37 - 127
Ethylbenzene	20.0	18.5		ug/L		93	80 - 130
1,2-Dibromoethane	20.0	18.7		ug/L		94	80 - 129
Isopropylbenzene	20.0	18.6		ug/L		93	80 - 141
Methyl acetate	40.0	37.2		ug/L		93	64 - 150
Methyl tert-butyl ether	20.0	23.7		ug/L		119	72 - 133
Methylcyclohexane	20.0	25.7		ug/L		128	71 - 129
Methylene Chloride	20.0	23.9		ug/L		119	79 - 123
Tetrachloroethene	20.0	20.1		ug/L		100	80 - 126
Toluene	20.0	18.5		ug/L		92	80 - 126
trans-1,2-Dichloroethene	20.0	23.9		ug/L		119	79 - 126
trans-1,3-Dichloropropene	20.0	20.6		ug/L		103	63 - 134
Trichloroethene	20.0	24.7		ug/L		123	80 - 123
Trichlorofluoromethane	20.0	21.7		ug/L		108	65 - 124
Vinyl chloride	20.0	21.0		ug/L		105	68 - 120
cis-1,3-Dichloropropene	20.0	20.7		ug/L		103	74 - 140
Styrene	20.0	19.0		ug/L		95	80 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 490-513393/6
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	24.6		ug/L		123	78 - 135	4	15
1,1,2,2-Tetrachloroethane	20.0	18.6		ug/L		93	69 - 131	3	15
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	26.0	*	ug/L		130	77 - 129	2	16
1,1,2-Trichloroethane	20.0	19.1		ug/L		96	80 - 124	3	13
1,1-Dichloroethane	20.0	23.0		ug/L		115	78 - 125	2	17
1,1-Dichloroethene	20.0	24.6		ug/L		123	79 - 124	1	20
1,2,3-Trimethylbenzene	20.0	18.3		ug/L		92	70 - 130	3	12
1,2,4-Trichlorobenzene	20.0	21.6		ug/L		108	63 - 133	1	15
1,2,4-Trimethylbenzene	20.0	18.7		ug/L		94	77 - 126	3	13
1,2-Dibromo-3-Chloropropane	20.0	23.7		ug/L		118	54 - 125	5	19
1,2-Dichlorobenzene	20.0	18.0		ug/L		90	80 - 121	2	12
1,2-Dichloroethane	20.0	22.3		ug/L		111	77 - 121	1	13
1,2-Dichloropropane	20.0	22.4		ug/L		112	75 - 120	3	15
1,3,5-Trimethylbenzene	20.0	18.6		ug/L		93	77 - 127	5	14
1,3-Dichlorobenzene	20.0	18.4		ug/L		92	80 - 122	5	13
1,4-Dichlorobenzene	20.0	18.1		ug/L		91	80 - 120	3	12
2-Butanone (MEK)	100	115		ug/L		115	62 - 133	3	19

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 490-513393/6
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Hexanone	100	90.1		ug/L		90	60 - 142	0	17
4-Methyl-2-pentanone (MIBK)	100	92.6		ug/L		93	60 - 137	3	21
Acetone	100	99.2		ug/L		99	54 - 145	1	23
Benzene	20.0	23.7		ug/L		119	80 - 121	3	12
Bromoform	20.0	19.7		ug/L		99	46 - 145	4	14
Bromomethane	20.0	22.2		ug/L		111	41 - 150	1	19
Carbon disulfide	20.0	26.5	*	ug/L		132	77 - 126	4	16
Carbon tetrachloride	20.0	25.3		ug/L		126	64 - 147	3	16
Chlorobenzene	20.0	19.1		ug/L		95	80 - 120	2	12
Dibromochloromethane	20.0	19.9		ug/L		99	69 - 133	0	13
Chloroethane	20.0	20.9		ug/L		105	72 - 120	2	15
Chloroform	20.0	23.7		ug/L		119	73 - 129	3	14
Chloromethane	20.0	16.6		ug/L		83	12 - 150	1	20
cis-1,2-Dichloroethene	20.0	24.0		ug/L		120	76 - 125	0	15
Cyclohexane	20.0	24.7	*	ug/L		123	73 - 122	3	16
Bromodichloromethane	20.0	25.0		ug/L		125	75 - 129	2	14
Dichlorodifluoromethane	20.0	20.5		ug/L		103	37 - 127	8	16
Ethylbenzene	20.0	18.5		ug/L		93	80 - 130	0	12
1,2-Dibromoethane	20.0	18.9		ug/L		95	80 - 129	1	13
Isopropylbenzene	20.0	19.1		ug/L		95	80 - 141	3	13
Methyl acetate	40.0	37.7		ug/L		94	64 - 150	1	18
Methyl tert-butyl ether	20.0	24.3		ug/L		122	72 - 133	2	16
Methylcyclohexane	20.0	26.6	*	ug/L		133	71 - 129	4	17
Methylene Chloride	20.0	24.8	*	ug/L		124	79 - 123	4	15
Tetrachloroethene	20.0	20.0		ug/L		100	80 - 126	0	17
Toluene	20.0	19.0		ug/L		95	80 - 126	3	13
trans-1,2-Dichloroethene	20.0	24.3		ug/L		122	79 - 126	2	15
trans-1,3-Dichloropropene	20.0	20.7		ug/L		104	63 - 134	1	13
Trichloroethene	20.0	25.3	*	ug/L		127	80 - 123	3	14
Trichlorofluoromethane	20.0	22.9		ug/L		115	65 - 124	6	22
Vinyl chloride	20.0	21.4		ug/L		107	68 - 120	2	15
cis-1,3-Dichloropropene	20.0	20.9		ug/L		104	74 - 140	1	15
Styrene	20.0	19.6		ug/L		98	80 - 127	3	12

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*

Lab Sample ID: 490-151433-3 MS
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Well 1-2A 050718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	20.0	25.8		ug/L		129	68 - 144
1,1,2,2-Tetrachloroethane	1.0	U	20.0	18.0		ug/L		90	56 - 145

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-151433-3 MS
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Well 1-2A 050718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	20.0	28.1		ug/L		140	63 - 150
1,1,2-Trichloroethane	1.0	U	20.0	19.4		ug/L		97	70 - 130
1,1-Dichloroethane	1.0	U	20.0	24.4		ug/L		122	61 - 139
1,1-Dichloroethene	1.0	U	20.0	27.1		ug/L		135	54 - 150
1,2,3-Trimethylbenzene	1.0	U	20.0	19.0		ug/L		95	67 - 131
1,2,4-Trichlorobenzene	1.0	U	20.0	20.5		ug/L		102	47 - 147
1,2,4-Trimethylbenzene	1.0	U	20.0	19.2		ug/L		96	64 - 136
1,2-Dibromo-3-Chloropropane	10	U	20.0	19.3		ug/L		97	38 - 138
1,2-Dichlorobenzene	1.0	U	20.0	18.3		ug/L		91	70 - 130
1,2-Dichloroethane	1.0	U	20.0	22.2		ug/L		111	64 - 136
1,2-Dichloropropane	1.0	U	20.0	23.5		ug/L		118	67 - 130
1,3,5-Trimethylbenzene	1.0	U	20.0	19.4		ug/L		97	69 - 139
1,3-Dichlorobenzene	1.0	U	20.0	18.1		ug/L		91	68 - 131
1,4-Dichlorobenzene	1.0	U	20.0	18.1		ug/L		91	70 - 130
2-Butanone (MEK)	50	U	100	109		ug/L		109	50 - 143
2-Hexanone	10	U	100	86.0		ug/L		86	44 - 150
4-Methyl-2-pentanone (MIBK)	10	U	100	88.8		ug/L		89	50 - 140
Acetone	25	U	100	96.7		ug/L		97	39 - 150
Benzene	1.0	U	20.0	24.6		ug/L		123	55 - 147
Bromoform	1.0	U	20.0	17.1		ug/L		86	53 - 150
Bromomethane	1.0	U	20.0	27.6		ug/L		138	30 - 150
Carbon disulfide	1.0	U *	20.0	27.6		ug/L		138	35 - 150
Carbon tetrachloride	1.0	U	20.0	27.9		ug/L		139	56 - 150
Chlorobenzene	1.0	U	20.0	19.5		ug/L		98	70 - 130
Dibromochloromethane	1.0	U	20.0	19.6		ug/L		98	66 - 140
Chloroethane	1.0	U	20.0	24.6		ug/L		123	58 - 141
Chloroform	1.0	U	20.0	25.1		ug/L		125	66 - 138
Chloromethane	1.0	U	20.0	21.1		ug/L		105	10 - 150
cis-1,2-Dichloroethene	1.0	U	20.0	25.1		ug/L		126	68 - 131
Cyclohexane	5.0	U *	20.0	27.3		ug/L		136	48 - 150
Bromodichloromethane	1.0	U	20.0	24.8		ug/L		124	70 - 140
Dichlorodifluoromethane	1.0	U	20.0	23.5		ug/L		117	10 - 150
Ethylbenzene	1.0	U	20.0	19.3		ug/L		97	65 - 139
1,2-Dibromoethane	1.0	U	20.0	19.2		ug/L		96	65 - 137
Isopropylbenzene	1.0	U	20.0	20.3		ug/L		101	70 - 137
Methyl acetate	10	U	40.0	35.3		ug/L		88	42 - 136
Methyl tert-butyl ether	1.0	U	20.0	24.1		ug/L		120	55 - 141
Methylcyclohexane	5.0	U *	20.0	28.3		ug/L		142	59 - 150
Methylene Chloride	5.0	U *	20.0	24.7		ug/L		123	64 - 130
Tetrachloroethene	1.0	U	20.0	21.3		ug/L		107	57 - 138
Toluene	1.0	U	20.0	19.8		ug/L		99	64 - 136
trans-1,2-Dichloroethene	1.0	U	20.0	26.0		ug/L		130	59 - 143
trans-1,3-Dichloropropene	1.0	U	20.0	19.5		ug/L		98	63 - 142
Trichloroethene	1.0	U *	20.0	26.4		ug/L		132	63 - 135
Trichlorofluoromethane	1.0	U	20.0	26.0		ug/L		130	44 - 150
Vinyl chloride	1.0	U	20.0	24.4		ug/L		122	57 - 150
cis-1,3-Dichloropropene	1.0	U	20.0	20.9		ug/L		105	70 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-151433-3 MS
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Well 1-2A 050718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	1.0	U	20.0	20.2		ug/L		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*

Lab Sample ID: 490-151433-3 MSD
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Well 1-2A 050718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	20.0	26.1		ug/L		130	68 - 144	1	17
1,1,2,2-Tetrachloroethane	1.0	U	20.0	18.0		ug/L		90	56 - 145	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	20.0	27.4		ug/L		137	63 - 150	3	18
1,1,2-Trichloroethane	1.0	U	20.0	18.5		ug/L		92	70 - 130	5	15
1,1-Dichloroethane	1.0	U	20.0	23.4		ug/L		117	61 - 139	4	17
1,1-Dichloroethene	1.0	U	20.0	26.6		ug/L		133	54 - 150	2	17
1,2,3-Trimethylbenzene	1.0	U	20.0	18.2		ug/L		91	67 - 131	4	40
1,2,4-Trichlorobenzene	1.0	U	20.0	20.6		ug/L		103	47 - 147	1	19
1,2,4-Trimethylbenzene	1.0	U	20.0	18.4		ug/L		92	64 - 136	4	16
1,2-Dibromo-3-Chloropropane	10	U	20.0	19.8		ug/L		99	38 - 138	3	24
1,2-Dichlorobenzene	1.0	U	20.0	17.9		ug/L		89	70 - 130	2	15
1,2-Dichloroethane	1.0	U	20.0	22.4		ug/L		112	64 - 136	1	17
1,2-Dichloropropane	1.0	U	20.0	23.2		ug/L		116	67 - 130	1	17
1,3,5-Trimethylbenzene	1.0	U	20.0	18.9		ug/L		95	69 - 139	2	17
1,3-Dichlorobenzene	1.0	U	20.0	17.9		ug/L		89	68 - 131	1	15
1,4-Dichlorobenzene	1.0	U	20.0	18.0		ug/L		90	70 - 130	0	15
2-Butanone (MEK)	50	U	100	106		ug/L		106	50 - 143	2	19
2-Hexanone	10	U	100	82.2		ug/L		82	44 - 150	4	15
4-Methyl-2-pentanone (MIBK)	10	U	100	86.4		ug/L		86	50 - 140	3	17
Acetone	25	U	100	94.7		ug/L		95	39 - 150	2	21
Benzene	1.0	U	20.0	24.2		ug/L		121	55 - 147	2	17
Bromoform	1.0	U	20.0	17.0		ug/L		85	53 - 150	1	16
Bromomethane	1.0	U	20.0	27.2		ug/L		136	30 - 150	2	50
Carbon disulfide	1.0	U *	20.0	27.2		ug/L		136	35 - 150	2	21
Carbon tetrachloride	1.0	U	20.0	26.6		ug/L		133	56 - 150	5	19
Chlorobenzene	1.0	U	20.0	19.0		ug/L		95	70 - 130	3	14
Dibromochloromethane	1.0	U	20.0	19.4		ug/L		97	66 - 140	1	15
Chloroethane	1.0	U	20.0	23.2		ug/L		116	58 - 141	6	20
Chloroform	1.0	U	20.0	23.6		ug/L		118	66 - 138	6	18
Chloromethane	1.0	U	20.0	18.8		ug/L		94	10 - 150	11	31
cis-1,2-Dichloroethene	1.0	U	20.0	24.5		ug/L		123	68 - 131	3	17
Cyclohexane	5.0	U *	20.0	25.8		ug/L		129	48 - 150	6	16
Bromodichloromethane	1.0	U	20.0	25.3		ug/L		126	70 - 140	2	18
Dichlorodifluoromethane	1.0	U	20.0	22.1		ug/L		111	10 - 150	6	18

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 490-151433-3 MSD
Matrix: Water
Analysis Batch: 513393

Client Sample ID: Well 1-2A 050718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	1.0	U	20.0	19.4		ug/L		97	65 - 139	0	15
1,2-Dibromoethane	1.0	U	20.0	18.7		ug/L		94	65 - 137	3	15
Isopropylbenzene	1.0	U	20.0	19.8		ug/L		99	70 - 137	3	16
Methyl acetate	10	U	40.0	33.5		ug/L		84	42 - 136	5	31
Methyl tert-butyl ether	1.0	U	20.0	23.8		ug/L		119	55 - 141	1	16
Methylcyclohexane	5.0	U *	20.0	28.0		ug/L		140	59 - 150	1	19
Methylene Chloride	5.0	U *	20.0	24.4		ug/L		122	64 - 130	1	17
Tetrachloroethene	1.0	U	20.0	20.7		ug/L		103	57 - 138	3	16
Toluene	1.0	U	20.0	19.2		ug/L		96	64 - 136	3	15
trans-1,2-Dichloroethene	1.0	U	20.0	25.7		ug/L		129	59 - 143	1	16
trans-1,3-Dichloropropene	1.0	U	20.0	19.5		ug/L		97	63 - 142	0	14
Trichloroethene	1.0	U *	20.0	25.9		ug/L		130	63 - 135	2	17
Trichlorofluoromethane	1.0	U	20.0	26.1		ug/L		130	44 - 150	0	18
Vinyl chloride	1.0	U	20.0	23.5		ug/L		117	57 - 150	4	17
cis-1,3-Dichloropropene	1.0	U	20.0	20.1		ug/L		100	70 - 133	4	15
Styrene	1.0	U	20.0	19.7		ug/L		99	70 - 130	2	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*109*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

GC/MS VOA

Analysis Batch: 513393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-151433-1	Well 1-3 050718	Total/NA	Water	8260C	
490-151433-2	Well 1-3 Post 050718	Total/NA	Water	8260C	
490-151433-3	Well 1-2A 050718	Total/NA	Water	8260C	
490-151433-4	TB 050718	Total/NA	Water	8260C	
MB 490-513393/8	Method Blank	Total/NA	Water	8260C	
LCS 490-513393/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-513393/6	Lab Control Sample Dup	Total/NA	Water	8260C	
490-151433-3 MS	Well 1-2A 050718	Total/NA	Water	8260C	
490-151433-3 MSD	Well 1-2A 050718	Total/NA	Water	8260C	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Client Sample ID: Well 1-3 050718

Lab Sample ID: 490-151433-1

Date Collected: 05/07/18 11:50

Matrix: Water

Date Received: 05/08/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	513393	05/08/18 18:58	SW1	TAL NSH

Client Sample ID: Well 1-3 Post 050718

Lab Sample ID: 490-151433-2

Date Collected: 05/07/18 11:55

Matrix: Water

Date Received: 05/08/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	513393	05/08/18 18:32	SW1	TAL NSH

Client Sample ID: Well 1-2A 050718

Lab Sample ID: 490-151433-3

Date Collected: 05/07/18 12:00

Matrix: Water

Date Received: 05/08/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	513393	05/08/18 18:05	SW1	TAL NSH

Client Sample ID: TB 050718

Lab Sample ID: 490-151433-4

Date Collected: 05/07/18 01:01

Matrix: Water

Date Received: 05/08/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	513393	05/08/18 17:39	SW1	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11342	03-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
5030C	Purge and Trap	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 490-151433-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-151433-1	Well 1-3 050718	Water	05/07/18 11:50	05/08/18 09:40
490-151433-2	Well 1-3 Post 050718	Water	05/07/18 11:55	05/08/18 09:40
490-151433-3	Well 1-2A 050718	Water	05/07/18 12:00	05/08/18 09:40
490-151433-4	TB 050718	Water	05/07/18 01:01	05/08/18 09:40

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

490-151433 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 5/8/2018 @ 0940

Time Samples Removed From Cooler 1144 Time Samples Placed In Storage 1150 (2 Hour Window)

1. Tracking # 2180 (last 4 digits, FedEx) Courier: FedEx

   IR Gun ID 17610176 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 2.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 1 Side

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) GH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA GH 5-8-18

b. Was there any observable headspace present in any VOA vial? YES...NO...NA GH 5-8-18

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA GH 5-8-18 If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial)

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: J. Wyckoff	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-113030-23080.1
Client Contact: Ms. Katie Bidwell	Phone: 607-206-6262	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: ARCADIS U.S. Inc				Job #:
Address: 855 Route 146 Suite 210	Due Date Requested:			
City: Clifton Park	TAT Requested (days): 48 hour RUSH.			
State, Zip: NY, 12065				
Phone: 518-250-7300(Tel)	PO #: Project 00266401.0000			
Email: katie.bidwell@arcadis-us.com	WO #: Contract D007618			
Project Name: NYSDEC-Standby VESTAL	Project #: 48005198			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - (MOD) TCL list OLM04.2	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
~~Well 1-3~~ Well 1-3 050718	05/07/18	1150	G	Water			X		
~~Well 1-3A~~ Well 1-3 Post 050718	5/7/18	1155	G	Water			X		Loc: 490 151433
Well 1-2A 050718	5/7/18	1200	G	Water			X		
TB 050718	5/7/18	—		Water			X		

Possible Hazard Identification
■ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ■ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	05/07/18 1420	Arcadis	[signature]	5-8-18 / 0940	TA-NA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 21

Ver: 08/04/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-158637-1
Client Project/Site: NYSDEC-Standby VESTAL

For:
ARCADIS U.S. Inc
855 Route 146
Suite 210
Clifton Park, New York 12065

Attn: Mr. Jeremy Wyckoff

Judy Stone

Authorized for release by:
6/30/2018 1:26:59 PM

Judy Stone, Senior Project Manager
(484)685-0868
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Table of Contents

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
J	Indicates an estimated value.
*	LCS or LCSD is outside acceptance limits.
*	MS or MSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-158637-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-158637-1

Receipt
The samples were received on 6/15/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.3º C and 2.5º C.

Receipt Exceptions
Per laboratory policy the Trip Blank sample date/time was changed to reflect the latest sample date/time of the sampling event.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-531180 was outside the method criteria for the following analyte(s): 1,1,2,2-Tetrachloroethane, Chloromethane, Dichlorodifluoromethane and Trichlorofluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-531180 recovered outside control limits for the following analytes: 2-Hexanone and 4-Methyl-2-pentanone (MIBK). These analytes were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-531553 was outside the method criteria for the following analytes: 1,1,2,2-Tetrachloroethane, Chloromethane and Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 460-531553 recovered outside control limits for the following analytes: trans-1,3-Dichloropropene, cis-1,3-Dichloropropene, Toluene, 1,3,5-Trimethylbenzene, 4-Methyl-2-pentanone (MIBK) and 2-Hexanone.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-531713 was outside the method criteria for the following analyte(s): trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, 1,2-Dichloroethane and 1,1,2,2-Tetrachloroethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-531713 recovered outside control limits for the following analytes: 1,2-Dichloroethane, cis-1,3-Dichloropropene, 4-Methyl-2-pentanone (MIBK) and 2-Hexanone. These analytes were not detected in the associated samples.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-531332 was outside the method criteria for the following analyte(s): 1,1,2,2-Tetrachloroethane, 1,2-Dibromoethane, Chloromethane and Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 460-531332 recovered outside control limits for the following analytes: 2-Hexanone and 4-Methyl-2-pentanone (MIBK). These analytes were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 4009-8 (460-158637-2), 4009-29S (460-158637-22), 4009-29I (460-158637-23) and DUP2 (460-158637-29). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 460-531930 recovered outside acceptance criteria, low biased, for Dichlorodifluoromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Job ID: 460-158637-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-531930 recovered outside control limits for the following analytes: 4-Methyl-2-pentanone (MIBK), 2-Hexanone and Trichlorofluoromethane. These analytes were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-7 — Lab Sample ID: 460-158637-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.59	J	1.0	0.26	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.41	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	38		1.0	0.22	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.28	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.72	J	1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	5.6		1.0	0.17	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-8 — Lab Sample ID: 460-158637-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	800		2.0	0.48	ug/L	2		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	6.7		2.0	0.62	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	44		2.0	0.53	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	34		2.0	0.23	ug/L	2		8260C	Total/NA
Chloroethane	5.2		2.0	0.64	ug/L	2		8260C	Total/NA
Chloroform	0.66	J	2.0	0.65	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	320		2.0	0.44	ug/L	2		8260C	Total/NA
Tetrachloroethene	1.6	J	2.0	0.50	ug/L	2		8260C	Total/NA
trans-1,2-Dichloroethene	1.2	J	2.0	0.47	ug/L	2		8260C	Total/NA
Trichloroethene	190		2.0	0.63	ug/L	2		8260C	Total/NA
Vinyl chloride	11		2.0	0.34	ug/L	2		8260C	Total/NA

Client Sample ID: Well 1-1 — Lab Sample ID: 460-158637-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	170		1.0	0.24	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	4.2		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	17		1.0	0.26	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	14		1.0	0.12	ug/L	1		8260C	Total/NA
Chloroethane	0.46	J	1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	56		1.0	0.22	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.35	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	53		1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	0.29	J	1.0	0.17	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-9 — Lab Sample ID: 460-158637-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	8.2		1.0	0.22	ug/L	1		8260C	Total/NA
Trichloroethene	0.32	J	1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	0.25	J	1.0	0.17	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-10 — Lab Sample ID: 460-158637-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.31	J	1.0	0.24	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-11 — Lab Sample ID: 460-158637-6

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-11 (Continued) — Lab Sample ID: 460-158637-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	68		1.0	0.24	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	1.2		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	21		1.0	0.26	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	6.4		1.0	0.12	ug/L	1		8260C	Total/NA
Chloroethane	1.2		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	20		1.0	0.22	ug/L	1		8260C	Total/NA
Trichloroethene	1.1		1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	19		1.0	0.17	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-12 — Lab Sample ID: 460-158637-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	6.2		1.0	0.26	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.54	J	1.0	0.12	ug/L	1		8260C	Total/NA
Benzene	1.7		1.0	0.43	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.22	ug/L	1		8260C	Total/NA
Trichloroethene	1.6		1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	2.6		1.0	0.17	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-13 — Lab Sample ID: 460-158637-8

No Detections.

Client Sample ID: 4009-13A — Lab Sample ID: 460-158637-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.90	J	1.0	0.43	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-14 — Lab Sample ID: 460-158637-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	11		1.0	0.43	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-15 — Lab Sample ID: 460-158637-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	9.0		1.0	0.43	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-16 — Lab Sample ID: 460-158637-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.7		1.0	0.43	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-16A — Lab Sample ID: 460-158637-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.56	J	1.0	0.43	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-18 — Lab Sample ID: 460-158637-14

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-18 (Continued) — Lab Sample ID: 460-158637-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.57	J	1.0	0.24	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-19 — Lab Sample ID: 460-158637-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.26	J	1.0	0.16	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-21 — Lab Sample ID: 460-158637-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	11		1.0	0.43	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-22 — Lab Sample ID: 460-158637-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.96	J	1.0	0.43	ug/L	1		8260C	Total/NA
Toluene	0.55	J	1.0	0.38	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-27S — Lab Sample ID: 460-158637-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	43		1.0	0.24	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	2.6		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	1.9		1.0	0.26	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	4.1		1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	18		1.0	0.22	ug/L	1		8260C	Total/NA
Trichloroethene	20		1.0	0.31	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-27I — Lab Sample ID: 460-158637-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.61	J	1.0	0.24	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.42	J	1.0	0.31	ug/L	1		8260C	Total/NA
Trichloroethene	1.4		1.0	0.31	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-27D — Lab Sample ID: 460-158637-20

No Detections.

Client Sample ID: 4009-28 — Lab Sample ID: 460-158637-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.5		1.0	0.24	ug/L	1		8260C	Total/NA
Benzene	0.61	J	1.0	0.43	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.41	J	1.0	0.22	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-29S — Lab Sample ID: 460-158637-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	420		2.0	0.48	ug/L	2		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	4.3		2.0	0.62	ug/L	2		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-29S (Continued) — Lab Sample ID: 460-158637-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	58		2.0	0.53	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	37		2.0	0.23	ug/L	2		8260C	Total/NA
Chloroethane	2.0		2.0	0.64	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	260		2.0	0.44	ug/L	2		8260C	Total/NA
trans-1,2-Dichloroethene	0.78	J	2.0	0.47	ug/L	2		8260C	Total/NA
Trichloroethene	19		2.0	0.63	ug/L	2		8260C	Total/NA
Vinyl chloride	74		2.0	0.34	ug/L	2		8260C	Total/NA

Client Sample ID: 4009-29I — Lab Sample ID: 460-158637-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	620		2.0	0.48	ug/L	2		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	7.5		2.0	0.62	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	50		2.0	0.53	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	50		2.0	0.23	ug/L	2		8260C	Total/NA
Chlorobenzene	0.91	J	2.0	0.75	ug/L	2		8260C	Total/NA
Chloroethane	2.2		2.0	0.64	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	250		2.0	0.44	ug/L	2		8260C	Total/NA
Tetrachloroethene	1.1	J	2.0	0.50	ug/L	2		8260C	Total/NA
trans-1,2-Dichloroethene	0.95	J	2.0	0.47	ug/L	2		8260C	Total/NA
Trichloroethene	200		2.0	0.63	ug/L	2		8260C	Total/NA
Vinyl chloride	63		2.0	0.34	ug/L	2		8260C	Total/NA

Client Sample ID: 4009-29D — Lab Sample ID: 460-158637-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	41		1.0	0.24	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.67	J	1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	11		1.0	0.26	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	5.3		1.0	0.12	ug/L	1		8260C	Total/NA
Chloroethane	3.0		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	26		1.0	0.22	ug/L	1		8260C	Total/NA
Trichloroethene	10		1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	17		1.0	0.17	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-30 — Lab Sample ID: 460-158637-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.61	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	4.1		1.0	0.43	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-30A — Lab Sample ID: 460-158637-26

No Detections.

Client Sample ID: 4009-11A — Lab Sample ID: 460-158637-27

No Detections.

Client Sample ID: DUP1 — Lab Sample ID: 460-158637-28

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP1 (Continued) — Lab Sample ID: 460-158637-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.2		1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	1.6		1.0	0.43	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.22	ug/L	1		8260C	Total/NA
Trichloroethene	1.7		1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	2.0		1.0	0.17	ug/L	1		8260C	Total/NA

Client Sample ID: DUP2 — Lab Sample ID: 460-158637-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	660		2.0	0.48	ug/L	2		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	7.5		2.0	0.62	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	53		2.0	0.53	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	51		2.0	0.23	ug/L	2		8260C	Total/NA
Chlorobenzene	1.1	J	2.0	0.75	ug/L	2		8260C	Total/NA
Chloroethane	2.3		2.0	0.64	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	270		2.0	0.44	ug/L	2		8260C	Total/NA
Tetrachloroethene	1.4	J	2.0	0.50	ug/L	2		8260C	Total/NA
trans-1,2-Dichloroethene	1.0	J	2.0	0.47	ug/L	2		8260C	Total/NA
Trichloroethene	220		2.0	0.63	ug/L	2		8260C	Total/NA
Vinyl chloride	62		2.0	0.34	ug/L	2		8260C	Total/NA

Client Sample ID: FIELD BLANK — Lab Sample ID: 460-158637-30

No Detections.

Client Sample ID: 4009-26 — Lab Sample ID: 460-158637-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	280		1.0	0.24	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	8.4		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	32		1.0	0.26	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	8.7		1.0	0.12	ug/L	1		8260C	Total/NA
Benzene	0.53	J	1.0	0.43	ug/L	1		8260C	Total/NA
Chloroethane	2.3		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	110		1.0	0.22	ug/L	1		8260C	Total/NA
Tetrachloroethene	1.2		1.0	0.25	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.74	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	65		1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	8.1		1.0	0.17	ug/L	1		8260C	Total/NA

Client Sample ID: Well 1-2A — Lab Sample ID: 460-158637-32

No Detections.

Client Sample ID: Well 1-3 PRE — Lab Sample ID: 460-158637-33

No Detections.

Client Sample ID: Well 1-3 POST — Lab Sample ID: 460-158637-34

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: TRIP BLANK (S)

Lab Sample ID: 460-158637-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.34	J	1.0	0.32	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-7
Date Collected: 06/14/18 12:10
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/26/18 23:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/26/18 23:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/26/18 23:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/26/18 23:49	1
1,1-Dichloroethane	**0.59**	**J**	1.0	0.26	ug/L			06/26/18 23:49	1
1,1-Dichloroethene	**0.41**	**J**	1.0	0.12	ug/L			06/26/18 23:49	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/26/18 23:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/26/18 23:49	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/26/18 23:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/26/18 23:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/26/18 23:49	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/26/18 23:49	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/26/18 23:49	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/26/18 23:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/26/18 23:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/26/18 23:49	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/26/18 23:49	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/26/18 23:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/26/18 23:49	1
Acetone	5.0	U	5.0	5.0	ug/L			06/26/18 23:49	1
Benzene	1.0	U	1.0	0.43	ug/L			06/26/18 23:49	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/26/18 23:49	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/26/18 23:49	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/26/18 23:49	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/26/18 23:49	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/26/18 23:49	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/26/18 23:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/26/18 23:49	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/26/18 23:49	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/26/18 23:49	1
cis-1,2-Dichloroethene	**38**		1.0	0.22	ug/L			06/26/18 23:49	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/26/18 23:49	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/26/18 23:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/26/18 23:49	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/26/18 23:49	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/26/18 23:49	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/26/18 23:49	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/26/18 23:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/26/18 23:49	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/26/18 23:49	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/26/18 23:49	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/26/18 23:49	1
Toluene	1.0	U	1.0	0.38	ug/L			06/26/18 23:49	1
trans-1,2-Dichloroethene	**0.28**	**J**	1.0	0.24	ug/L			06/26/18 23:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/26/18 23:49	1
Trichloroethene	**0.72**	**J**	1.0	0.31	ug/L			06/26/18 23:49	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/26/18 23:49	1
Vinyl chloride	**5.6**		1.0	0.17	ug/L			06/26/18 23:49	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/26/18 23:49	1

Client Sample ID: 4009-7

Date Collected: 06/14/18 12:10
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/26/18 23:49	1
Styrene	1.0	U	1.0	0.42	ug/L			06/26/18 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*		*06/26/18 23:49*	*1*
4-Bromofluorobenzene	*105*		*77 - 124*		*06/26/18 23:49*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/26/18 23:49*	*1*
Dibromofluoromethane (Surr)	*105*		*72 - 131*		*06/26/18 23:49*	*1*

Client Sample ID: 4009-8

Date Collected: 06/14/18 12:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**800**		2.0	0.48	ug/L			06/27/18 11:16	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.73	ug/L			06/27/18 11:16	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**6.7**		2.0	0.62	ug/L			06/27/18 11:16	2
1,1,2-Trichloroethane	2.0	U	2.0	0.87	ug/L			06/27/18 11:16	2
1,1-Dichloroethane	**44**		2.0	0.53	ug/L			06/27/18 11:16	2
1,1-Dichloroethene	**34**		2.0	0.23	ug/L			06/27/18 11:16	2
1,2,3-Trimethylbenzene	2.0	U	2.0	0.72	ug/L			06/27/18 11:16	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.73	ug/L			06/27/18 11:16	2
1,2,4-Trimethylbenzene	2.0	U	2.0	0.75	ug/L			06/27/18 11:16	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.75	ug/L			06/27/18 11:16	2
1,2-Dichlorobenzene	2.0	U	2.0	0.86	ug/L			06/27/18 11:16	2
1,2-Dichloroethane	2.0	U	2.0	0.86	ug/L			06/27/18 11:16	2
1,2-Dichloropropane	2.0	U	2.0	0.71	ug/L			06/27/18 11:16	2
1,3,5-Trimethylbenzene	2.0	U	2.0	0.65	ug/L			06/27/18 11:16	2
1,3-Dichlorobenzene	2.0	U	2.0	0.68	ug/L			06/27/18 11:16	2
1,4-Dichlorobenzene	2.0	U	2.0	1.5	ug/L			06/27/18 11:16	2
2-Butanone (MEK)	10	U	10	3.7	ug/L			06/27/18 11:16	2
2-Hexanone	10	U *	10	5.8	ug/L			06/27/18 11:16	2
4-Methyl-2-pentanone (MIBK)	10	U *	10	5.5	ug/L			06/27/18 11:16	2
Acetone	10	U	10	10	ug/L			06/27/18 11:16	2
Benzene	2.0	U	2.0	0.86	ug/L			06/27/18 11:16	2
Bromoform	2.0	U	2.0	1.1	ug/L			06/27/18 11:16	2
Bromomethane	2.0	U	2.0	2.0	ug/L			06/27/18 11:16	2
Carbon disulfide	2.0	U	2.0	0.31	ug/L			06/27/18 11:16	2
Carbon tetrachloride	2.0	U	2.0	0.42	ug/L			06/27/18 11:16	2
Chlorobenzene	2.0	U	2.0	0.75	ug/L			06/27/18 11:16	2
Dibromochloromethane	2.0	U	2.0	0.56	ug/L			06/27/18 11:16	2
Chloroethane	**5.2**		2.0	0.64	ug/L			06/27/18 11:16	2
Chloroform	**0.66**	**J**	2.0	0.65	ug/L			06/27/18 11:16	2
Chloromethane	2.0	U	2.0	0.29	ug/L			06/27/18 11:16	2
cis-1,2-Dichloroethene	**320**		2.0	0.44	ug/L			06/27/18 11:16	2
Cyclohexane	2.0	U	2.0	0.64	ug/L			06/27/18 11:16	2
Bromodichloromethane	2.0	U	2.0	0.69	ug/L			06/27/18 11:16	2
Dichlorodifluoromethane	2.0	U	2.0	0.24	ug/L			06/27/18 11:16	2

Client Sample ID: 4009-8

Date Collected: 06/14/18 12:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	2.0	U	2.0	0.60	ug/L			06/27/18 11:16	2
1,2-Dibromoethane	2.0	U	2.0	1.0	ug/L			06/27/18 11:16	2
Isopropylbenzene	2.0	U	2.0	0.67	ug/L			06/27/18 11:16	2
Methyl acetate	10	U	10	0.63	ug/L			06/27/18 11:16	2
Methyl tert-butyl ether	2.0	U	2.0	0.93	ug/L			06/27/18 11:16	2
Methylcyclohexane	2.0	U	2.0	0.52	ug/L			06/27/18 11:16	2
Methylene Chloride	2.0	U	2.0	0.63	ug/L			06/27/18 11:16	2
Tetrachloroethene	**1.6**	**J**	2.0	0.50	ug/L			06/27/18 11:16	2
Toluene	2.0	U	2.0	0.76	ug/L			06/27/18 11:16	2
trans-1,2-Dichloroethene	**1.2**	**J**	2.0	0.47	ug/L			06/27/18 11:16	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.97	ug/L			06/27/18 11:16	2
Trichloroethene	**190**		2.0	0.63	ug/L			06/27/18 11:16	2
Trichlorofluoromethane	2.0	U	2.0	0.29	ug/L			06/27/18 11:16	2
Vinyl chloride	**11**		2.0	0.34	ug/L			06/27/18 11:16	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			06/27/18 11:16	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.91	ug/L			06/27/18 11:16	2
Styrene	2.0	U	2.0	0.83	ug/L			06/27/18 11:16	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*74 - 132*		*06/27/18 11:16*	*2*
4-Bromofluorobenzene	*105*		*77 - 124*		*06/27/18 11:16*	*2*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/27/18 11:16*	*2*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/27/18 11:16*	*2*

Client Sample ID: Well 1-1

Date Collected: 06/14/18 08:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**170**		1.0	0.24	ug/L			06/27/18 00:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 00:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**4.2**		1.0	0.31	ug/L			06/27/18 00:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 00:13	1
1,1-Dichloroethane	**17**		1.0	0.26	ug/L			06/27/18 00:13	1
1,1-Dichloroethene	**14**		1.0	0.12	ug/L			06/27/18 00:13	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 00:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 00:13	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 00:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 00:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 00:13	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 00:13	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 00:13	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 00:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 00:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 00:13	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 00:13	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 00:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 00:13	1

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: Well 1-1

Date Collected: 06/14/18 08:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 00:13	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 00:13	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 00:13	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 00:13	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 00:13	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 00:13	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 00:13	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 00:13	1
Chloroethane	**0.46**	**J**	1.0	0.32	ug/L			06/27/18 00:13	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 00:13	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 00:13	1
cis-1,2-Dichloroethene	**56**		1.0	0.22	ug/L			06/27/18 00:13	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 00:13	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 00:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 00:13	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 00:13	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 00:13	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 00:13	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 00:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 00:13	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 00:13	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 00:13	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 00:13	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 00:13	1
trans-1,2-Dichloroethene	**0.35**	**J**	1.0	0.24	ug/L			06/27/18 00:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 00:13	1
Trichloroethene	**53**		1.0	0.31	ug/L			06/27/18 00:13	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 00:13	1
Vinyl chloride	**0.29**	**J**	1.0	0.17	ug/L			06/27/18 00:13	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 00:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 00:13	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*06/27/18 00:13*	*1*
4-Bromofluorobenzene	*107*		*77 - 124*		*06/27/18 00:13*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/27/18 00:13*	*1*
Dibromofluoromethane (Surr)	*104*		*72 - 131*		*06/27/18 00:13*	*1*

Client Sample ID: 4009-9

Date Collected: 06/14/18 11:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 00:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 00:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 00:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 00:37	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 00:37	1

Client Sample ID: 4009-9
Date Collected: 06/14/18 11:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 00:37	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 00:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 00:37	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 00:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 00:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 00:37	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 00:37	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 00:37	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 00:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 00:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 00:37	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 00:37	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 00:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 00:37	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 00:37	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 00:37	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 00:37	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 00:37	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 00:37	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 00:37	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 00:37	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 00:37	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 00:37	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 00:37	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 00:37	1
cis-1,2-Dichloroethene	**8.2**		1.0	0.22	ug/L			06/27/18 00:37	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 00:37	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 00:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 00:37	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 00:37	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 00:37	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 00:37	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 00:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 00:37	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 00:37	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 00:37	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 00:37	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 00:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 00:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 00:37	1
Trichloroethene	**0.32**	**J**	1.0	0.31	ug/L			06/27/18 00:37	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 00:37	1
Vinyl chloride	**0.25**	**J**	1.0	0.17	ug/L			06/27/18 00:37	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 00:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 00:37	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*06/27/18 00:37*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*06/27/18 00:37*	*1*

Client Sample ID: 4009-9

Date Collected: 06/14/18 11:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		06/27/18 00:37	1
Dibromofluoromethane (Surr)	104		72 - 131		06/27/18 00:37	1

Client Sample ID: 4009-10

Date Collected: 06/14/18 11:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.31	J	1.0	0.24	ug/L			06/27/18 01:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 01:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 01:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 01:00	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 01:00	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 01:00	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 01:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 01:00	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 01:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 01:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 01:00	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 01:00	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 01:00	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 01:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 01:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 01:00	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 01:00	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 01:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 01:00	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 01:00	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 01:00	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 01:00	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 01:00	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 01:00	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 01:00	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 01:00	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 01:00	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 01:00	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 01:00	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 01:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 01:00	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 01:00	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 01:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 01:00	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 01:00	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 01:00	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 01:00	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 01:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 01:00	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 01:00	1

Client Sample ID: 4009-10

Date Collected: 06/14/18 11:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 01:00	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 01:00	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 01:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 01:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 01:00	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 01:00	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 01:00	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 01:00	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 01:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 01:00	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*06/27/18 01:00*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*06/27/18 01:00*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/27/18 01:00*	*1*
Dibromofluoromethane (Surr)	*105*		*72 - 131*		*06/27/18 01:00*	*1*

Client Sample ID: 4009-11

Date Collected: 06/14/18 11:55
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**68**		1.0	0.24	ug/L			06/27/18 01:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 01:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.2**		1.0	0.31	ug/L			06/27/18 01:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 01:24	1
1,1-Dichloroethane	**21**		1.0	0.26	ug/L			06/27/18 01:24	1
1,1-Dichloroethene	**6.4**		1.0	0.12	ug/L			06/27/18 01:24	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 01:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 01:24	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 01:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 01:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 01:24	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 01:24	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 01:24	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 01:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 01:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 01:24	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 01:24	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 01:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 01:24	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 01:24	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 01:24	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 01:24	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 01:24	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 01:24	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 01:24	1

Client Sample ID: 4009-11

Date Collected: 06/14/18 11:55
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 01:24	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 01:24	1
Chloroethane	**1.2**		1.0	0.32	ug/L			06/27/18 01:24	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 01:24	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 01:24	1
cis-1,2-Dichloroethene	**20**		1.0	0.22	ug/L			06/27/18 01:24	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 01:24	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 01:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 01:24	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 01:24	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 01:24	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 01:24	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 01:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 01:24	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 01:24	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 01:24	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 01:24	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 01:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 01:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 01:24	1
Trichloroethene	**1.1**		1.0	0.31	ug/L			06/27/18 01:24	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 01:24	1
Vinyl chloride	**19**		1.0	0.17	ug/L			06/27/18 01:24	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 01:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 01:24	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*		*06/27/18 01:24*	*1*
4-Bromofluorobenzene	*102*		*77 - 124*		*06/27/18 01:24*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/27/18 01:24*	*1*
Dibromofluoromethane (Surr)	*102*		*72 - 131*		*06/27/18 01:24*	*1*

Client Sample ID: 4009-12

Date Collected: 06/14/18 10:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 01:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 01:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 01:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 01:47	1
1,1-Dichloroethane	**6.2**		1.0	0.26	ug/L			06/27/18 01:47	1
1,1-Dichloroethene	**0.54**	**J**	1.0	0.12	ug/L			06/27/18 01:47	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 01:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 01:47	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 01:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 01:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 01:47	1

Client Sample ID: 4009-12
Date Collected: 06/14/18 10:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 01:47	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 01:47	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 01:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 01:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 01:47	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 01:47	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 01:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 01:47	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 01:47	1
Benzene	**1.7**		1.0	0.43	ug/L			06/27/18 01:47	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 01:47	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 01:47	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 01:47	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 01:47	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 01:47	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 01:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 01:47	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 01:47	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 01:47	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.22	ug/L			06/27/18 01:47	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 01:47	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 01:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 01:47	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 01:47	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 01:47	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 01:47	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 01:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 01:47	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 01:47	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 01:47	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 01:47	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 01:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 01:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 01:47	1
Trichloroethene	**1.6**		1.0	0.31	ug/L			06/27/18 01:47	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 01:47	1
Vinyl chloride	**2.6**		1.0	0.17	ug/L			06/27/18 01:47	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 01:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 01:47	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*06/27/18 01:47*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*06/27/18 01:47*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/27/18 01:47*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/27/18 01:47*	*1*

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-13
Date Collected: 06/14/18 11:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 02:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 02:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 02:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 02:10	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 02:10	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 02:10	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 02:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 02:10	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 02:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 02:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 02:10	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 02:10	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 02:10	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 02:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 02:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 02:10	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 02:10	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 02:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 02:10	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 02:10	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 02:10	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 02:10	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 02:10	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 02:10	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 02:10	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 02:10	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 02:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 02:10	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 02:10	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 02:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 02:10	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 02:10	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 02:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 02:10	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 02:10	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 02:10	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 02:10	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 02:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 02:10	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 02:10	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 02:10	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 02:10	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 02:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 02:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 02:10	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 02:10	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 02:10	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 02:10	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 02:10	1

Client Sample ID: 4009-13
Date Collected: 06/14/18 11:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 02:10	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*		*06/27/18 02:10*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*06/27/18 02:10*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/27/18 02:10*	*1*
Dibromofluoromethane (Surr)	*105*		*72 - 131*		*06/27/18 02:10*	*1*

Client Sample ID: 4009-13A
Date Collected: 06/14/18 11:20
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 02:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 02:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 02:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 02:34	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 02:34	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 02:34	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 02:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 02:34	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 02:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 02:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 02:34	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 02:34	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 02:34	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 02:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 02:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 02:34	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 02:34	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 02:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 02:34	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 02:34	1
Benzene	**0.90**	**J**	1.0	0.43	ug/L			06/27/18 02:34	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 02:34	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 02:34	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 02:34	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 02:34	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 02:34	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 02:34	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 02:34	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 02:34	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 02:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 02:34	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 02:34	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 02:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 02:34	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 02:34	1

Client Sample ID: 4009-13A

Date Collected: 06/14/18 11:20
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 02:34	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 02:34	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 02:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 02:34	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 02:34	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 02:34	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 02:34	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 02:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 02:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 02:34	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 02:34	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 02:34	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 02:34	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 02:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 02:34	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*74 - 132*		*06/27/18 02:34*	*1*
4-Bromofluorobenzene	*102*		*77 - 124*		*06/27/18 02:34*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/27/18 02:34*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/27/18 02:34*	*1*

Client Sample ID: 4009-14

Date Collected: 06/14/18 09:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 02:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 02:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 02:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 02:58	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 02:58	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 02:58	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 02:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 02:58	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 02:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 02:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 02:58	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 02:58	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 02:58	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 02:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 02:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 02:58	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 02:58	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 02:58	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 02:58	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 02:58	1
Benzene	**11**		1.0	0.43	ug/L			06/27/18 02:58	1

Client Sample ID: 4009-14
Date Collected: 06/14/18 09:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 02:58	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 02:58	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 02:58	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 02:58	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 02:58	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 02:58	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 02:58	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 02:58	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 02:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 02:58	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 02:58	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 02:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 02:58	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 02:58	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 02:58	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 02:58	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 02:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 02:58	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 02:58	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 02:58	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 02:58	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 02:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 02:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 02:58	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 02:58	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 02:58	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 02:58	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 02:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 02:58	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*		*06/27/18 02:58*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*06/27/18 02:58*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/27/18 02:58*	*1*
Dibromofluoromethane (Surr)	*106*		*72 - 131*		*06/27/18 02:58*	*1*

Client Sample ID: 4009-15
Date Collected: 06/14/18 09:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 03:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 03:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 03:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 03:21	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 03:21	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 03:21	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 03:21	1

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-15
Date Collected: 06/14/18 09:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 03:21	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 03:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 03:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 03:21	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 03:21	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 03:21	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 03:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 03:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 03:21	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 03:21	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 03:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 03:21	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 03:21	1
Benzene	**9.0**		1.0	0.43	ug/L			06/27/18 03:21	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 03:21	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 03:21	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 03:21	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 03:21	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 03:21	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 03:21	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 03:21	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 03:21	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 03:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 03:21	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 03:21	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 03:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 03:21	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 03:21	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 03:21	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 03:21	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 03:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 03:21	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 03:21	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 03:21	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 03:21	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 03:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 03:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 03:21	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 03:21	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 03:21	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 03:21	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 03:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 03:21	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*		*06/27/18 03:21*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*06/27/18 03:21*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 03:21*	*1*
Dibromofluoromethane (Surr)	*107*		*72 - 131*		*06/27/18 03:21*	*1*

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-16
Date Collected: 06/14/18 09:40
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 03:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 03:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 03:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 03:44	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 03:44	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 03:44	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 03:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 03:44	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 03:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 03:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 03:44	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 03:44	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 03:44	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 03:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 03:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 03:44	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 03:44	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 03:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 03:44	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 03:44	1
Benzene	**5.7**		1.0	0.43	ug/L			06/27/18 03:44	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 03:44	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 03:44	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 03:44	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 03:44	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 03:44	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 03:44	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 03:44	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 03:44	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 03:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 03:44	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 03:44	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 03:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 03:44	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 03:44	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 03:44	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 03:44	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 03:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 03:44	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 03:44	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 03:44	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 03:44	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 03:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 03:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 03:44	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 03:44	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 03:44	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 03:44	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 03:44	1

Client Sample ID: 4009-16

Date Collected: 06/14/18 09:40
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 03:44	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*74 - 132*		*06/27/18 03:44*	*1*
4-Bromofluorobenzene	*106*		*77 - 124*		*06/27/18 03:44*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 03:44*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*06/27/18 03:44*	*1*

Client Sample ID: 4009-16A

Date Collected: 06/14/18 09:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 04:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 04:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 04:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 04:08	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 04:08	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 04:08	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 04:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 04:08	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 04:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 04:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 04:08	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 04:08	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 04:08	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 04:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 04:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 04:08	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 04:08	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 04:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 04:08	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 04:08	1
Benzene	**0.56**	**J**	1.0	0.43	ug/L			06/27/18 04:08	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 04:08	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 04:08	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 04:08	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 04:08	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 04:08	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 04:08	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 04:08	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 04:08	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 04:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 04:08	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 04:08	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 04:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 04:08	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 04:08	1

Client Sample ID: 4009-16A

Date Collected: 06/14/18 09:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 04:08	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 04:08	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 04:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 04:08	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 04:08	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 04:08	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 04:08	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 04:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 04:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 04:08	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 04:08	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 04:08	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 04:08	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 04:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 04:08	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*74 - 132*		*06/27/18 04:08*	*1*
4-Bromofluorobenzene	*106*		*77 - 124*		*06/27/18 04:08*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 04:08*	*1*
Dibromofluoromethane (Surr)	*107*		*72 - 131*		*06/27/18 04:08*	*1*

Client Sample ID: 4009-18

Date Collected: 06/14/18 09:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-14

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.57**	**J**	1.0	0.24	ug/L			06/27/18 04:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 04:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 04:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 04:32	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 04:32	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 04:32	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 04:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 04:32	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 04:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 04:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 04:32	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 04:32	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 04:32	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 04:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 04:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 04:32	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 04:32	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 04:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 04:32	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 04:32	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 04:32	1

Client Sample ID: 4009-18

Date Collected: 06/14/18 09:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-14

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 04:32	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 04:32	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 04:32	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 04:32	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 04:32	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 04:32	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 04:32	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 04:32	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 04:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 04:32	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 04:32	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 04:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 04:32	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 04:32	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 04:32	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 04:32	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 04:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 04:32	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 04:32	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 04:32	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 04:32	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 04:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 04:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 04:32	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 04:32	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 04:32	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 04:32	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 04:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 04:32	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*74 - 132*		*06/27/18 04:32*	*1*
4-Bromofluorobenzene	*109*		*77 - 124*		*06/27/18 04:32*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/27/18 04:32*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/27/18 04:32*	*1*

Client Sample ID: 4009-19

Date Collected: 06/14/18 09:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-15

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 04:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 04:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 04:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 04:55	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 04:55	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 04:55	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 04:55	1

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-19
Date Collected: 06/14/18 09:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 04:55	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 04:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 04:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 04:55	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 04:55	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 04:55	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 04:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 04:55	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 04:55	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 04:55	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 04:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 04:55	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 04:55	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 04:55	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 04:55	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 04:55	1
Carbon disulfide	**0.26**	**J**	1.0	0.16	ug/L			06/27/18 04:55	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 04:55	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 04:55	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 04:55	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 04:55	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 04:55	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 04:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 04:55	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 04:55	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 04:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 04:55	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 04:55	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 04:55	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 04:55	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 04:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 04:55	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 04:55	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 04:55	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 04:55	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 04:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 04:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 04:55	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 04:55	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 04:55	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 04:55	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 04:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 04:55	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 04:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*06/27/18 04:55*	*1*
4-Bromofluorobenzene	*109*		*77 - 124*		*06/27/18 04:55*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/27/18 04:55*	*1*
Dibromofluoromethane (Surr)	*110*		*72 - 131*		*06/27/18 04:55*	*1*

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-21
Date Collected: 06/14/18 09:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-16
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 05:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 05:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 05:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 05:19	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 05:19	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 05:19	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 05:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 05:19	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 05:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 05:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 05:19	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 05:19	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 05:19	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 05:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 05:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 05:19	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 05:19	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 05:19	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 05:19	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 05:19	1
Benzene	**11**		1.0	0.43	ug/L			06/27/18 05:19	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 05:19	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 05:19	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 05:19	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 05:19	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 05:19	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 05:19	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 05:19	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 05:19	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 05:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 05:19	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 05:19	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 05:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 05:19	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 05:19	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 05:19	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 05:19	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 05:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 05:19	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 05:19	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 05:19	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 05:19	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 05:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 05:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 05:19	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 05:19	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 05:19	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 05:19	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 05:19	1

Client Sample ID: 4009-21
Date Collected: 06/14/18 09:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-16
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 05:19	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 05:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*74 - 132*		*06/27/18 05:19*	*1*
4-Bromofluorobenzene	*110*		*77 - 124*		*06/27/18 05:19*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 05:19*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/27/18 05:19*	*1*

Client Sample ID: 4009-22
Date Collected: 06/14/18 08:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-17
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 13:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 13:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 13:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 13:14	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 13:14	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 13:14	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 13:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 13:14	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 13:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 13:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 13:14	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 13:14	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 13:14	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 13:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 13:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 13:14	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 13:14	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 13:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 13:14	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 13:14	1
Benzene	**0.96**	**J**	1.0	0.43	ug/L			06/27/18 13:14	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 13:14	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 13:14	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 13:14	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 13:14	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 13:14	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 13:14	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 13:14	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 13:14	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 13:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 13:14	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 13:14	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 13:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 13:14	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 13:14	1

Client Sample ID: 4009-22

Date Collected: 06/14/18 08:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-17

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 13:14	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 13:14	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 13:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 13:14	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 13:14	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 13:14	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 13:14	1
Toluene	**0.55**	**J**	1.0	0.38	ug/L			06/27/18 13:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 13:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 13:14	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 13:14	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 13:14	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 13:14	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 13:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 13:14	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*		*06/27/18 13:14*	*1*
4-Bromofluorobenzene	*108*		*77 - 124*		*06/27/18 13:14*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/27/18 13:14*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*06/27/18 13:14*	*1*

Client Sample ID: 4009-27S

Date Collected: 06/14/18 10:40
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-18

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**43**		1.0	0.24	ug/L			06/27/18 13:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.6**		1.0	0.31	ug/L			06/27/18 13:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 13:37	1
1,1-Dichloroethane	**1.9**		1.0	0.26	ug/L			06/27/18 13:37	1
1,1-Dichloroethene	**4.1**		1.0	0.12	ug/L			06/27/18 13:37	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 13:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 13:37	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 13:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 13:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 13:37	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 13:37	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 13:37	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 13:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 13:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 13:37	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 13:37	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 13:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 13:37	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 13:37	1

Client Sample ID: 4009-27S
Date Collected: 06/14/18 10:40
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-18
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 13:37	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 13:37	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 13:37	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 13:37	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 13:37	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 13:37	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 13:37	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 13:37	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 13:37	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 13:37	1
cis-1,2-Dichloroethene	**18**		1.0	0.22	ug/L			06/27/18 13:37	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 13:37	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 13:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 13:37	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 13:37	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 13:37	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 13:37	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 13:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 13:37	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 13:37	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 13:37	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 13:37	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 13:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 13:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 13:37	1
Trichloroethene	**20**		1.0	0.31	ug/L			06/27/18 13:37	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 13:37	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 13:37	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 13:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 13:37	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*06/27/18 13:37*	*1*
4-Bromofluorobenzene	*111*		*77 - 124*		*06/27/18 13:37*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/27/18 13:37*	*1*
Dibromofluoromethane (Surr)	*107*		*72 - 131*		*06/27/18 13:37*	*1*

Client Sample ID: 4009-27I
Date Collected: 06/14/18 10:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-19
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.61**	**J**	1.0	0.24	ug/L			06/27/18 10:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 10:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.42**	**J**	1.0	0.31	ug/L			06/27/18 10:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 10:52	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 10:52	1

Client Sample ID: 4009-27I
Date Collected: 06/14/18 10:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-19
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 10:52	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 10:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 10:52	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 10:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 10:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 10:52	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 10:52	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 10:52	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 10:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 10:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 10:52	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 10:52	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 10:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 10:52	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 10:52	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 10:52	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 10:52	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 10:52	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 10:52	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 10:52	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 10:52	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 10:52	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 10:52	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 10:52	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 10:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 10:52	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 10:52	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 10:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 10:52	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 10:52	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 10:52	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 10:52	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 10:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 10:52	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 10:52	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 10:52	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 10:52	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 10:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 10:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 10:52	1
Trichloroethene	**1.4**		1.0	0.31	ug/L			06/27/18 10:52	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 10:52	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 10:52	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 10:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 10:52	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 10:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*06/27/18 10:52*	*1*
4-Bromofluorobenzene	*105*		*77 - 124*		*06/27/18 10:52*	*1*

Client Sample ID: 4009-27I

Date Collected: 06/14/18 10:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-19

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/27/18 10:52*	*1*
Dibromofluoromethane (Surr)	*110*		*72 - 131*		*06/27/18 10:52*	*1*

Client Sample ID: 4009-27D

Date Collected: 06/14/18 10:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-20

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 14:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 14:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 14:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 14:01	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 14:01	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 14:01	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 14:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 14:01	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 14:01	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 14:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 14:01	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 14:01	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 14:01	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 14:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 14:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 14:01	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 14:01	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 14:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 14:01	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 14:01	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 14:01	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 14:01	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 14:01	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 14:01	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 14:01	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 14:01	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 14:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 14:01	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 14:01	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 14:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 14:01	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 14:01	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 14:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 14:01	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 14:01	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 14:01	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 14:01	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 14:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 14:01	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 14:01	1

Client Sample ID: 4009-27D

Date Collected: 06/14/18 10:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-20

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 14:01	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 14:01	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 14:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 14:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 14:01	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 14:01	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 14:01	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 14:01	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 14:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 14:01	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*06/27/18 14:01*	*1*
4-Bromofluorobenzene	*107*		*77 - 124*		*06/27/18 14:01*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 14:01*	*1*
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*06/27/18 14:01*	*1*

Client Sample ID: 4009-28

Date Collected: 06/14/18 08:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-21

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**2.5**		1.0	0.24	ug/L			06/27/18 14:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 14:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 14:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 14:24	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 14:24	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 14:24	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 14:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 14:24	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 14:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 14:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 14:24	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 14:24	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 14:24	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 14:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 14:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 14:24	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 14:24	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 14:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 14:24	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 14:24	1
Benzene	**0.61**	**J**	1.0	0.43	ug/L			06/27/18 14:24	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 14:24	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 14:24	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 14:24	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 14:24	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 14:24	1

Client Sample ID: 4009-28

Date Collected: 06/14/18 08:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-21

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 14:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 14:24	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 14:24	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 14:24	1
cis-1,2-Dichloroethene	**0.41**	**J**	1.0	0.22	ug/L			06/27/18 14:24	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 14:24	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 14:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 14:24	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 14:24	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 14:24	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 14:24	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 14:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 14:24	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 14:24	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 14:24	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 14:24	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 14:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 14:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 14:24	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 14:24	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 14:24	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 14:24	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 14:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 14:24	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*		*06/27/18 14:24*	*1*
4-Bromofluorobenzene	*105*		*77 - 124*		*06/27/18 14:24*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/27/18 14:24*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*06/27/18 14:24*	*1*

Client Sample ID: 4009-29S

Date Collected: 06/14/18 10:20
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-22

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**420**		2.0	0.48	ug/L			06/27/18 17:55	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.73	ug/L			06/27/18 17:55	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**4.3**		2.0	0.62	ug/L			06/27/18 17:55	2
1,1,2-Trichloroethane	2.0	U	2.0	0.87	ug/L			06/27/18 17:55	2
1,1-Dichloroethane	**58**		2.0	0.53	ug/L			06/27/18 17:55	2
1,1-Dichloroethene	**37**		2.0	0.23	ug/L			06/27/18 17:55	2
1,2,3-Trimethylbenzene	2.0	U	2.0	0.72	ug/L			06/27/18 17:55	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.73	ug/L			06/27/18 17:55	2
1,2,4-Trimethylbenzene	2.0	U	2.0	0.75	ug/L			06/27/18 17:55	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.75	ug/L			06/27/18 17:55	2
1,2-Dichlorobenzene	2.0	U	2.0	0.86	ug/L			06/27/18 17:55	2

Client Sample ID: 4009-29S
Date Collected: 06/14/18 10:20
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-22
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	2.0	U	2.0	0.86	ug/L			06/27/18 17:55	2
1,2-Dichloropropane	2.0	U	2.0	0.71	ug/L			06/27/18 17:55	2
1,3,5-Trimethylbenzene	2.0	U	2.0	0.65	ug/L			06/27/18 17:55	2
1,3-Dichlorobenzene	2.0	U	2.0	0.68	ug/L			06/27/18 17:55	2
1,4-Dichlorobenzene	2.0	U	2.0	1.5	ug/L			06/27/18 17:55	2
2-Butanone (MEK)	10	U	10	3.7	ug/L			06/27/18 17:55	2
2-Hexanone	10	U *	10	5.8	ug/L			06/27/18 17:55	2
4-Methyl-2-pentanone (MIBK)	10	U *	10	5.5	ug/L			06/27/18 17:55	2
Acetone	10	U	10	10	ug/L			06/27/18 17:55	2
Benzene	2.0	U	2.0	0.86	ug/L			06/27/18 17:55	2
Bromoform	2.0	U	2.0	1.1	ug/L			06/27/18 17:55	2
Bromomethane	2.0	U	2.0	2.0	ug/L			06/27/18 17:55	2
Carbon disulfide	2.0	U	2.0	0.31	ug/L			06/27/18 17:55	2
Carbon tetrachloride	2.0	U	2.0	0.42	ug/L			06/27/18 17:55	2
Chlorobenzene	2.0	U	2.0	0.75	ug/L			06/27/18 17:55	2
Dibromochloromethane	2.0	U	2.0	0.56	ug/L			06/27/18 17:55	2
Chloroethane	**2.0**		2.0	0.64	ug/L			06/27/18 17:55	2
Chloroform	2.0	U	2.0	0.65	ug/L			06/27/18 17:55	2
Chloromethane	2.0	U	2.0	0.29	ug/L			06/27/18 17:55	2
cis-1,2-Dichloroethene	**260**		2.0	0.44	ug/L			06/27/18 17:55	2
Cyclohexane	2.0	U	2.0	0.64	ug/L			06/27/18 17:55	2
Bromodichloromethane	2.0	U	2.0	0.69	ug/L			06/27/18 17:55	2
Dichlorodifluoromethane	2.0	U	2.0	0.24	ug/L			06/27/18 17:55	2
Ethylbenzene	2.0	U	2.0	0.60	ug/L			06/27/18 17:55	2
1,2-Dibromoethane	2.0	U	2.0	1.0	ug/L			06/27/18 17:55	2
Isopropylbenzene	2.0	U	2.0	0.67	ug/L			06/27/18 17:55	2
Methyl acetate	10	U	10	0.63	ug/L			06/27/18 17:55	2
Methyl tert-butyl ether	2.0	U	2.0	0.93	ug/L			06/27/18 17:55	2
Methylcyclohexane	2.0	U	2.0	0.52	ug/L			06/27/18 17:55	2
Methylene Chloride	2.0	U	2.0	0.63	ug/L			06/27/18 17:55	2
Tetrachloroethene	2.0	U	2.0	0.50	ug/L			06/27/18 17:55	2
Toluene	2.0	U	2.0	0.76	ug/L			06/27/18 17:55	2
trans-1,2-Dichloroethene	**0.78**	**J**	2.0	0.47	ug/L			06/27/18 17:55	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.97	ug/L			06/27/18 17:55	2
Trichloroethene	**19**		2.0	0.63	ug/L			06/27/18 17:55	2
Trichlorofluoromethane	2.0	U	2.0	0.29	ug/L			06/27/18 17:55	2
Vinyl chloride	**74**		2.0	0.34	ug/L			06/27/18 17:55	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			06/27/18 17:55	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.91	ug/L			06/27/18 17:55	2
Styrene	2.0	U	2.0	0.83	ug/L			06/27/18 17:55	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*		*06/27/18 17:55*	*2*
4-Bromofluorobenzene	*111*		*77 - 124*		*06/27/18 17:55*	*2*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/27/18 17:55*	*2*
Dibromofluoromethane (Surr)	*112*		*72 - 131*		*06/27/18 17:55*	*2*

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-29I
Date Collected: 06/14/18 10:22
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-23
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**620**		2.0	0.48	ug/L			06/28/18 23:26	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.73	ug/L			06/28/18 23:26	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**7.5**		2.0	0.62	ug/L			06/28/18 23:26	2
1,1,2-Trichloroethane	2.0	U	2.0	0.87	ug/L			06/28/18 23:26	2
1,1-Dichloroethane	**50**		2.0	0.53	ug/L			06/28/18 23:26	2
1,1-Dichloroethene	**50**		2.0	0.23	ug/L			06/28/18 23:26	2
1,2,3-Trimethylbenzene	2.0	U	2.0	0.72	ug/L			06/28/18 23:26	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.73	ug/L			06/28/18 23:26	2
1,2,4-Trimethylbenzene	2.0	U	2.0	0.75	ug/L			06/28/18 23:26	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.75	ug/L			06/28/18 23:26	2
1,2-Dichlorobenzene	2.0	U	2.0	0.86	ug/L			06/28/18 23:26	2
1,2-Dichloroethane	2.0	U	2.0	0.86	ug/L			06/28/18 23:26	2
1,2-Dichloropropane	2.0	U	2.0	0.71	ug/L			06/28/18 23:26	2
1,3,5-Trimethylbenzene	2.0	U	2.0	0.65	ug/L			06/28/18 23:26	2
1,3-Dichlorobenzene	2.0	U	2.0	0.68	ug/L			06/28/18 23:26	2
1,4-Dichlorobenzene	2.0	U	2.0	1.5	ug/L			06/28/18 23:26	2
2-Butanone (MEK)	10	U	10	3.7	ug/L			06/28/18 23:26	2
2-Hexanone	10	U *	10	5.8	ug/L			06/28/18 23:26	2
4-Methyl-2-pentanone (MIBK)	10	U *	10	5.5	ug/L			06/28/18 23:26	2
Acetone	10	U	10	10	ug/L			06/28/18 23:26	2
Benzene	2.0	U	2.0	0.86	ug/L			06/28/18 23:26	2
Bromoform	2.0	U	2.0	1.1	ug/L			06/28/18 23:26	2
Bromomethane	2.0	U	2.0	2.0	ug/L			06/28/18 23:26	2
Carbon disulfide	2.0	U	2.0	0.31	ug/L			06/28/18 23:26	2
Carbon tetrachloride	2.0	U	2.0	0.42	ug/L			06/28/18 23:26	2
Chlorobenzene	**0.91**	**J**	2.0	0.75	ug/L			06/28/18 23:26	2
Dibromochloromethane	2.0	U	2.0	0.56	ug/L			06/28/18 23:26	2
Chloroethane	**2.2**		2.0	0.64	ug/L			06/28/18 23:26	2
Chloroform	2.0	U	2.0	0.65	ug/L			06/28/18 23:26	2
Chloromethane	2.0	U	2.0	0.29	ug/L			06/28/18 23:26	2
cis-1,2-Dichloroethene	**250**		2.0	0.44	ug/L			06/28/18 23:26	2
Cyclohexane	2.0	U	2.0	0.64	ug/L			06/28/18 23:26	2
Bromodichloromethane	2.0	U	2.0	0.69	ug/L			06/28/18 23:26	2
Dichlorodifluoromethane	2.0	U	2.0	0.24	ug/L			06/28/18 23:26	2
Ethylbenzene	2.0	U	2.0	0.60	ug/L			06/28/18 23:26	2
1,2-Dibromoethane	2.0	U	2.0	1.0	ug/L			06/28/18 23:26	2
Isopropylbenzene	2.0	U	2.0	0.67	ug/L			06/28/18 23:26	2
Methyl acetate	10	U	10	0.63	ug/L			06/28/18 23:26	2
Methyl tert-butyl ether	2.0	U	2.0	0.93	ug/L			06/28/18 23:26	2
Methylcyclohexane	2.0	U	2.0	0.52	ug/L			06/28/18 23:26	2
Methylene Chloride	2.0	U	2.0	0.63	ug/L			06/28/18 23:26	2
Tetrachloroethene	**1.1**	**J**	2.0	0.50	ug/L			06/28/18 23:26	2
Toluene	2.0	U	2.0	0.76	ug/L			06/28/18 23:26	2
trans-1,2-Dichloroethene	**0.95**	**J**	2.0	0.47	ug/L			06/28/18 23:26	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.97	ug/L			06/28/18 23:26	2
Trichloroethene	**200**		2.0	0.63	ug/L			06/28/18 23:26	2
Trichlorofluoromethane	2.0	U *	2.0	0.29	ug/L			06/28/18 23:26	2
Vinyl chloride	**63**		2.0	0.34	ug/L			06/28/18 23:26	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			06/28/18 23:26	2

Client Sample ID: 4009-29I

Date Collected: 06/14/18 10:22
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-23

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	2.0	U	2.0	0.91	ug/L			06/28/18 23:26	2
Styrene	2.0	U	2.0	0.83	ug/L			06/28/18 23:26	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*06/28/18 23:26*	*2*
4-Bromofluorobenzene	*107*		*77 - 124*		*06/28/18 23:26*	*2*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/28/18 23:26*	*2*
Dibromofluoromethane (Surr)	*110*		*72 - 131*		*06/28/18 23:26*	*2*

Client Sample ID: 4009-29D

Date Collected: 06/14/18 10:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-24

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**41**		1.0	0.24	ug/L			06/27/18 14:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.67**	**J**	1.0	0.31	ug/L			06/27/18 14:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 14:48	1
1,1-Dichloroethane	**11**		1.0	0.26	ug/L			06/27/18 14:48	1
1,1-Dichloroethene	**5.3**		1.0	0.12	ug/L			06/27/18 14:48	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 14:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 14:48	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 14:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 14:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 14:48	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 14:48	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 14:48	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 14:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 14:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 14:48	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 14:48	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 14:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 14:48	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 14:48	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 14:48	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 14:48	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 14:48	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 14:48	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 14:48	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 14:48	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 14:48	1
Chloroethane	**3.0**		1.0	0.32	ug/L			06/27/18 14:48	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 14:48	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 14:48	1
cis-1,2-Dichloroethene	**26**		1.0	0.22	ug/L			06/27/18 14:48	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 14:48	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 14:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 14:48	1

Client Sample ID: 4009-29D

Date Collected: 06/14/18 10:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-24

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 14:48	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 14:48	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 14:48	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 14:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 14:48	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 14:48	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 14:48	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 14:48	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 14:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 14:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 14:48	1
Trichloroethene	**10**		1.0	0.31	ug/L			06/27/18 14:48	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 14:48	1
Vinyl chloride	**17**		1.0	0.17	ug/L			06/27/18 14:48	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 14:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 14:48	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*06/27/18 14:48*	*1*
4-Bromofluorobenzene	*107*		*77 - 124*		*06/27/18 14:48*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 14:48*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/27/18 14:48*	*1*

Client Sample ID: 4009-30

Date Collected: 06/14/18 10:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-25

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 15:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 15:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 15:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 15:11	1
1,1-Dichloroethane	**0.61**	**J**	1.0	0.26	ug/L			06/27/18 15:11	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 15:11	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 15:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 15:11	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 15:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 15:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 15:11	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 15:11	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 15:11	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 15:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 15:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 15:11	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 15:11	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 15:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 15:11	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 15:11	1

Client Sample ID: 4009-30
Date Collected: 06/14/18 10:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-25
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.1**		1.0	0.43	ug/L			06/27/18 15:11	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 15:11	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 15:11	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 15:11	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 15:11	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 15:11	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 15:11	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 15:11	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 15:11	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 15:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 15:11	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 15:11	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 15:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 15:11	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 15:11	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 15:11	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 15:11	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 15:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 15:11	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 15:11	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 15:11	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 15:11	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 15:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 15:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 15:11	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 15:11	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 15:11	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 15:11	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 15:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 15:11	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*		*06/27/18 15:11*	*1*
4-Bromofluorobenzene	*111*		*77 - 124*		*06/27/18 15:11*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 15:11*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*06/27/18 15:11*	*1*

Client Sample ID: 4009-30A
Date Collected: 06/14/18 10:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-26
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 15:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 15:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 15:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 15:35	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 15:35	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 15:35	1

Client Sample ID: 4009-30A
Date Collected: 06/14/18 10:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-26
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 15:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 15:35	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 15:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 15:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 15:35	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 15:35	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 15:35	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 15:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 15:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 15:35	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 15:35	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 15:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 15:35	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 15:35	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 15:35	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 15:35	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 15:35	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 15:35	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 15:35	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 15:35	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 15:35	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 15:35	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 15:35	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 15:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 15:35	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 15:35	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 15:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 15:35	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 15:35	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 15:35	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 15:35	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 15:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 15:35	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 15:35	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 15:35	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 15:35	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 15:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 15:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 15:35	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 15:35	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 15:35	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 15:35	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 15:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 15:35	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*		*06/27/18 15:35*	*1*
4-Bromofluorobenzene	*106*		*77 - 124*		*06/27/18 15:35*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/27/18 15:35*	*1*

Client Sample ID: 4009-30A
Date Collected: 06/14/18 10:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-26
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*06/27/18 15:35*	*1*

Client Sample ID: 4009-11A
Date Collected: 06/14/18 11:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-27
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/28/18 23:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/28/18 23:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/28/18 23:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/28/18 23:03	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/28/18 23:03	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/28/18 23:03	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/28/18 23:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/28/18 23:03	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/28/18 23:03	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/28/18 23:03	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/28/18 23:03	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/28/18 23:03	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/28/18 23:03	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/28/18 23:03	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/28/18 23:03	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/28/18 23:03	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/28/18 23:03	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/28/18 23:03	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/28/18 23:03	1
Acetone	5.0	U	5.0	5.0	ug/L			06/28/18 23:03	1
Benzene	1.0	U	1.0	0.43	ug/L			06/28/18 23:03	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/28/18 23:03	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/28/18 23:03	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/28/18 23:03	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/28/18 23:03	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/28/18 23:03	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/28/18 23:03	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/28/18 23:03	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/28/18 23:03	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/28/18 23:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/28/18 23:03	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/28/18 23:03	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/28/18 23:03	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/28/18 23:03	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/28/18 23:03	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/28/18 23:03	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/28/18 23:03	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/28/18 23:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/28/18 23:03	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/28/18 23:03	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/28/18 23:03	1

Client Sample ID: 4009-11A
Date Collected: 06/14/18 11:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-27
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/28/18 23:03	1
Toluene	1.0	U	1.0	0.38	ug/L			06/28/18 23:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/28/18 23:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/28/18 23:03	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/28/18 23:03	1
Trichlorofluoromethane	1.0	U *	1.0	0.14	ug/L			06/28/18 23:03	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/28/18 23:03	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/28/18 23:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/28/18 23:03	1
Styrene	1.0	U	1.0	0.42	ug/L			06/28/18 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*74 - 132*		*06/28/18 23:03*	*1*
4-Bromofluorobenzene	*106*		*77 - 124*		*06/28/18 23:03*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/28/18 23:03*	*1*
Dibromofluoromethane (Surr)	*110*		*72 - 131*		*06/28/18 23:03*	*1*

Client Sample ID: DUP1
Date Collected: 06/14/18 00:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-28
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/28/18 11:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/28/18 11:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/28/18 11:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/28/18 11:04	1
1,1-Dichloroethane	**5.2**		1.0	0.26	ug/L			06/28/18 11:04	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/28/18 11:04	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/28/18 11:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/28/18 11:04	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/28/18 11:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/28/18 11:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/28/18 11:04	1
1,2-Dichloroethane	1.0	U *	1.0	0.43	ug/L			06/28/18 11:04	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/28/18 11:04	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/28/18 11:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/28/18 11:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/28/18 11:04	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/28/18 11:04	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/28/18 11:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/28/18 11:04	1
Acetone	5.0	U	5.0	5.0	ug/L			06/28/18 11:04	1
Benzene	**1.6**		1.0	0.43	ug/L			06/28/18 11:04	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/28/18 11:04	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/28/18 11:04	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/28/18 11:04	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/28/18 11:04	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/28/18 11:04	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/28/18 11:04	1

Client Sample ID: DUP1

Date Collected: 06/14/18 00:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-28
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	0.32	ug/L			06/28/18 11:04	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/28/18 11:04	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/28/18 11:04	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.22	ug/L			06/28/18 11:04	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/28/18 11:04	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/28/18 11:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/28/18 11:04	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/28/18 11:04	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/28/18 11:04	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/28/18 11:04	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/28/18 11:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/28/18 11:04	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/28/18 11:04	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/28/18 11:04	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/28/18 11:04	1
Toluene	1.0	U	1.0	0.38	ug/L			06/28/18 11:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/28/18 11:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/28/18 11:04	1
Trichloroethene	**1.7**		1.0	0.31	ug/L			06/28/18 11:04	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/28/18 11:04	1
Vinyl chloride	**2.0**		1.0	0.17	ug/L			06/28/18 11:04	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/28/18 11:04	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			06/28/18 11:04	1
Styrene	1.0	U	1.0	0.42	ug/L			06/28/18 11:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*74 - 132*		*06/28/18 11:04*	*1*
4-Bromofluorobenzene	*107*		*77 - 124*		*06/28/18 11:04*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/28/18 11:04*	*1*
Dibromofluoromethane (Surr)	*113*		*72 - 131*		*06/28/18 11:04*	*1*

Client Sample ID: DUP2

Date Collected: 06/14/18 00:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-29
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**660**		2.0	0.48	ug/L			06/27/18 22:37	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.73	ug/L			06/27/18 22:37	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**7.5**		2.0	0.62	ug/L			06/27/18 22:37	2
1,1,2-Trichloroethane	2.0	U	2.0	0.87	ug/L			06/27/18 22:37	2
1,1-Dichloroethane	**53**		2.0	0.53	ug/L			06/27/18 22:37	2
1,1-Dichloroethene	**51**		2.0	0.23	ug/L			06/27/18 22:37	2
1,2,3-Trimethylbenzene	2.0	U	2.0	0.72	ug/L			06/27/18 22:37	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.73	ug/L			06/27/18 22:37	2
1,2,4-Trimethylbenzene	2.0	U	2.0	0.75	ug/L			06/27/18 22:37	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.75	ug/L			06/27/18 22:37	2
1,2-Dichlorobenzene	2.0	U	2.0	0.86	ug/L			06/27/18 22:37	2
1,2-Dichloroethane	2.0	U	2.0	0.86	ug/L			06/27/18 22:37	2

Client Sample ID: DUP2
Date Collected: 06/14/18 00:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-29
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	2.0	U	2.0	0.71	ug/L			06/27/18 22:37	2
1,3,5-Trimethylbenzene	2.0	U *	2.0	0.65	ug/L			06/27/18 22:37	2
1,3-Dichlorobenzene	2.0	U	2.0	0.68	ug/L			06/27/18 22:37	2
1,4-Dichlorobenzene	2.0	U	2.0	1.5	ug/L			06/27/18 22:37	2
2-Butanone (MEK)	10	U	10	3.7	ug/L			06/27/18 22:37	2
2-Hexanone	10	U *	10	5.8	ug/L			06/27/18 22:37	2
4-Methyl-2-pentanone (MIBK)	10	U *	10	5.5	ug/L			06/27/18 22:37	2
Acetone	10	U	10	10	ug/L			06/27/18 22:37	2
Benzene	2.0	U	2.0	0.86	ug/L			06/27/18 22:37	2
Bromoform	2.0	U	2.0	1.1	ug/L			06/27/18 22:37	2
Bromomethane	2.0	U	2.0	2.0	ug/L			06/27/18 22:37	2
Carbon disulfide	2.0	U	2.0	0.31	ug/L			06/27/18 22:37	2
Carbon tetrachloride	2.0	U	2.0	0.42	ug/L			06/27/18 22:37	2
Chlorobenzene	**1.1**	**J**	2.0	0.75	ug/L			06/27/18 22:37	2
Dibromochloromethane	2.0	U	2.0	0.56	ug/L			06/27/18 22:37	2
Chloroethane	**2.3**		2.0	0.64	ug/L			06/27/18 22:37	2
Chloroform	2.0	U	2.0	0.65	ug/L			06/27/18 22:37	2
Chloromethane	2.0	U	2.0	0.29	ug/L			06/27/18 22:37	2
cis-1,2-Dichloroethene	**270**		2.0	0.44	ug/L			06/27/18 22:37	2
Cyclohexane	2.0	U	2.0	0.64	ug/L			06/27/18 22:37	2
Bromodichloromethane	2.0	U	2.0	0.69	ug/L			06/27/18 22:37	2
Dichlorodifluoromethane	2.0	U	2.0	0.24	ug/L			06/27/18 22:37	2
Ethylbenzene	2.0	U	2.0	0.60	ug/L			06/27/18 22:37	2
1,2-Dibromoethane	2.0	U	2.0	1.0	ug/L			06/27/18 22:37	2
Isopropylbenzene	2.0	U	2.0	0.67	ug/L			06/27/18 22:37	2
Methyl acetate	10	U	10	0.63	ug/L			06/27/18 22:37	2
Methyl tert-butyl ether	2.0	U	2.0	0.93	ug/L			06/27/18 22:37	2
Methylcyclohexane	2.0	U	2.0	0.52	ug/L			06/27/18 22:37	2
Methylene Chloride	2.0	U	2.0	0.63	ug/L			06/27/18 22:37	2
Tetrachloroethene	**1.4**	**J**	2.0	0.50	ug/L			06/27/18 22:37	2
Toluene	2.0	U *	2.0	0.76	ug/L			06/27/18 22:37	2
trans-1,2-Dichloroethene	**1.0**	**J**	2.0	0.47	ug/L			06/27/18 22:37	2
trans-1,3-Dichloropropene	2.0	U *	2.0	0.97	ug/L			06/27/18 22:37	2
Trichloroethene	**220**		2.0	0.63	ug/L			06/27/18 22:37	2
Trichlorofluoromethane	2.0	U	2.0	0.29	ug/L			06/27/18 22:37	2
Vinyl chloride	**62**		2.0	0.34	ug/L			06/27/18 22:37	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			06/27/18 22:37	2
cis-1,3-Dichloropropene	2.0	U *	2.0	0.91	ug/L			06/27/18 22:37	2
Styrene	2.0	U	2.0	0.83	ug/L			06/27/18 22:37	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*74 - 132*		*06/27/18 22:37*	*2*
4-Bromofluorobenzene	*110*		*77 - 124*		*06/27/18 22:37*	*2*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 22:37*	*2*
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*06/27/18 22:37*	*2*

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: FIELD BLANK
Date Collected: 06/14/18 08:35
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-30
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 10:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 10:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 10:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 10:29	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 10:29	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 10:29	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 10:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 10:29	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 10:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 10:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 10:29	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 10:29	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 10:29	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 10:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 10:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 10:29	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 10:29	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 10:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 10:29	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 10:29	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 10:29	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 10:29	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 10:29	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 10:29	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 10:29	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 10:29	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 10:29	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 10:29	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 10:29	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 10:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 10:29	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 10:29	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 10:29	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 10:29	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 10:29	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 10:29	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 10:29	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 10:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 10:29	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 10:29	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 10:29	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 10:29	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 10:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 10:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 10:29	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 10:29	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 10:29	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 10:29	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 10:29	1

Client Sample ID: FIELD BLANK

Lab Sample ID: 460-158637-30

Date Collected: 06/14/18 08:35

Matrix: Water

Date Received: 06/15/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 10:29	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 10:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*		*06/27/18 10:29*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*06/27/18 10:29*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 10:29*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/27/18 10:29*	*1*

Client Sample ID: 4009-26

Lab Sample ID: 460-158637-31

Date Collected: 06/14/18 12:00

Matrix: Water

Date Received: 06/15/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**280**		1.0	0.24	ug/L			06/27/18 16:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 16:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**8.4**		1.0	0.31	ug/L			06/27/18 16:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 16:21	1
1,1-Dichloroethane	**32**		1.0	0.26	ug/L			06/27/18 16:21	1
1,1-Dichloroethene	**8.7**		1.0	0.12	ug/L			06/27/18 16:21	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 16:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 16:21	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 16:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 16:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 16:21	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 16:21	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 16:21	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 16:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 16:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 16:21	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 16:21	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 16:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 16:21	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 16:21	1
Benzene	**0.53**	**J**	1.0	0.43	ug/L			06/27/18 16:21	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 16:21	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 16:21	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 16:21	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 16:21	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 16:21	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 16:21	1
Chloroethane	**2.3**		1.0	0.32	ug/L			06/27/18 16:21	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 16:21	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 16:21	1
cis-1,2-Dichloroethene	**110**		1.0	0.22	ug/L			06/27/18 16:21	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 16:21	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 16:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 16:21	1

Client Sample ID: 4009-26

Date Collected: 06/14/18 12:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-31

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 16:21	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 16:21	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 16:21	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 16:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 16:21	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 16:21	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 16:21	1
Tetrachloroethene	**1.2**		1.0	0.25	ug/L			06/27/18 16:21	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 16:21	1
trans-1,2-Dichloroethene	**0.74**	**J**	1.0	0.24	ug/L			06/27/18 16:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 16:21	1
Trichloroethene	**65**		1.0	0.31	ug/L			06/27/18 16:21	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 16:21	1
Vinyl chloride	**8.1**		1.0	0.17	ug/L			06/27/18 16:21	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 16:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 16:21	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*06/27/18 16:21*	*1*
4-Bromofluorobenzene	*103*		*77 - 124*		*06/27/18 16:21*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/27/18 16:21*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/27/18 16:21*	*1*

Client Sample ID: Well 1-2A

Date Collected: 06/14/18 09:12
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-32

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 16:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 16:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 16:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 16:45	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 16:45	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 16:45	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 16:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 16:45	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 16:45	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 16:45	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 16:45	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 16:45	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 16:45	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 16:45	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 16:45	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 16:45	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 16:45	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 16:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 16:45	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 16:45	1

Client Sample ID: Well 1-2A

Lab Sample ID: 460-158637-32

Date Collected: 06/14/18 09:12

Matrix: Water

Date Received: 06/15/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 16:45	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 16:45	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 16:45	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 16:45	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 16:45	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 16:45	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 16:45	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 16:45	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 16:45	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 16:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 16:45	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 16:45	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 16:45	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 16:45	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 16:45	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 16:45	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 16:45	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 16:45	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 16:45	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 16:45	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 16:45	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 16:45	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 16:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 16:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 16:45	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 16:45	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 16:45	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 16:45	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 16:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 16:45	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*06/27/18 16:45*	*1*
4-Bromofluorobenzene	*103*		*77 - 124*		*06/27/18 16:45*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/27/18 16:45*	*1*
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*06/27/18 16:45*	*1*

Client Sample ID: Well 1-3 PRE

Lab Sample ID: 460-158637-33

Date Collected: 06/14/18 09:10

Matrix: Water

Date Received: 06/15/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 17:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 17:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 17:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 17:08	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 17:08	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 17:08	1

Client Sample ID: Well 1-3 PRE
Date Collected: 06/14/18 09:10
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-33
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 17:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 17:08	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 17:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 17:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 17:08	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 17:08	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 17:08	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 17:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 17:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 17:08	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 17:08	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 17:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 17:08	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 17:08	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 17:08	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 17:08	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 17:08	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 17:08	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 17:08	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 17:08	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 17:08	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 17:08	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 17:08	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 17:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 17:08	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 17:08	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 17:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 17:08	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 17:08	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 17:08	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 17:08	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 17:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 17:08	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 17:08	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 17:08	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 17:08	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 17:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 17:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 17:08	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 17:08	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 17:08	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 17:08	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 17:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 17:08	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*06/27/18 17:08*	*1*
4-Bromofluorobenzene	*108*		*77 - 124*		*06/27/18 17:08*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/27/18 17:08*	*1*

Client Sample ID: Well 1-3 PRE
Date Collected: 06/14/18 09:10
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-33
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	113		72 - 131		06/27/18 17:08	1

Client Sample ID: Well 1-3 POST
Date Collected: 06/14/18 09:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-34
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 17:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 17:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 17:32	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 17:32	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 17:32	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 17:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 17:32	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 17:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 17:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 17:32	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 17:32	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 17:32	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 17:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 17:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 17:32	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 17:32	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 17:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 17:32	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 17:32	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 17:32	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 17:32	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 17:32	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 17:32	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 17:32	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 17:32	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 17:32	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 17:32	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 17:32	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 17:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 17:32	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 17:32	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 17:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 17:32	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 17:32	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 17:32	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 17:32	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 17:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 17:32	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 17:32	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 17:32	1

Client Sample ID: Well 1-3 POST

Lab Sample ID: 460-158637-34

Date Collected: 06/14/18 09:05

Matrix: Water

Date Received: 06/15/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 17:32	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 17:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 17:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 17:32	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 17:32	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 17:32	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 17:32	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 17:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 17:32	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*06/27/18 17:32*	*1*
4-Bromofluorobenzene	*106*		*77 - 124*		*06/27/18 17:32*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/27/18 17:32*	*1*
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*06/27/18 17:32*	*1*

Client Sample ID: TRIP BLANK (S)

Lab Sample ID: 460-158637-35

Date Collected: 06/14/18 12:10

Matrix: Water

Date Received: 06/15/18 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 12:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 12:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 12:50	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 12:50	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 12:50	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 12:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 12:50	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 12:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 12:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 12:50	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 12:50	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 12:50	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 12:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 12:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 12:50	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 12:50	1
2-Hexanone	5.0	U *	5.0	2.9	ug/L			06/27/18 12:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U *	5.0	2.7	ug/L			06/27/18 12:50	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 12:50	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 12:50	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 12:50	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 12:50	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 12:50	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 12:50	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 12:50	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 12:50	1

Client Sample ID: TRIP BLANK (S)
Date Collected: 06/14/18 12:10
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-35
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 12:50	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 12:50	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 12:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 12:50	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 12:50	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 12:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 12:50	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 12:50	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 12:50	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 12:50	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 12:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 12:50	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 12:50	1
Methylene Chloride	**0.34**	**J**	1.0	0.32	ug/L			06/27/18 12:50	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 12:50	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 12:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 12:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 12:50	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 12:50	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 12:50	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 12:50	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 12:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 12:50	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*06/27/18 12:50*	*1*
4-Bromofluorobenzene	*107*		*77 - 124*		*06/27/18 12:50*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/27/18 12:50*	*1*
Dibromofluoromethane (Surr)	*114*		*72 - 131*		*06/27/18 12:50*	*1*

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(74-132)	(77-124)	(80-120)	(72-131)
460-158637-1	4009-7	88	105	95	105
460-158637-2	4009-8	90	105	90	108
460-158637-3	Well 1-1	91	107	95	104
460-158637-4	4009-9	92	104	95	104
460-158637-5	4009-10	91	100	96	105
460-158637-6	4009-11	88	102	95	102
460-158637-6 MS	4009-11	85	106	91	104
460-158637-6 MSD	4009-11	84	109	91	104
460-158637-7	4009-12	92	100	94	108
460-158637-8	4009-13	88	104	97	105
460-158637-9	4009-13A	90	102	94	108
460-158637-10	4009-14	89	100	95	106
460-158637-11	4009-15	89	104	93	107
460-158637-12	4009-16	86	106	93	109
460-158637-13	4009-16A	90	106	93	107
460-158637-14	4009-18	90	109	95	108
460-158637-15	4009-19	91	109	94	110
460-158637-16	4009-21	87	110	93	108
460-158637-17	4009-22	89	108	92	109
460-158637-18	4009-27S	91	111	94	107
460-158637-19	4009-27I	91	105	92	110
460-158637-19 MS	4009-27I	83	109	93	106
460-158637-19 MSD	4009-27I	87	107	94	102
460-158637-20	4009-27D	92	107	93	111
460-158637-21	4009-28	89	105	90	109
460-158637-22	4009-29S	89	111	90	112
460-158637-23	4009-29I	92	107	94	110
460-158637-24	4009-29D	92	107	93	108
460-158637-25	4009-30	89	111	93	109
460-158637-26	4009-30A	88	106	95	111
460-158637-27	4009-11A	93	106	93	110
460-158637-28	DUP1	93	107	93	113
460-158637-29	DUP2	87	110	93	111
460-158637-30	FIELD BLANK	88	104	93	108
460-158637-31	4009-26	91	103	93	108
460-158637-32	Well 1-2A	92	103	90	111
460-158637-33	Well 1-3 PRE	92	108	91	113
460-158637-34	Well 1-3 POST	92	106	90	111
460-158637-35	TRIP BLANK (S)	91	107	91	114
LCS 460-531180/4	Lab Control Sample	88	108	93	107
LCS 460-531332/7	Lab Control Sample	86	108	96	104
LCS 460-531553/5	Lab Control Sample	87	111	91	108
LCS 460-531713/4	Lab Control Sample	88	110	93	101
LCS 460-531930/6	Lab Control Sample	91	105	93	104
LCSD 460-531180/5	Lab Control Sample Dup	90	109	94	105
LCSD 460-531713/5	Lab Control Sample Dup	87	110	93	104
LCSD 460-531930/5	Lab Control Sample Dup	92	107	94	106
MB 460-531180/9	Method Blank	85	104	93	107
MB 460-531332/8	Method Blank	89	109	91	107

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(74-132)	(77-124)	(80-120)	(72-131)
MB 460-531553/8	Method Blank	89	106	90	111
MB 460-531713/8	Method Blank	91	108	95	108
MB 460-531930/9	Method Blank	93	109	94	108

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-531180/9
Matrix: Water
Analysis Batch: 531180

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/26/18 21:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/26/18 21:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/26/18 21:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/26/18 21:53	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/26/18 21:53	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/26/18 21:53	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/26/18 21:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/26/18 21:53	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/26/18 21:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/26/18 21:53	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/26/18 21:53	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/26/18 21:53	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/26/18 21:53	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/26/18 21:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/26/18 21:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/26/18 21:53	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/26/18 21:53	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			06/26/18 21:53	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			06/26/18 21:53	1
Acetone	5.0	U	5.0	5.0	ug/L			06/26/18 21:53	1
Benzene	1.0	U	1.0	0.43	ug/L			06/26/18 21:53	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/26/18 21:53	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/26/18 21:53	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/26/18 21:53	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/26/18 21:53	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/26/18 21:53	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/26/18 21:53	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/26/18 21:53	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/26/18 21:53	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/26/18 21:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/26/18 21:53	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/26/18 21:53	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/26/18 21:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/26/18 21:53	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/26/18 21:53	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/26/18 21:53	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/26/18 21:53	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/26/18 21:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/26/18 21:53	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/26/18 21:53	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/26/18 21:53	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/26/18 21:53	1
Toluene	1.0	U	1.0	0.38	ug/L			06/26/18 21:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/26/18 21:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/26/18 21:53	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/26/18 21:53	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/26/18 21:53	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/26/18 21:53	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-531180/9
Matrix: Water
Analysis Batch: 531180

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/26/18 21:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/26/18 21:53	1
Styrene	1.0	U	1.0	0.42	ug/L			06/26/18 21:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*74 - 132*		*06/26/18 21:53*	*1*
4-Bromofluorobenzene	*104*		*77 - 124*		*06/26/18 21:53*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/26/18 21:53*	*1*
Dibromofluoromethane (Surr)	*107*		*72 - 131*		*06/26/18 21:53*	*1*

Lab Sample ID: LCS 460-531180/4
Matrix: Water
Analysis Batch: 531180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	18.2		ug/L		91	75 - 125
1,1,2,2-Tetrachloroethane	20.0	15.9		ug/L		79	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.9		ug/L		94	59 - 150
1,1,2-Trichloroethane	20.0	16.7		ug/L		84	78 - 120
1,1-Dichloroethane	20.0	17.4		ug/L		87	77 - 123
1,1-Dichloroethene	20.0	18.6		ug/L		93	74 - 123
1,2,3-Trimethylbenzene	20.0	16.8		ug/L		84	70 - 130
1,2,4-Trichlorobenzene	20.0	20.0		ug/L		100	80 - 124
1,2,4-Trimethylbenzene	20.0	17.0		ug/L		85	78 - 122
1,2-Dibromo-3-Chloropropane	20.0	15.6		ug/L		78	55 - 134
1,2-Dichlorobenzene	20.0	18.4		ug/L		92	80 - 120
1,2-Dichloroethane	20.0	16.2		ug/L		81	76 - 121
1,2-Dichloropropane	20.0	17.1		ug/L		86	77 - 123
1,3,5-Trimethylbenzene	20.0	16.9		ug/L		85	80 - 120
1,3-Dichlorobenzene	20.0	18.0		ug/L		90	80 - 120
1,4-Dichlorobenzene	20.0	18.2		ug/L		91	80 - 120
2-Butanone (MEK)	100	75.6		ug/L		76	64 - 120
2-Hexanone	100	68.2	*	ug/L		68	71 - 125
4-Methyl-2-pentanone (MIBK)	100	74.7	*	ug/L		75	78 - 124
Acetone	100	67.9		ug/L		68	39 - 150
Benzene	20.0	17.4		ug/L		87	77 - 121
Bromoform	20.0	19.6		ug/L		98	53 - 120
Bromomethane	20.0	19.4		ug/L		97	10 - 150
Carbon disulfide	20.0	18.4		ug/L		92	69 - 133
Carbon tetrachloride	20.0	18.9		ug/L		95	70 - 132
Chlorobenzene	20.0	17.9		ug/L		90	80 - 120
Dibromochloromethane	20.0	18.0		ug/L		90	73 - 120
Chloroethane	20.0	18.3		ug/L		91	52 - 150
Chloroform	20.0	18.0		ug/L		90	80 - 120
Chloromethane	20.0	17.9		ug/L		90	56 - 131
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	80 - 120
Cyclohexane	20.0	19.0		ug/L		95	56 - 150

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-531180/4
Matrix: Water
Analysis Batch: 531180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	20.0	17.3		ug/L		87	76 - 120
Dichlorodifluoromethane	20.0	16.6		ug/L		83	50 - 131
Ethylbenzene	20.0	17.8		ug/L		89	80 - 120
1,2-Dibromoethane	20.0	17.8		ug/L		89	80 - 120
Isopropylbenzene	20.0	19.0		ug/L		95	80 - 123
Methyl acetate	40.0	36.0		ug/L		90	66 - 144
Methyl tert-butyl ether	20.0	18.4		ug/L		92	79 - 122
Methylcyclohexane	20.0	18.4		ug/L		92	61 - 145
Methylene Chloride	20.0	18.8		ug/L		94	77 - 123
Tetrachloroethene	20.0	20.0		ug/L		100	78 - 122
Toluene	20.0	17.5		ug/L		88	80 - 120
trans-1,2-Dichloroethene	20.0	19.0		ug/L		95	79 - 120
trans-1,3-Dichloropropene	20.0	15.9		ug/L		80	76 - 120
Trichloroethene	20.0	17.7		ug/L		89	77 - 120
Trichlorofluoromethane	20.0	16.4		ug/L		82	71 - 143
Vinyl chloride	20.0	18.4		ug/L		92	62 - 138
cis-1,3-Dichloropropene	20.0	15.7		ug/L		79	77 - 120
Styrene	20.0	19.0		ug/L		95	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*
4-Bromofluorobenzene	*108*		*77 - 124*
Toluene-d8 (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*72 - 131*

Lab Sample ID: LCSD 460-531180/5
Matrix: Water
Analysis Batch: 531180

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	16.7		ug/L		84	75 - 125	8	30
1,1,2,2-Tetrachloroethane	20.0	16.3		ug/L		81	74 - 120	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.6		ug/L		83	59 - 150	13	30
1,1,2-Trichloroethane	20.0	16.4		ug/L		82	78 - 120	2	30
1,1-Dichloroethane	20.0	16.6		ug/L		83	77 - 123	5	30
1,1-Dichloroethene	20.0	17.0		ug/L		85	74 - 123	9	30
1,2,3-Trimethylbenzene	20.0	16.8		ug/L		84	70 - 130	0	30
1,2,4-Trichlorobenzene	20.0	20.3		ug/L		101	80 - 124	1	30
1,2,4-Trimethylbenzene	20.0	17.1		ug/L		86	78 - 122	1	30
1,2-Dibromo-3-Chloropropane	20.0	16.6		ug/L		83	55 - 134	6	30
1,2-Dichlorobenzene	20.0	18.6		ug/L		93	80 - 120	2	30
1,2-Dichloroethane	20.0	15.6		ug/L		78	76 - 121	4	30
1,2-Dichloropropane	20.0	17.2		ug/L		86	77 - 123	0	30
1,3,5-Trimethylbenzene	20.0	16.5		ug/L		82	80 - 120	3	30
1,3-Dichlorobenzene	20.0	17.8		ug/L		89	80 - 120	1	30
1,4-Dichlorobenzene	20.0	17.9		ug/L		89	80 - 120	2	30
2-Butanone (MEK)	100	75.3		ug/L		75	64 - 120	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-531180/5
Matrix: Water
Analysis Batch: 531180

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Hexanone			100	65.3	*	ug/L		65	71 - 125	4	30
4-Methyl-2-pentanone (MIBK)			100	71.1	*	ug/L		71	78 - 124	5	30
Acetone			100	69.8		ug/L		70	39 - 150	3	30
Benzene			20.0	16.2		ug/L		81	77 - 121	7	30
Bromoform			20.0	19.3		ug/L		96	53 - 120	2	30
Bromomethane			20.0	18.2		ug/L		91	10 - 150	7	30
Carbon disulfide			20.0	17.2		ug/L		86	69 - 133	7	30
Carbon tetrachloride			20.0	17.3		ug/L		86	70 - 132	9	30
Chlorobenzene			20.0	17.0		ug/L		85	80 - 120	5	30
Dibromochloromethane			20.0	17.4		ug/L		87	73 - 120	3	30
Chloroethane			20.0	17.8		ug/L		89	52 - 150	3	30
Chloroform			20.0	16.7		ug/L		84	80 - 120	7	30
Chloromethane			20.0	15.8		ug/L		79	56 - 131	13	30
cis-1,2-Dichloroethene			20.0	18.1		ug/L		90	80 - 120	6	30
Cyclohexane			20.0	17.4		ug/L		87	56 - 150	9	30
Bromodichloromethane			20.0	16.0		ug/L		80	76 - 120	8	30
Dichlorodifluoromethane			20.0	14.4		ug/L		72	50 - 131	14	30
Ethylbenzene			20.0	16.4		ug/L		82	80 - 120	8	30
1,2-Dibromoethane			20.0	16.7		ug/L		84	80 - 120	6	30
Isopropylbenzene			20.0	17.5		ug/L		88	80 - 123	8	30
Methyl acetate			40.0	36.2		ug/L		90	66 - 144	1	30
Methyl tert-butyl ether			20.0	17.9		ug/L		89	79 - 122	3	30
Methylcyclohexane			20.0	16.9		ug/L		84	61 - 145	9	30
Methylene Chloride			20.0	17.4		ug/L		87	77 - 123	8	30
Tetrachloroethene			20.0	17.8		ug/L		89	78 - 122	12	30
Toluene			20.0	16.2		ug/L		81	80 - 120	8	30
trans-1,2-Dichloroethene			20.0	17.2		ug/L		86	79 - 120	10	30
trans-1,3-Dichloropropene			20.0	15.3		ug/L		76	76 - 120	4	30
Trichloroethene			20.0	16.4		ug/L		82	77 - 120	8	30
Trichlorofluoromethane			20.0	15.4		ug/L		77	71 - 143	6	30
Vinyl chloride			20.0	16.6		ug/L		83	62 - 138	10	30
cis-1,3-Dichloropropene			20.0	15.4		ug/L		77	77 - 120	2	30
Styrene			20.0	17.5		ug/L		88	80 - 120	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*74 - 132*
4-Bromofluorobenzene	*109*		*77 - 124*
Toluene-d8 (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*72 - 131*

Lab Sample ID: MB 460-531332/8
Matrix: Water
Analysis Batch: 531332

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 10:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 10:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 10:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-531332/8
Matrix: Water
Analysis Batch: 531332

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 10:05	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 10:05	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 10:05	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 10:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 10:05	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 10:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 10:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 10:05	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 10:05	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 10:05	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 10:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 10:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 10:05	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 10:05	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			06/27/18 10:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			06/27/18 10:05	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 10:05	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 10:05	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 10:05	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 10:05	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 10:05	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 10:05	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 10:05	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 10:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 10:05	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 10:05	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 10:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 10:05	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 10:05	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 10:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 10:05	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 10:05	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 10:05	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 10:05	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 10:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 10:05	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 10:05	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 10:05	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 10:05	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 10:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 10:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 10:05	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 10:05	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 10:05	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 10:05	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 10:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 10:05	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 10:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-531332/8
Matrix: Water
Analysis Batch: 531332

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		74 - 132		06/27/18 10:05	1
4-Bromofluorobenzene	109		77 - 124		06/27/18 10:05	1
Toluene-d8 (Surr)	91		80 - 120		06/27/18 10:05	1
Dibromofluoromethane (Surr)	107		72 - 131		06/27/18 10:05	1

Lab Sample ID: LCS 460-531332/7
Matrix: Water
Analysis Batch: 531332

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	18.2		ug/L		91	75 - 125
1,1,2,2-Tetrachloroethane	20.0	16.3		ug/L		82	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.2		ug/L		101	59 - 150
1,1,2-Trichloroethane	20.0	16.7		ug/L		83	78 - 120
1,1-Dichloroethane	20.0	17.0		ug/L		85	77 - 123
1,1-Dichloroethene	20.0	18.2		ug/L		91	74 - 123
1,2,3-Trimethylbenzene	20.0	16.7		ug/L		83	70 - 130
1,2,4-Trichlorobenzene	20.0	19.6		ug/L		98	80 - 124
1,2,4-Trimethylbenzene	20.0	17.3		ug/L		86	78 - 122
1,2-Dibromo-3-Chloropropane	20.0	16.3		ug/L		82	55 - 134
1,2-Dichlorobenzene	20.0	18.4		ug/L		92	80 - 120
1,2-Dichloroethane	20.0	15.8		ug/L		79	76 - 121
1,2-Dichloropropane	20.0	17.0		ug/L		85	77 - 123
1,3,5-Trimethylbenzene	20.0	17.0		ug/L		85	80 - 120
1,3-Dichlorobenzene	20.0	17.9		ug/L		89	80 - 120
1,4-Dichlorobenzene	20.0	18.1		ug/L		90	80 - 120
2-Butanone (MEK)	100	75.7		ug/L		76	64 - 120
2-Hexanone	100	65.5	*	ug/L		66	71 - 125
4-Methyl-2-pentanone (MIBK)	100	73.7	*	ug/L		74	78 - 124
Acetone	100	73.0		ug/L		73	39 - 150
Benzene	20.0	17.0		ug/L		85	77 - 121
Bromoform	20.0	19.7		ug/L		99	53 - 120
Bromomethane	20.0	20.4		ug/L		102	10 - 150
Carbon disulfide	20.0	17.7		ug/L		88	69 - 133
Carbon tetrachloride	20.0	19.3		ug/L		97	70 - 132
Chlorobenzene	20.0	18.0		ug/L		90	80 - 120
Dibromochloromethane	20.0	17.6		ug/L		88	73 - 120
Chloroethane	20.0	19.6		ug/L		98	52 - 150
Chloroform	20.0	17.5		ug/L		88	80 - 120
Chloromethane	20.0	17.7		ug/L		88	56 - 131
cis-1,2-Dichloroethene	20.0	18.5		ug/L		93	80 - 120
Cyclohexane	20.0	20.1		ug/L		100	56 - 150
Bromodichloromethane	20.0	16.6		ug/L		83	76 - 120
Dichlorodifluoromethane	20.0	17.6		ug/L		88	50 - 131
Ethylbenzene	20.0	17.8		ug/L		89	80 - 120
1,2-Dibromoethane	20.0	17.5		ug/L		88	80 - 120
Isopropylbenzene	20.0	18.8		ug/L		94	80 - 123

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-531332/7
Matrix: Water
Analysis Batch: 531332

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	40.0	37.4		ug/L		94	66 - 144
Methyl tert-butyl ether	20.0	18.1		ug/L		91	79 - 122
Methylcyclohexane	20.0	19.6		ug/L		98	61 - 145
Methylene Chloride	20.0	18.1		ug/L		90	77 - 123
Tetrachloroethene	20.0	19.6		ug/L		98	78 - 122
Toluene	20.0	17.5		ug/L		87	80 - 120
trans-1,2-Dichloroethene	20.0	18.5		ug/L		92	79 - 120
trans-1,3-Dichloropropene	20.0	16.3		ug/L		81	76 - 120
Trichloroethene	20.0	17.3		ug/L		86	77 - 120
Trichlorofluoromethane	20.0	20.1		ug/L		100	71 - 143
Vinyl chloride	20.0	19.3		ug/L		97	62 - 138
cis-1,3-Dichloropropene	20.0	16.0		ug/L		80	77 - 120
Styrene	20.0	18.8		ug/L		94	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*74 - 132*
4-Bromofluorobenzene	*108*		*77 - 124*
Toluene-d8 (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*72 - 131*

Lab Sample ID: 460-158637-19 MS
Matrix: Water
Analysis Batch: 531332

Client Sample ID: 4009-27I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.61	J	20.0	16.6		ug/L		80	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	20.0	13.7	*	ug/L		68	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	0.42	J	20.0	18.2		ug/L		89	59 - 150
1,1,2-Trichloroethane	1.0	U	20.0	14.8	*	ug/L		74	78 - 120
1,1-Dichloroethane	1.0	U	20.0	15.3		ug/L		77	77 - 123
1,1-Dichloroethene	1.0	U	20.0	16.1		ug/L		81	74 - 123
1,2,3-Trimethylbenzene	1.0	U	20.0	14.9		ug/L		75	70 - 130
1,2,4-Trichlorobenzene	1.0	U	20.0	16.9		ug/L		84	80 - 124
1,2,4-Trimethylbenzene	1.0	U	20.0	15.0	*	ug/L		75	78 - 122
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	13.6		ug/L		68	55 - 134
1,2-Dichlorobenzene	1.0	U	20.0	16.4		ug/L		82	80 - 120
1,2-Dichloroethane	1.0	U	20.0	14.6	*	ug/L		73	76 - 121
1,2-Dichloropropane	1.0	U	20.0	15.5		ug/L		78	77 - 123
1,3,5-Trimethylbenzene	1.0	U	20.0	14.7	*	ug/L		73	80 - 120
1,3-Dichlorobenzene	1.0	U	20.0	15.9		ug/L		80	80 - 120
1,4-Dichlorobenzene	1.0	U	20.0	16.4		ug/L		82	80 - 120
2-Butanone (MEK)	5.0	U	100	76.5		ug/L		76	64 - 120
2-Hexanone	5.0	U *	100	63.8	*	ug/L		64	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U *	100	69.3	*	ug/L		69	78 - 124
Acetone	5.0	U	100	70.1		ug/L		70	39 - 150
Benzene	1.0	U	20.0	15.3		ug/L		77	77 - 121
Bromoform	1.0	U	20.0	18.1		ug/L		90	53 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-158637-19 MS
Matrix: Water
Analysis Batch: 531332

Client Sample ID: 4009-27I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	1.0	U	20.0	17.9		ug/L		89	10 - 150
Carbon disulfide	1.0	U	20.0	14.8		ug/L		74	69 - 133
Carbon tetrachloride	1.0	U	20.0	17.4		ug/L		87	70 - 132
Chlorobenzene	1.0	U	20.0	16.2		ug/L		81	80 - 120
Dibromochloromethane	1.0	U	20.0	16.0		ug/L		80	73 - 120
Chloroethane	1.0	U	20.0	17.6		ug/L		88	52 - 150
Chloroform	1.0	U	20.0	15.7	*	ug/L		78	80 - 120
Chloromethane	1.0	U	20.0	15.6		ug/L		78	56 - 131
cis-1,2-Dichloroethene	1.0	U	20.0	17.0		ug/L		85	80 - 120
Cyclohexane	1.0	U	20.0	17.6		ug/L		88	56 - 150
Bromodichloromethane	1.0	U	20.0	15.5		ug/L		78	76 - 120
Dichlorodifluoromethane	1.0	U	20.0	15.0		ug/L		75	50 - 131
Ethylbenzene	1.0	U	20.0	15.5	*	ug/L		78	80 - 120
1,2-Dibromoethane	1.0	U	20.0	15.5	*	ug/L		77	80 - 120
Isopropylbenzene	1.0	U	20.0	16.8		ug/L		84	80 - 123
Methyl acetate	5.0	U	40.0	31.7		ug/L		79	66 - 144
Methyl tert-butyl ether	1.0	U	20.0	16.2		ug/L		81	79 - 122
Methylcyclohexane	1.0	U	20.0	17.4		ug/L		87	61 - 145
Methylene Chloride	1.0	U	20.0	16.3		ug/L		82	77 - 123
Tetrachloroethene	1.0	U	20.0	17.5		ug/L		87	78 - 122
Toluene	1.0	U	20.0	15.5	*	ug/L		78	80 - 120
trans-1,2-Dichloroethene	1.0	U	20.0	16.4		ug/L		82	79 - 120
trans-1,3-Dichloropropene	1.0	U	20.0	13.9	*	ug/L		70	76 - 120
Trichloroethene	1.4		20.0	16.9		ug/L		78	77 - 120
Trichlorofluoromethane	1.0	U	20.0	17.3		ug/L		87	71 - 143
Vinyl chloride	1.0	U	20.0	16.7		ug/L		84	62 - 138
cis-1,3-Dichloropropene	1.0	U	20.0	14.2	*	ug/L		71	77 - 120
Styrene	1.0	U	20.0	16.8		ug/L		84	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*74 - 132*
4-Bromofluorobenzene	*109*		*77 - 124*
Toluene-d8 (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*72 - 131*

Lab Sample ID: 460-158637-19 MSD
Matrix: Water
Analysis Batch: 531332

Client Sample ID: 4009-27I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.61	J	20.0	17.8		ug/L		86	75 - 125	7	30
1,1,2,2-Tetrachloroethane	1.0	U	20.0	16.1		ug/L		80	74 - 120	16	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.42	J	20.0	19.3		ug/L		95	59 - 150	6	30
1,1,2-Trichloroethane	1.0	U	20.0	16.8		ug/L		84	78 - 120	13	30
1,1-Dichloroethane	1.0	U	20.0	17.0		ug/L		85	77 - 123	11	30
1,1-Dichloroethene	1.0	U	20.0	18.1		ug/L		90	74 - 123	11	30
1,2,3-Trimethylbenzene	1.0	U	20.0	17.0		ug/L		85	70 - 130	13	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-158637-19 MSD
Matrix: Water
Analysis Batch: 531332

Client Sample ID: 4009-27I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	1.0	U	20.0	19.2		ug/L		96	80 - 124	13	30
1,2,4-Trimethylbenzene	1.0	U	20.0	17.0		ug/L		85	78 - 122	13	30
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	15.2		ug/L		76	55 - 134	11	30
1,2-Dichlorobenzene	1.0	U	20.0	18.3		ug/L		91	80 - 120	11	30
1,2-Dichloroethane	1.0	U	20.0	15.8		ug/L		79	76 - 121	8	30
1,2-Dichloropropane	1.0	U	20.0	17.0		ug/L		85	77 - 123	9	30
1,3,5-Trimethylbenzene	1.0	U	20.0	17.2		ug/L		86	80 - 120	16	30
1,3-Dichlorobenzene	1.0	U	20.0	18.4		ug/L		92	80 - 120	14	30
1,4-Dichlorobenzene	1.0	U	20.0	18.4		ug/L		92	80 - 120	12	30
2-Butanone (MEK)	5.0	U	100	75.8		ug/L		76	64 - 120	1	30
2-Hexanone	5.0	U *	100	68.6	*	ug/L		69	71 - 125	7	30
4-Methyl-2-pentanone (MIBK)	5.0	U *	100	73.7	*	ug/L		74	78 - 124	6	30
Acetone	5.0	U	100	72.6		ug/L		73	39 - 150	3	30
Benzene	1.0	U	20.0	16.9		ug/L		84	77 - 121	10	30
Bromoform	1.0	U	20.0	18.9		ug/L		95	53 - 120	5	30
Bromomethane	1.0	U	20.0	19.5		ug/L		97	10 - 150	9	30
Carbon disulfide	1.0	U	20.0	16.2		ug/L		81	69 - 133	9	30
Carbon tetrachloride	1.0	U	20.0	18.9		ug/L		94	70 - 132	8	30
Chlorobenzene	1.0	U	20.0	17.7		ug/L		89	80 - 120	9	30
Dibromochloromethane	1.0	U	20.0	17.3		ug/L		86	73 - 120	8	30
Chloroethane	1.0	U	20.0	19.0		ug/L		95	52 - 150	8	30
Chloroform	1.0	U	20.0	17.7		ug/L		88	80 - 120	12	30
Chloromethane	1.0	U	20.0	16.7		ug/L		83	56 - 131	7	30
cis-1,2-Dichloroethene	1.0	U	20.0	18.7		ug/L		93	80 - 120	9	30
Cyclohexane	1.0	U	20.0	19.5		ug/L		97	56 - 150	10	30
Bromodichloromethane	1.0	U	20.0	16.9		ug/L		84	76 - 120	8	30
Dichlorodifluoromethane	1.0	U	20.0	16.9		ug/L		85	50 - 131	12	30
Ethylbenzene	1.0	U	20.0	17.0		ug/L		85	80 - 120	9	30
1,2-Dibromoethane	1.0	U	20.0	17.2		ug/L		86	80 - 120	11	30
Isopropylbenzene	1.0	U	20.0	18.1		ug/L		91	80 - 123	7	30
Methyl acetate	5.0	U	40.0	35.2		ug/L		88	66 - 144	10	30
Methyl tert-butyl ether	1.0	U	20.0	17.6		ug/L		88	79 - 122	8	30
Methylcyclohexane	1.0	U	20.0	18.9		ug/L		94	61 - 145	8	30
Methylene Chloride	1.0	U	20.0	17.9		ug/L		89	77 - 123	9	30
Tetrachloroethene	1.0	U	20.0	19.4		ug/L		97	78 - 122	10	30
Toluene	1.0	U	20.0	17.2		ug/L		86	80 - 120	10	30
trans-1,2-Dichloroethene	1.0	U	20.0	18.6		ug/L		93	79 - 120	13	30
trans-1,3-Dichloropropene	1.0	U	20.0	15.1		ug/L		76	76 - 120	8	30
Trichloroethene	1.4		20.0	18.7		ug/L		86	77 - 120	10	30
Trichlorofluoromethane	1.0	U	20.0	18.2		ug/L		91	71 - 143	5	30
Vinyl chloride	1.0	U	20.0	18.5		ug/L		92	62 - 138	10	30
cis-1,3-Dichloropropene	1.0	U	20.0	15.5		ug/L		77	77 - 120	8	30
Styrene	1.0	U	20.0	18.4		ug/L		92	80 - 120	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*74 - 132*
4-Bromofluorobenzene	*107*		*77 - 124*
Toluene-d8 (Surr)	*94*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-158637-19 MSD
Matrix: Water
Analysis Batch: 531332

Client Sample ID: 4009-27I
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*102*		*72 - 131*

Lab Sample ID: MB 460-531553/8
Matrix: Water
Analysis Batch: 531553

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/27/18 21:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/27/18 21:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/27/18 21:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 21:50	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/27/18 21:50	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/27/18 21:50	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/27/18 21:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/27/18 21:50	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/27/18 21:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/27/18 21:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/27/18 21:50	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/27/18 21:50	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/27/18 21:50	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/27/18 21:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/27/18 21:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/27/18 21:50	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/27/18 21:50	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			06/27/18 21:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			06/27/18 21:50	1
Acetone	5.0	U	5.0	5.0	ug/L			06/27/18 21:50	1
Benzene	1.0	U	1.0	0.43	ug/L			06/27/18 21:50	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/27/18 21:50	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/27/18 21:50	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/27/18 21:50	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/27/18 21:50	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/27/18 21:50	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/27/18 21:50	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/27/18 21:50	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/27/18 21:50	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/27/18 21:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/27/18 21:50	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/27/18 21:50	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/27/18 21:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/27/18 21:50	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/27/18 21:50	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/27/18 21:50	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/27/18 21:50	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/27/18 21:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/27/18 21:50	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/27/18 21:50	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/27/18 21:50	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-531553/8
Matrix: Water
Analysis Batch: 531553

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/27/18 21:50	1
Toluene	1.0	U	1.0	0.38	ug/L			06/27/18 21:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/27/18 21:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/27/18 21:50	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/27/18 21:50	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/27/18 21:50	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/27/18 21:50	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/27/18 21:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/27/18 21:50	1
Styrene	1.0	U	1.0	0.42	ug/L			06/27/18 21:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*		*06/27/18 21:50*	*1*
4-Bromofluorobenzene	*106*		*77 - 124*		*06/27/18 21:50*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/27/18 21:50*	*1*
Dibromofluoromethane (Surr)	*111*		*72 - 131*		*06/27/18 21:50*	*1*

Lab Sample ID: LCS 460-531553/5
Matrix: Water
Analysis Batch: 531553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	16.8		ug/L		84	75 - 125
1,1,2,2-Tetrachloroethane	20.0	15.2		ug/L		76	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.8		ug/L		84	59 - 150
1,1,2-Trichloroethane	20.0	15.9		ug/L		79	78 - 120
1,1-Dichloroethane	20.0	16.0		ug/L		80	77 - 123
1,1-Dichloroethene	20.0	17.2		ug/L		86	74 - 123
1,2,3-Trimethylbenzene	20.0	15.9		ug/L		80	70 - 130
1,2,4-Trichlorobenzene	20.0	19.4		ug/L		97	80 - 124
1,2,4-Trimethylbenzene	20.0	16.0		ug/L		80	78 - 122
1,2-Dibromo-3-Chloropropane	20.0	13.7		ug/L		69	55 - 134
1,2-Dichlorobenzene	20.0	17.8		ug/L		89	80 - 120
1,2-Dichloroethane	20.0	15.8		ug/L		79	76 - 121
1,2-Dichloropropane	20.0	15.9		ug/L		79	77 - 123
1,3,5-Trimethylbenzene	20.0	15.8	*	ug/L		79	80 - 120
1,3-Dichlorobenzene	20.0	17.2		ug/L		86	80 - 120
1,4-Dichlorobenzene	20.0	17.4		ug/L		87	80 - 120
2-Butanone (MEK)	100	78.5		ug/L		79	64 - 120
2-Hexanone	100	66.4	*	ug/L		66	71 - 125
4-Methyl-2-pentanone (MIBK)	100	72.0	*	ug/L		72	78 - 124
Acetone	100	70.8		ug/L		71	39 - 150
Benzene	20.0	15.5		ug/L		78	77 - 121
Bromoform	20.0	19.2		ug/L		96	53 - 120
Bromomethane	20.0	18.3		ug/L		91	10 - 150
Carbon disulfide	20.0	16.6		ug/L		83	69 - 133
Carbon tetrachloride	20.0	17.1		ug/L		85	70 - 132

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-531553/5
Matrix: Water
Analysis Batch: 531553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	20.0	17.0		ug/L		85	80 - 120
Dibromochloromethane	20.0	17.5		ug/L		87	73 - 120
Chloroethane	20.0	17.2		ug/L		86	52 - 150
Chloroform	20.0	17.1		ug/L		85	80 - 120
Chloromethane	20.0	15.6		ug/L		78	56 - 131
cis-1,2-Dichloroethene	20.0	18.3		ug/L		92	80 - 120
Cyclohexane	20.0	17.1		ug/L		86	56 - 150
Bromodichloromethane	20.0	16.2		ug/L		81	76 - 120
Dichlorodifluoromethane	20.0	15.2		ug/L		76	50 - 131
Ethylbenzene	20.0	16.1		ug/L		80	80 - 120
1,2-Dibromoethane	20.0	16.9		ug/L		84	80 - 120
Isopropylbenzene	20.0	17.3		ug/L		87	80 - 123
Methyl acetate	40.0	33.8		ug/L		85	66 - 144
Methyl tert-butyl ether	20.0	18.3		ug/L		91	79 - 122
Methylcyclohexane	20.0	16.3		ug/L		82	61 - 145
Methylene Chloride	20.0	17.7		ug/L		88	77 - 123
Tetrachloroethene	20.0	17.5		ug/L		88	78 - 122
Toluene	20.0	15.7	*	ug/L		78	80 - 120
trans-1,2-Dichloroethene	20.0	17.6		ug/L		88	79 - 120
trans-1,3-Dichloropropene	20.0	14.9	*	ug/L		74	76 - 120
Trichloroethene	20.0	16.3		ug/L		81	77 - 120
Trichlorofluoromethane	20.0	15.6		ug/L		78	71 - 143
Vinyl chloride	20.0	16.2		ug/L		81	62 - 138
cis-1,3-Dichloropropene	20.0	15.0	*	ug/L		75	77 - 120
Styrene	20.0	17.8		ug/L		89	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*74 - 132*
4-Bromofluorobenzene	*111*		*77 - 124*
Toluene-d8 (Surr)	*91*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*72 - 131*

Lab Sample ID: 460-158637-6 MS
Matrix: Water
Analysis Batch: 531553

Client Sample ID: 4009-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	68		20.0	85.9		ug/L		89	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	20.0	15.4		ug/L		77	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.2		20.0	17.6		ug/L		82	59 - 150
1,1,2-Trichloroethane	1.0	U	20.0	15.3	*	ug/L		77	78 - 120
1,1-Dichloroethane	21		20.0	35.7	*	ug/L		75	77 - 123
1,1-Dichloroethene	6.4		20.0	22.7		ug/L		82	74 - 123
1,2,3-Trimethylbenzene	1.0	U	20.0	15.7		ug/L		79	70 - 130
1,2,4-Trichlorobenzene	1.0	U	20.0	18.0		ug/L		90	80 - 124
1,2,4-Trimethylbenzene	1.0	U	20.0	16.0		ug/L		80	78 - 122
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	14.7		ug/L		73	55 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-158637-6 MS
Matrix: Water
Analysis Batch: 531553

Client Sample ID: 4009-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	1.0	U	20.0	17.7		ug/L		89	80 - 120
1,2-Dichloroethane	1.0	U	20.0	14.7	*	ug/L		74	76 - 121
1,2-Dichloropropane	1.0	U	20.0	15.9		ug/L		79	77 - 123
1,3,5-Trimethylbenzene	1.0	U	20.0	15.9	*	ug/L		79	80 - 120
1,3-Dichlorobenzene	1.0	U	20.0	16.7		ug/L		83	80 - 120
1,4-Dichlorobenzene	1.0	U	20.0	16.8		ug/L		84	80 - 120
2-Butanone (MEK)	5.0	U	100	78.4		ug/L		78	64 - 120
2-Hexanone	5.0	U *	100	66.5	*	ug/L		67	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U *	100	74.1	*	ug/L		74	78 - 124
Acetone	5.0	U	100	72.7		ug/L		73	39 - 150
Benzene	1.0	U	20.0	15.5		ug/L		78	77 - 121
Bromoform	1.0	U	20.0	17.3		ug/L		87	53 - 120
Bromomethane	1.0	U	20.0	17.2		ug/L		86	10 - 150
Carbon disulfide	1.0	U	20.0	15.0		ug/L		75	69 - 133
Carbon tetrachloride	1.0	U	20.0	17.4		ug/L		87	70 - 132
Chlorobenzene	1.0	U	20.0	16.3		ug/L		82	80 - 120
Dibromochloromethane	1.0	U	20.0	16.2		ug/L		81	73 - 120
Chloroethane	1.2		20.0	17.8		ug/L		83	52 - 150
Chloroform	1.0	U	20.0	16.6		ug/L		83	80 - 120
Chloromethane	1.0	U	20.0	14.9		ug/L		75	56 - 131
cis-1,2-Dichloroethene	20		20.0	38.3		ug/L		92	80 - 120
Cyclohexane	1.0	U	20.0	17.5		ug/L		87	56 - 150
Bromodichloromethane	1.0	U	20.0	15.8		ug/L		79	76 - 120
Dichlorodifluoromethane	1.0	U	20.0	13.4		ug/L		67	50 - 131
Ethylbenzene	1.0	U	20.0	15.9	*	ug/L		79	80 - 120
1,2-Dibromoethane	1.0	U	20.0	16.2		ug/L		81	80 - 120
Isopropylbenzene	1.0	U	20.0	17.0		ug/L		85	80 - 123
Methyl acetate	5.0	U	40.0	31.5		ug/L		79	66 - 144
Methyl tert-butyl ether	1.0	U	20.0	17.2		ug/L		86	79 - 122
Methylcyclohexane	1.0	U	20.0	16.1		ug/L		81	61 - 145
Methylene Chloride	1.0	U	20.0	17.2		ug/L		86	77 - 123
Tetrachloroethene	1.0	U	20.0	17.5		ug/L		88	78 - 122
Toluene	1.0	U	20.0	15.9	*	ug/L		79	80 - 120
trans-1,2-Dichloroethene	1.0	U	20.0	17.3		ug/L		87	79 - 120
trans-1,3-Dichloropropene	1.0	U	20.0	14.2	*	ug/L		71	76 - 120
Trichloroethene	1.1		20.0	16.9		ug/L		79	77 - 120
Trichlorofluoromethane	1.0	U	20.0	14.7		ug/L		73	71 - 143
Vinyl chloride	19		20.0	32.1		ug/L		66	62 - 138
cis-1,3-Dichloropropene	1.0	U	20.0	14.2	*	ug/L		71	77 - 120
Styrene	1.0	U	20.0	16.9		ug/L		84	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*74 - 132*
4-Bromofluorobenzene	*106*		*77 - 124*
Toluene-d8 (Surr)	*91*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*72 - 131*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-158637-6 MSD
Matrix: Water
Analysis Batch: 531553

Client Sample ID: 4009-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	68		20.0	91.2		ug/L		116	75 - 125	6	30
1,1,2,2-Tetrachloroethane	1.0	U	20.0	15.8		ug/L		79	74 - 120	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.2		20.0	18.4		ug/L		86	59 - 150	4	30
1,1,2-Trichloroethane	1.0	U	20.0	16.2		ug/L		81	78 - 120	5	30
1,1-Dichloroethane	21		20.0	37.1		ug/L		82	77 - 123	4	30
1,1-Dichloroethene	6.4		20.0	23.3		ug/L		85	74 - 123	2	30
1,2,3-Trimethylbenzene	1.0	U	20.0	16.1		ug/L		81	70 - 130	3	30
1,2,4-Trichlorobenzene	1.0	U	20.0	18.7		ug/L		93	80 - 124	3	30
1,2,4-Trimethylbenzene	1.0	U	20.0	16.0		ug/L		80	78 - 122	0	30
1,2-Dibromo-3-Chloropropane	1.0	U	20.0	13.2		ug/L		66	55 - 134	11	30
1,2-Dichlorobenzene	1.0	U	20.0	17.9		ug/L		90	80 - 120	1	30
1,2-Dichloroethane	1.0	U	20.0	15.5		ug/L		77	76 - 121	5	30
1,2-Dichloropropane	1.0	U	20.0	16.5		ug/L		83	77 - 123	4	30
1,3,5-Trimethylbenzene	1.0	U	20.0	15.8	*	ug/L		79	80 - 120	0	30
1,3-Dichlorobenzene	1.0	U	20.0	17.2		ug/L		86	80 - 120	3	30
1,4-Dichlorobenzene	1.0	U	20.0	17.6		ug/L		88	80 - 120	5	30
2-Butanone (MEK)	5.0	U	100	79.3		ug/L		79	64 - 120	1	30
2-Hexanone	5.0	U *	100	68.7	*	ug/L		69	71 - 125	3	30
4-Methyl-2-pentanone (MIBK)	5.0	U *	100	75.2	*	ug/L		75	78 - 124	2	30
Acetone	5.0	U	100	77.4		ug/L		77	39 - 150	6	30
Benzene	1.0	U	20.0	15.8		ug/L		79	77 - 121	2	30
Bromoform	1.0	U	20.0	18.7		ug/L		94	53 - 120	8	30
Bromomethane	1.0	U	20.0	18.7		ug/L		94	10 - 150	8	30
Carbon disulfide	1.0	U	20.0	15.3		ug/L		76	69 - 133	2	30
Carbon tetrachloride	1.0	U	20.0	18.0		ug/L		90	70 - 132	4	30
Chlorobenzene	1.0	U	20.0	17.2		ug/L		86	80 - 120	5	30
Dibromochloromethane	1.0	U	20.0	16.9		ug/L		85	73 - 120	5	30
Chloroethane	1.2		20.0	18.6		ug/L		87	52 - 150	5	30
Chloroform	1.0	U	20.0	17.8		ug/L		89	80 - 120	7	30
Chloromethane	1.0	U	20.0	15.4		ug/L		77	56 - 131	3	30
cis-1,2-Dichloroethene	20		20.0	40.1		ug/L		101	80 - 120	5	30
Cyclohexane	1.0	U	20.0	18.4		ug/L		92	56 - 150	5	30
Bromodichloromethane	1.0	U	20.0	16.7		ug/L		83	76 - 120	6	30
Dichlorodifluoromethane	1.0	U	20.0	15.0		ug/L		75	50 - 131	11	30
Ethylbenzene	1.0	U	20.0	16.6		ug/L		83	80 - 120	5	30
1,2-Dibromoethane	1.0	U	20.0	16.9		ug/L		85	80 - 120	4	30
Isopropylbenzene	1.0	U	20.0	17.2		ug/L		86	80 - 123	1	30
Methyl acetate	5.0	U	40.0	31.2		ug/L		78	66 - 144	1	30
Methyl tert-butyl ether	1.0	U	20.0	17.9		ug/L		90	79 - 122	4	30
Methylcyclohexane	1.0	U	20.0	16.7		ug/L		83	61 - 145	3	30
Methylene Chloride	1.0	U	20.0	17.6		ug/L		88	77 - 123	2	30
Tetrachloroethene	1.0	U	20.0	17.5		ug/L		88	78 - 122	0	30
Toluene	1.0	U	20.0	16.1		ug/L		80	80 - 120	1	30
trans-1,2-Dichloroethene	1.0	U	20.0	17.7		ug/L		89	79 - 120	2	30
trans-1,3-Dichloropropene	1.0	U	20.0	14.8	*	ug/L		74	76 - 120	4	30
Trichloroethene	1.1		20.0	17.7		ug/L		83	77 - 120	5	30
Trichlorofluoromethane	1.0	U	20.0	15.3		ug/L		77	71 - 143	4	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-158637-6 MSD
Matrix: Water
Analysis Batch: 531553

Client Sample ID: 4009-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	19		20.0	32.9		ug/L		70	62 - 138	2	30
cis-1,3-Dichloropropene	1.0	U	20.0	14.8	*	ug/L		74	77 - 120	4	30
Styrene	1.0	U	20.0	17.9		ug/L		90	80 - 120	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*74 - 132*
4-Bromofluorobenzene	*109*		*77 - 124*
Toluene-d8 (Surr)	*91*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*72 - 131*

Lab Sample ID: MB 460-531713/8
Matrix: Water
Analysis Batch: 531713

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/28/18 09:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/28/18 09:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/28/18 09:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/28/18 09:29	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/28/18 09:29	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/28/18 09:29	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/28/18 09:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/28/18 09:29	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/28/18 09:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/28/18 09:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/28/18 09:29	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/28/18 09:29	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/28/18 09:29	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/28/18 09:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/28/18 09:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/28/18 09:29	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/28/18 09:29	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			06/28/18 09:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			06/28/18 09:29	1
Acetone	5.0	U	5.0	5.0	ug/L			06/28/18 09:29	1
Benzene	1.0	U	1.0	0.43	ug/L			06/28/18 09:29	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/28/18 09:29	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/28/18 09:29	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/28/18 09:29	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/28/18 09:29	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/28/18 09:29	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/28/18 09:29	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/28/18 09:29	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/28/18 09:29	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/28/18 09:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/28/18 09:29	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/28/18 09:29	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/28/18 09:29	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-531713/8
Matrix: Water
Analysis Batch: 531713

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/28/18 09:29	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/28/18 09:29	1
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/28/18 09:29	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/28/18 09:29	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/28/18 09:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/28/18 09:29	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/28/18 09:29	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/28/18 09:29	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/28/18 09:29	1
Toluene	1.0	U	1.0	0.38	ug/L			06/28/18 09:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/28/18 09:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/28/18 09:29	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/28/18 09:29	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/28/18 09:29	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/28/18 09:29	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/28/18 09:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/28/18 09:29	1
Styrene	1.0	U	1.0	0.42	ug/L			06/28/18 09:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*06/28/18 09:29*	*1*
4-Bromofluorobenzene	*108*		*77 - 124*		*06/28/18 09:29*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/28/18 09:29*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/28/18 09:29*	*1*

Lab Sample ID: LCS 460-531713/4
Matrix: Water
Analysis Batch: 531713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	17.4		ug/L		87	75 - 125
1,1,2,2-Tetrachloroethane	20.0	15.5		ug/L		78	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.5		ug/L		97	59 - 150
1,1,2-Trichloroethane	20.0	16.2		ug/L		81	78 - 120
1,1-Dichloroethane	20.0	16.2		ug/L		81	77 - 123
1,1-Dichloroethene	20.0	18.2		ug/L		91	74 - 123
1,2,3-Trimethylbenzene	20.0	16.5		ug/L		82	70 - 130
1,2,4-Trichlorobenzene	20.0	19.5		ug/L		97	80 - 124
1,2,4-Trimethylbenzene	20.0	16.6		ug/L		83	78 - 122
1,2-Dibromo-3-Chloropropane	20.0	15.5		ug/L		78	55 - 134
1,2-Dichlorobenzene	20.0	18.1		ug/L		91	80 - 120
1,2-Dichloroethane	20.0	14.9	*	ug/L		74	76 - 121
1,2-Dichloropropane	20.0	16.2		ug/L		81	77 - 123
1,3,5-Trimethylbenzene	20.0	16.0		ug/L		80	80 - 120
1,3-Dichlorobenzene	20.0	17.6		ug/L		88	80 - 120
1,4-Dichlorobenzene	20.0	17.9		ug/L		90	80 - 120
2-Butanone (MEK)	100	74.6		ug/L		75	64 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-531713/4
Matrix: Water
Analysis Batch: 531713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	100	63.8	*	ug/L		64	71 - 125
4-Methyl-2-pentanone (MIBK)	100	68.8	*	ug/L		69	78 - 124
Acetone	100	67.4		ug/L		67	39 - 150
Benzene	20.0	16.2		ug/L		81	77 - 121
Bromoform	20.0	19.5		ug/L		97	53 - 120
Bromomethane	20.0	17.7		ug/L		88	10 - 150
Carbon disulfide	20.0	16.7		ug/L		83	69 - 133
Carbon tetrachloride	20.0	18.4		ug/L		92	70 - 132
Chlorobenzene	20.0	17.3		ug/L		86	80 - 120
Dibromochloromethane	20.0	16.7		ug/L		84	73 - 120
Chloroethane	20.0	17.2		ug/L		86	52 - 150
Chloroform	20.0	16.9		ug/L		84	80 - 120
Chloromethane	20.0	15.5		ug/L		77	56 - 131
cis-1,2-Dichloroethene	20.0	18.4		ug/L		92	80 - 120
Cyclohexane	20.0	19.2		ug/L		96	56 - 150
Bromodichloromethane	20.0	16.4		ug/L		82	76 - 120
Dichlorodifluoromethane	20.0	16.9		ug/L		85	50 - 131
Ethylbenzene	20.0	16.7		ug/L		84	80 - 120
1,2-Dibromoethane	20.0	16.8		ug/L		84	80 - 120
Isopropylbenzene	20.0	17.9		ug/L		89	80 - 123
Methyl acetate	40.0	33.4		ug/L		83	66 - 144
Methyl tert-butyl ether	20.0	17.4		ug/L		87	79 - 122
Methylcyclohexane	20.0	18.8		ug/L		94	61 - 145
Methylene Chloride	20.0	17.9		ug/L		90	77 - 123
Tetrachloroethene	20.0	18.9		ug/L		94	78 - 122
Toluene	20.0	16.3		ug/L		81	80 - 120
trans-1,2-Dichloroethene	20.0	17.6		ug/L		88	79 - 120
trans-1,3-Dichloropropene	20.0	15.4		ug/L		77	76 - 120
Trichloroethene	20.0	17.5		ug/L		88	77 - 120
Trichlorofluoromethane	20.0	17.1		ug/L		85	71 - 143
Vinyl chloride	20.0	17.2		ug/L		86	62 - 138
cis-1,3-Dichloropropene	20.0	15.3	*	ug/L		76	77 - 120
Styrene	20.0	17.7		ug/L		89	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*
4-Bromofluorobenzene	*110*		*77 - 124*
Toluene-d8 (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*72 - 131*

Lab Sample ID: LCSD 460-531713/5
Matrix: Water
Analysis Batch: 531713

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	17.2		ug/L		86	75 - 125	1	30
1,1,2,2-Tetrachloroethane	20.0	15.5		ug/L		78	74 - 120	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-531713/5
Matrix: Water
Analysis Batch: 531713

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.2		ug/L		96	59 - 150	1	30
1,1,2-Trichloroethane	20.0	15.8		ug/L		79	78 - 120	2	30
1,1-Dichloroethane	20.0	16.4		ug/L		82	77 - 123	1	30
1,1-Dichloroethene	20.0	17.9		ug/L		89	74 - 123	2	30
1,2,3-Trimethylbenzene	20.0	16.4		ug/L		82	70 - 130	0	30
1,2,4-Trichlorobenzene	20.0	18.8		ug/L		94	80 - 124	3	30
1,2,4-Trimethylbenzene	20.0	16.2		ug/L		81	78 - 122	3	30
1,2-Dibromo-3-Chloropropane	20.0	14.1		ug/L		71	55 - 134	10	30
1,2-Dichlorobenzene	20.0	17.8		ug/L		89	80 - 120	2	30
1,2-Dichloroethane	20.0	14.9	*	ug/L		75	76 - 121	0	30
1,2-Dichloropropane	20.0	16.7		ug/L		83	77 - 123	3	30
1,3,5-Trimethylbenzene	20.0	16.0		ug/L		80	80 - 120	1	30
1,3-Dichlorobenzene	20.0	17.2		ug/L		86	80 - 120	2	30
1,4-Dichlorobenzene	20.0	17.5		ug/L		87	80 - 120	3	30
2-Butanone (MEK)	100	75.5		ug/L		75	64 - 120	1	30
2-Hexanone	100	66.2	*	ug/L		66	71 - 125	4	30
4-Methyl-2-pentanone (MIBK)	100	71.2	*	ug/L		71	78 - 124	3	30
Acetone	100	70.8		ug/L		71	39 - 150	5	30
Benzene	20.0	16.4		ug/L		82	77 - 121	1	30
Bromoform	20.0	18.8		ug/L		94	53 - 120	4	30
Bromomethane	20.0	19.0		ug/L		95	10 - 150	8	30
Carbon disulfide	20.0	17.1		ug/L		85	69 - 133	2	30
Carbon tetrachloride	20.0	18.6		ug/L		93	70 - 132	1	30
Chlorobenzene	20.0	17.6		ug/L		88	80 - 120	2	30
Dibromochloromethane	20.0	17.3		ug/L		87	73 - 120	3	30
Chloroethane	20.0	18.4		ug/L		92	52 - 150	7	30
Chloroform	20.0	17.3		ug/L		86	80 - 120	2	30
Chloromethane	20.0	16.3		ug/L		81	56 - 131	5	30
cis-1,2-Dichloroethene	20.0	18.4		ug/L		92	80 - 120	0	30
Cyclohexane	20.0	19.3		ug/L		96	56 - 150	0	30
Bromodichloromethane	20.0	16.6		ug/L		83	76 - 120	1	30
Dichlorodifluoromethane	20.0	16.9		ug/L		84	50 - 131	0	30
Ethylbenzene	20.0	17.3		ug/L		86	80 - 120	3	30
1,2-Dibromoethane	20.0	16.9		ug/L		85	80 - 120	1	30
Isopropylbenzene	20.0	18.0		ug/L		90	80 - 123	0	30
Methyl acetate	40.0	33.3		ug/L		83	66 - 144	0	30
Methyl tert-butyl ether	20.0	17.2		ug/L		86	79 - 122	1	30
Methylcyclohexane	20.0	19.2		ug/L		96	61 - 145	2	30
Methylene Chloride	20.0	17.5		ug/L		88	77 - 123	2	30
Tetrachloroethene	20.0	18.8		ug/L		94	78 - 122	1	30
Toluene	20.0	16.7		ug/L		83	80 - 120	3	30
trans-1,2-Dichloroethene	20.0	18.3		ug/L		92	79 - 120	4	30
trans-1,3-Dichloropropene	20.0	15.4		ug/L		77	76 - 120	0	30
Trichloroethene	20.0	17.6		ug/L		88	77 - 120	0	30
Trichlorofluoromethane	20.0	18.6		ug/L		93	71 - 143	9	30
Vinyl chloride	20.0	17.7		ug/L		89	62 - 138	3	30
cis-1,3-Dichloropropene	20.0	15.2	*	ug/L		76	77 - 120	0	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-531713/5
Matrix: Water
Analysis Batch: 531713

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Styrene			20.0	18.2		ug/L		91	80 - 120	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*74 - 132*
4-Bromofluorobenzene	*110*		*77 - 124*
Toluene-d8 (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*72 - 131*

Lab Sample ID: MB 460-531930/9
Matrix: Water
Analysis Batch: 531930

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			06/28/18 22:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			06/28/18 22:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/28/18 22:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			06/28/18 22:39	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			06/28/18 22:39	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			06/28/18 22:39	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.36	ug/L			06/28/18 22:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			06/28/18 22:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			06/28/18 22:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			06/28/18 22:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			06/28/18 22:39	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			06/28/18 22:39	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			06/28/18 22:39	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			06/28/18 22:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			06/28/18 22:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			06/28/18 22:39	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			06/28/18 22:39	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			06/28/18 22:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			06/28/18 22:39	1
Acetone	5.0	U	5.0	5.0	ug/L			06/28/18 22:39	1
Benzene	1.0	U	1.0	0.43	ug/L			06/28/18 22:39	1
Bromoform	1.0	U	1.0	0.54	ug/L			06/28/18 22:39	1
Bromomethane	1.0	U	1.0	1.0	ug/L			06/28/18 22:39	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			06/28/18 22:39	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			06/28/18 22:39	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			06/28/18 22:39	1
Dibromochloromethane	1.0	U	1.0	0.28	ug/L			06/28/18 22:39	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/28/18 22:39	1
Chloroform	1.0	U	1.0	0.33	ug/L			06/28/18 22:39	1
Chloromethane	1.0	U	1.0	0.14	ug/L			06/28/18 22:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			06/28/18 22:39	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			06/28/18 22:39	1
Bromodichloromethane	1.0	U	1.0	0.34	ug/L			06/28/18 22:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			06/28/18 22:39	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			06/28/18 22:39	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-531930/9
Matrix: Water
Analysis Batch: 531930

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	1.0	U	1.0	0.50	ug/L			06/28/18 22:39	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			06/28/18 22:39	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			06/28/18 22:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			06/28/18 22:39	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			06/28/18 22:39	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			06/28/18 22:39	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			06/28/18 22:39	1
Toluene	1.0	U	1.0	0.38	ug/L			06/28/18 22:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			06/28/18 22:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			06/28/18 22:39	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			06/28/18 22:39	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			06/28/18 22:39	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			06/28/18 22:39	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			06/28/18 22:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			06/28/18 22:39	1
Styrene	1.0	U	1.0	0.42	ug/L			06/28/18 22:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*74 - 132*		*06/28/18 22:39*	*1*
4-Bromofluorobenzene	*109*		*77 - 124*		*06/28/18 22:39*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/28/18 22:39*	*1*
Dibromofluoromethane (Surr)	*108*		*72 - 131*		*06/28/18 22:39*	*1*

Lab Sample ID: LCS 460-531930/6
Matrix: Water
Analysis Batch: 531930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	16.6		ug/L		83	75 - 125
1,1,2,2-Tetrachloroethane	20.0	16.6		ug/L		83	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	15.5		ug/L		77	59 - 150
1,1,2-Trichloroethane	20.0	16.6		ug/L		83	78 - 120
1,1-Dichloroethane	20.0	17.0		ug/L		85	77 - 123
1,1-Dichloroethene	20.0	16.8		ug/L		84	74 - 123
1,2,3-Trimethylbenzene	20.0	17.0		ug/L		85	70 - 130
1,2,4-Trichlorobenzene	20.0	20.0		ug/L		100	80 - 124
1,2,4-Trimethylbenzene	20.0	16.7		ug/L		84	78 - 122
1,2-Dibromo-3-Chloropropane	20.0	16.4		ug/L		82	55 - 134
1,2-Dichlorobenzene	20.0	18.8		ug/L		94	80 - 120
1,2-Dichloroethane	20.0	16.7		ug/L		84	76 - 121
1,2-Dichloropropane	20.0	17.5		ug/L		87	77 - 123
1,3,5-Trimethylbenzene	20.0	16.6		ug/L		83	80 - 120
1,3-Dichlorobenzene	20.0	17.8		ug/L		89	80 - 120
1,4-Dichlorobenzene	20.0	18.4		ug/L		92	80 - 120
2-Butanone (MEK)	100	75.2		ug/L		75	64 - 120
2-Hexanone	100	66.7	*	ug/L		67	71 - 125
4-Methyl-2-pentanone (MIBK)	100	71.7	*	ug/L		72	78 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-531930/6
Matrix: Water
Analysis Batch: 531930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	75.3		ug/L		75	39 - 150
Benzene	20.0	16.5		ug/L		82	77 - 121
Bromoform	20.0	19.2		ug/L		96	53 - 120
Bromomethane	20.0	17.3		ug/L		86	10 - 150
Carbon disulfide	20.0	16.4		ug/L		82	69 - 133
Carbon tetrachloride	20.0	17.2		ug/L		86	70 - 132
Chlorobenzene	20.0	17.3		ug/L		87	80 - 120
Dibromochloromethane	20.0	17.2		ug/L		86	73 - 120
Chloroethane	20.0	17.0		ug/L		85	52 - 150
Chloroform	20.0	17.6		ug/L		88	80 - 120
Chloromethane	20.0	15.1		ug/L		76	56 - 131
cis-1,2-Dichloroethene	20.0	18.2		ug/L		91	80 - 120
Cyclohexane	20.0	16.0		ug/L		80	56 - 150
Bromodichloromethane	20.0	17.7		ug/L		88	76 - 120
Dichlorodifluoromethane	20.0	11.6		ug/L		58	50 - 131
Ethylbenzene	20.0	16.2		ug/L		81	80 - 120
1,2-Dibromoethane	20.0	17.0		ug/L		85	80 - 120
Isopropylbenzene	20.0	17.1		ug/L		86	80 - 123
Methyl acetate	40.0	37.3		ug/L		93	66 - 144
Methyl tert-butyl ether	20.0	18.5		ug/L		93	79 - 122
Methylcyclohexane	20.0	16.0		ug/L		80	61 - 145
Methylene Chloride	20.0	18.4		ug/L		92	77 - 123
Tetrachloroethene	20.0	17.1		ug/L		85	78 - 122
Toluene	20.0	16.3		ug/L		81	80 - 120
trans-1,2-Dichloroethene	20.0	17.3		ug/L		86	79 - 120
trans-1,3-Dichloropropene	20.0	16.7		ug/L		83	76 - 120
Trichloroethene	20.0	16.1		ug/L		81	77 - 120
Trichlorofluoromethane	20.0	14.0	*	ug/L		70	71 - 143
Vinyl chloride	20.0	15.5		ug/L		78	62 - 138
cis-1,3-Dichloropropene	20.0	16.3		ug/L		81	77 - 120
Styrene	20.0	18.3		ug/L		92	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*
4-Bromofluorobenzene	*105*		*77 - 124*
Toluene-d8 (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*72 - 131*

Lab Sample ID: LCSD 460-531930/5
Matrix: Water
Analysis Batch: 531930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	17.8		ug/L		89	75 - 125	7	30
1,1,2,2-Tetrachloroethane	20.0	15.4		ug/L		77	74 - 120	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.0		ug/L		90	59 - 150	15	30
1,1,2-Trichloroethane	20.0	16.4		ug/L		82	78 - 120	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-531930/5
Matrix: Water
Analysis Batch: 531930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	20.0	17.4		ug/L		87	77 - 123	2	30
1,1-Dichloroethene	20.0	18.0		ug/L		90	74 - 123	7	30
1,2,3-Trimethylbenzene	20.0	16.3		ug/L		81	70 - 130	4	30
1,2,4-Trichlorobenzene	20.0	19.8		ug/L		99	80 - 124	1	30
1,2,4-Trimethylbenzene	20.0	16.1		ug/L		81	78 - 122	4	30
1,2-Dibromo-3-Chloropropane	20.0	15.0		ug/L		75	55 - 134	9	30
1,2-Dichlorobenzene	20.0	17.4		ug/L		87	80 - 120	8	30
1,2-Dichloroethane	20.0	16.6		ug/L		83	76 - 121	1	30
1,2-Dichloropropane	20.0	17.4		ug/L		87	77 - 123	0	30
1,3,5-Trimethylbenzene	20.0	16.1		ug/L		81	80 - 120	3	30
1,3-Dichlorobenzene	20.0	17.1		ug/L		85	80 - 120	4	30
1,4-Dichlorobenzene	20.0	17.3		ug/L		86	80 - 120	6	30
2-Butanone (MEK)	100	71.7		ug/L		72	64 - 120	5	30
2-Hexanone	100	64.6	*	ug/L		65	71 - 125	3	30
4-Methyl-2-pentanone (MIBK)	100	70.2	*	ug/L		70	78 - 124	2	30
Acetone	100	64.3		ug/L		64	39 - 150	16	30
Benzene	20.0	16.9		ug/L		85	77 - 121	3	30
Bromoform	20.0	18.9		ug/L		95	53 - 120	1	30
Bromomethane	20.0	18.2		ug/L		91	10 - 150	5	30
Carbon disulfide	20.0	17.6		ug/L		88	69 - 133	7	30
Carbon tetrachloride	20.0	18.1		ug/L		90	70 - 132	5	30
Chlorobenzene	20.0	17.3		ug/L		86	80 - 120	0	30
Dibromochloromethane	20.0	17.5		ug/L		87	73 - 120	2	30
Chloroethane	20.0	18.4		ug/L		92	52 - 150	8	30
Chloroform	20.0	17.9		ug/L		89	80 - 120	2	30
Chloromethane	20.0	16.3		ug/L		81	56 - 131	7	30
cis-1,2-Dichloroethene	20.0	18.0		ug/L		90	80 - 120	1	30
Cyclohexane	20.0	18.2		ug/L		91	56 - 150	13	30
Bromodichloromethane	20.0	17.0		ug/L		85	76 - 120	4	30
Dichlorodifluoromethane	20.0	14.0		ug/L		70	50 - 131	19	30
Ethylbenzene	20.0	16.6		ug/L		83	80 - 120	3	30
1,2-Dibromoethane	20.0	16.9		ug/L		84	80 - 120	1	30
Isopropylbenzene	20.0	17.6		ug/L		88	80 - 123	3	30
Methyl acetate	40.0	37.1		ug/L		93	66 - 144	1	30
Methyl tert-butyl ether	20.0	18.7		ug/L		93	79 - 122	1	30
Methylcyclohexane	20.0	17.1		ug/L		85	61 - 145	7	30
Methylene Chloride	20.0	18.4		ug/L		92	77 - 123	0	30
Tetrachloroethene	20.0	18.3		ug/L		91	78 - 122	7	30
Toluene	20.0	16.5		ug/L		83	80 - 120	2	30
trans-1,2-Dichloroethene	20.0	18.2		ug/L		91	79 - 120	5	30
trans-1,3-Dichloropropene	20.0	16.0		ug/L		80	76 - 120	4	30
Trichloroethene	20.0	17.0		ug/L		85	77 - 120	5	30
Trichlorofluoromethane	20.0	16.2		ug/L		81	71 - 143	14	30
Vinyl chloride	20.0	17.5		ug/L		88	62 - 138	12	30
cis-1,3-Dichloropropene	20.0	15.6		ug/L		78	77 - 120	4	30
Styrene	20.0	18.2		ug/L		91	80 - 120	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-531930/5
Matrix: Water
Analysis Batch: 531930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		74 - 132
4-Bromofluorobenzene	107		77 - 124
Toluene-d8 (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	106		72 - 131

GC/MS VOA

Analysis Batch: 531180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-158637-1	4009-7	Total/NA	Water	8260C	
460-158637-3	Well 1-1	Total/NA	Water	8260C	
460-158637-4	4009-9	Total/NA	Water	8260C	
460-158637-5	4009-10	Total/NA	Water	8260C	
460-158637-6	4009-11	Total/NA	Water	8260C	
460-158637-7	4009-12	Total/NA	Water	8260C	
460-158637-8	4009-13	Total/NA	Water	8260C	
460-158637-9	4009-13A	Total/NA	Water	8260C	
460-158637-10	4009-14	Total/NA	Water	8260C	
460-158637-11	4009-15	Total/NA	Water	8260C	
460-158637-12	4009-16	Total/NA	Water	8260C	
460-158637-13	4009-16A	Total/NA	Water	8260C	
460-158637-14	4009-18	Total/NA	Water	8260C	
460-158637-15	4009-19	Total/NA	Water	8260C	
460-158637-16	4009-21	Total/NA	Water	8260C	
MB 460-531180/9	Method Blank	Total/NA	Water	8260C	
LCS 460-531180/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-531180/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 531332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-158637-2	4009-8	Total/NA	Water	8260C	
460-158637-17	4009-22	Total/NA	Water	8260C	
460-158637-18	4009-27S	Total/NA	Water	8260C	
460-158637-19	4009-27I	Total/NA	Water	8260C	
460-158637-20	4009-27D	Total/NA	Water	8260C	
460-158637-21	4009-28	Total/NA	Water	8260C	
460-158637-22	4009-29S	Total/NA	Water	8260C	
460-158637-24	4009-29D	Total/NA	Water	8260C	
460-158637-25	4009-30	Total/NA	Water	8260C	
460-158637-26	4009-30A	Total/NA	Water	8260C	
460-158637-30	FIELD BLANK	Total/NA	Water	8260C	
460-158637-31	4009-26	Total/NA	Water	8260C	
460-158637-32	Well 1-2A	Total/NA	Water	8260C	
460-158637-33	Well 1-3 PRE	Total/NA	Water	8260C	
460-158637-34	Well 1-3 POST	Total/NA	Water	8260C	
460-158637-35	TRIP BLANK (S)	Total/NA	Water	8260C	
MB 460-531332/8	Method Blank	Total/NA	Water	8260C	
LCS 460-531332/7	Lab Control Sample	Total/NA	Water	8260C	
460-158637-19 MS	4009-27I	Total/NA	Water	8260C	
460-158637-19 MSD	4009-27I	Total/NA	Water	8260C	

Analysis Batch: 531553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-158637-29	DUP2	Total/NA	Water	8260C	
MB 460-531553/8	Method Blank	Total/NA	Water	8260C	
LCS 460-531553/5	Lab Control Sample	Total/NA	Water	8260C	
460-158637-6 MS	4009-11	Total/NA	Water	8260C	
460-158637-6 MSD	4009-11	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 531713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-158637-28	DUP1	Total/NA	Water	8260C	
MB 460-531713/8	Method Blank	Total/NA	Water	8260C	
LCS 460-531713/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-531713/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 531930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-158637-23	4009-29I	Total/NA	Water	8260C	
460-158637-27	4009-11A	Total/NA	Water	8260C	
MB 460-531930/9	Method Blank	Total/NA	Water	8260C	
LCS 460-531930/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-531930/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Client Sample ID: 4009-7
Date Collected: 06/14/18 12:10
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/26/18 23:49	MZS	TAL EDI

Client Sample ID: 4009-8
Date Collected: 06/14/18 12:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	531332	06/27/18 11:16	CJM	TAL EDI

Client Sample ID: Well 1-1
Date Collected: 06/14/18 08:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 00:13	MZS	TAL EDI

Client Sample ID: 4009-9
Date Collected: 06/14/18 11:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 00:37	MZS	TAL EDI

Client Sample ID: 4009-10
Date Collected: 06/14/18 11:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 01:00	MZS	TAL EDI

Client Sample ID: 4009-11
Date Collected: 06/14/18 11:55
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 01:24	MZS	TAL EDI

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-12
Date Collected: 06/14/18 10:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 01:47	MZS	TAL EDI

Client Sample ID: 4009-13
Date Collected: 06/14/18 11:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 02:10	MZS	TAL EDI

Client Sample ID: 4009-13A
Date Collected: 06/14/18 11:20
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 02:34	MZS	TAL EDI

Client Sample ID: 4009-14
Date Collected: 06/14/18 09:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 02:58	MZS	TAL EDI

Client Sample ID: 4009-15
Date Collected: 06/14/18 09:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 03:21	MZS	TAL EDI

Client Sample ID: 4009-16
Date Collected: 06/14/18 09:40
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 03:44	MZS	TAL EDI

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-16A
Date Collected: 06/14/18 09:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 04:08	MZS	TAL EDI

Client Sample ID: 4009-18
Date Collected: 06/14/18 09:15
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 04:32	MZS	TAL EDI

Client Sample ID: 4009-19
Date Collected: 06/14/18 09:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 04:55	MZS	TAL EDI

Client Sample ID: 4009-21
Date Collected: 06/14/18 09:30
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531180	06/27/18 05:19	MZS	TAL EDI

Client Sample ID: 4009-22
Date Collected: 06/14/18 08:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 13:14	CJM	TAL EDI

Client Sample ID: 4009-27S
Date Collected: 06/14/18 10:40
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 13:37	CJM	TAL EDI

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-27I
Date Collected: 06/14/18 10:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 10:52	CJM	TAL EDI

Client Sample ID: 4009-27D
Date Collected: 06/14/18 10:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 14:01	CJM	TAL EDI

Client Sample ID: 4009-28
Date Collected: 06/14/18 08:45
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 14:24	CJM	TAL EDI

Client Sample ID: 4009-29S
Date Collected: 06/14/18 10:20
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	531332	06/27/18 17:55	CJM	TAL EDI

Client Sample ID: 4009-29I
Date Collected: 06/14/18 10:22
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	531930	06/28/18 23:26	VBP	TAL EDI

Client Sample ID: 4009-29D
Date Collected: 06/14/18 10:25
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 14:48	CJM	TAL EDI

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-30
Date Collected: 06/14/18 10:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 15:11	CJM	TAL EDI

Client Sample ID: 4009-30A
Date Collected: 06/14/18 10:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-26
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 15:35	CJM	TAL EDI

Client Sample ID: 4009-11A
Date Collected: 06/14/18 11:50
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-27
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531930	06/28/18 23:03	VBP	TAL EDI

Client Sample ID: DUP1
Date Collected: 06/14/18 00:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-28
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531713	06/28/18 11:04	CJM	TAL EDI

Client Sample ID: DUP2
Date Collected: 06/14/18 00:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-29
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	531553	06/27/18 22:37	VBP	TAL EDI

Client Sample ID: FIELD BLANK
Date Collected: 06/14/18 08:35
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 10:29	CJM	TAL EDI

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Client Sample ID: 4009-26
Date Collected: 06/14/18 12:00
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-31
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 16:21	CJM	TAL EDI

Client Sample ID: Well 1-2A
Date Collected: 06/14/18 09:12
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-32
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 16:45	CJM	TAL EDI

Client Sample ID: Well 1-3 PRE
Date Collected: 06/14/18 09:10
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-33
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 17:08	CJM	TAL EDI

Client Sample ID: Well 1-3 POST
Date Collected: 06/14/18 09:05
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-34
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 17:32	CJM	TAL EDI

Client Sample ID: TRIP BLANK (S)
Date Collected: 06/14/18 12:10
Date Received: 06/15/18 09:00

Lab Sample ID: 460-158637-35
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	531332	06/27/18 12:50	CJM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC-Standby VESTAL

TestAmerica Job ID: 460-158637-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-158637-1	4009-7	Water	06/14/18 12:10	06/15/18 09:00
460-158637-2	4009-8	Water	06/14/18 12:05	06/15/18 09:00
460-158637-3	Well 1-1	Water	06/14/18 08:30	06/15/18 09:00
460-158637-4	4009-9	Water	06/14/18 11:25	06/15/18 09:00
460-158637-5	4009-10	Water	06/14/18 11:30	06/15/18 09:00
460-158637-6	4009-11	Water	06/14/18 11:55	06/15/18 09:00
460-158637-7	4009-12	Water	06/14/18 10:15	06/15/18 09:00
460-158637-8	4009-13	Water	06/14/18 11:15	06/15/18 09:00
460-158637-9	4009-13A	Water	06/14/18 11:20	06/15/18 09:00
460-158637-10	4009-14	Water	06/14/18 09:00	06/15/18 09:00
460-158637-11	4009-15	Water	06/14/18 09:50	06/15/18 09:00
460-158637-12	4009-16	Water	06/14/18 09:40	06/15/18 09:00
460-158637-13	4009-16A	Water	06/14/18 09:45	06/15/18 09:00
460-158637-14	4009-18	Water	06/14/18 09:15	06/15/18 09:00
460-158637-15	4009-19	Water	06/14/18 09:25	06/15/18 09:00
460-158637-16	4009-21	Water	06/14/18 09:30	06/15/18 09:00
460-158637-17	4009-22	Water	06/14/18 08:50	06/15/18 09:00
460-158637-18	4009-27S	Water	06/14/18 10:40	06/15/18 09:00
460-158637-19	4009-27I	Water	06/14/18 10:45	06/15/18 09:00
460-158637-20	4009-27D	Water	06/14/18 10:50	06/15/18 09:00
460-158637-21	4009-28	Water	06/14/18 08:45	06/15/18 09:00
460-158637-22	4009-29S	Water	06/14/18 10:20	06/15/18 09:00
460-158637-23	4009-29I	Water	06/14/18 10:22	06/15/18 09:00
460-158637-24	4009-29D	Water	06/14/18 10:25	06/15/18 09:00
460-158637-25	4009-30	Water	06/14/18 10:00	06/15/18 09:00
460-158637-26	4009-30A	Water	06/14/18 10:05	06/15/18 09:00
460-158637-27	4009-11A	Water	06/14/18 11:50	06/15/18 09:00
460-158637-28	DUP1	Water	06/14/18 00:00	06/15/18 09:00
460-158637-29	DUP2	Water	06/14/18 00:00	06/15/18 09:00
460-158637-30	FIELD BLANK	Water	06/14/18 08:35	06/15/18 09:00
460-158637-31	4009-26	Water	06/14/18 12:00	06/15/18 09:00
460-158637-32	Well 1-2A	Water	06/14/18 09:12	06/15/18 09:00
460-158637-33	Well 1-3 PRE	Water	06/14/18 09:10	06/15/18 09:00
460-158637-34	Well 1-3 POST	Water	06/14/18 09:05	06/15/18 09:00
460-158637-35	TRIP BLANK (S)	Water	06/14/18 12:10	06/15/18 09:00

TestAmerica Albany
25 Kraft Road
Albany, NY 12205

480591-Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/30/2018

Client Information	Sampler: Molly Barker	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-110197-22802.1
Client Contact: Katie Bidwell	Phone: 518-344-9328	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 4
Company: ARCADIS US Inc				Job #: 158637

Address: 855 Route 146 Suite 210	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Clifton Park	TAT Requested (days): **Standard**		A - HCL; B - NaOH; - Zn Acetate; - Nitric Acid; - NaHSO4; - MeOH; - Amchlor; - Ascorbic Acid; Ice; - DI Water; - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
State, Zip: NY 12065			
Phone: 518-250-7300	PO #: **Project 00266401.0000**		
Email: katie.bidwell@arcadis.com	WO #: Contract D007618		
Project Name: NYSDEC-Standby VESTAL	Project #: **48005198**		
Site: **Town of Vestal Water Supply**	SSOW#:		Other:

460-158637 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8260 C (MOD) TCL list OLM04.2 + TMBs	Total Number of conta	Special Instructions/Note:
			Preservation Code:			A		
4009-7	6/14/18	1210	G	water		X	3	-1
4009-8	6/14/18	1205	G	water		X	3	-2
Well 1-1	6/14/18	0530	G	water		X	3	-3
4009-9	6/14/18	1125	G	water		X	3	-4
4009-10	6/14/18	1130	G	water		X	3	-5
4009-11	6/14/18	1155	G	water	X	X	9	Perform MS/MSD -6
4009-12	6/14/18	1015	G	water		X	3	-7
4009-13	6/14/18	1115	G	water		X	3	-8
4009-13A	6/14/18	1120	G	water		X	3	-9
4009-14	6/14/18	0900	G	water		X	3	-10
4009-15	6/14/18	0950	G	water		X	3	-11

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Molly K Barker	14 June 2018 1530	ARCADIS	Rob Locke	6-14-18 1520	TA
Rob Locke	6-14-18 1800	TA	via FedEx	6/15/18 0900	TAGL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: 040682, 040683

Cooler Temperature(s) °C and Other Remarks: 2.3°, 2.5°C IR11

TestAmerica Albany
25 Kraft Road
Albany, NY 12205

480501-Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/30/2018

Client Information	Sampler: Molly Barker	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-110197-22802.1
Client Contact: Katie Bidwell	Phone: 518-344-9328	E-Mail: judy.stone@testamericainc.com		Page: Page 2 of 4
Company: ARCADIS US Inc		Analysis Requested		Job #: 158039
Address: 855 Route 146 Suite 210	Due Date Requested:			Preservation Codes:
City: Clifton Park	TAT Requested (days): **Standard**			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: NY 12065				Other:
Phone: 518-250-7300	PO #: **Project 00266401.0000**			
Email: katie.bidwell@arcadis.com	WO #: Contract D007618			
Project Name: NYSDEC-Standby VESTAL	Project #: **48005198**			
Site: **Town of Vestal Water Supply**	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260 C (MOD) TCL list OLM04.2 + TICs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
4009-16	6/14/18	0940	G	water			X	3	-12
4009-16A	6/14/18	0945	G	water			X	3	-13
4009-18	6/14/18	0915	G	water			X	3	-14
4009-19	6/14/18	0925	G	water			X	3	-15
4009-21	6/14/18	0930	G	water			X	3	-16
4009-22	6/14/18	0850	G	water			X	3	-17
4009-27S	6/14/18	1040	G	water			X	3	-18
4009-27I	6/14/18	1045	G	water		X	X	9	Perform MS/MSD -19
4009-27D	6/14/18	1050	G	water			X	3	-20
4009-28	6/14/18	0845	G	water			X	3	-21
4009-29S	6/14/18	1020	G	water			X	3	-22

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Molly Barker	14 June 2018 1520	ARCADIS	Kat Loeb	6-14-18 1520	TA
Relinquished by: Kat Loeb	Date/Time: 6-14-18 1500	Company TA	Received by: via FedEx	Date/Time: 6/15/18 0900	Company TAEst
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Albany
25 Kraft Road
Albany, NY 12205

480-110197-Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/30/2018

Client Information	Sampler: Molly Barker	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-110197-22802.1
Client Contact: Katie Bidwell	Phone: 518-344-9328	E-Mail: judy.stone@testamericainc.com		Page: Page 3 of 4
Company: ARCADIS US Inc		Analysis Requested		Job #: 158637

Address: 855 Route 146 Suite 210	Due Date Requested:	
City: Clifton Park	TAT Requested (days): **Standard**	
State, Zip: NY 12065		
Phone: 518-250-7300	PO #: **Project 00266401.0000**	
Email: katie.bidwell@arcadis.com	WO #: Contract D007618	
Project Name: NYSDEC-Standby VESTAL	Project #: **48005198**	
Site: **Town of Vestal Water Supply**	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	[redacted]	8260 C (MOD) TCL list OLM04.2 + TMB's	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A		
4009-29I	6/14/18	1022	G	water			X	3	-23
4009-29D	6/14/18	1025	G	water			X	3	-24
4009-30	6/14/18	1000	G	water			X	3	-25
4009-30A	6/14/18	1005	G	water			X	3	-26
4009-11A	6/14/18	1150	G	water			X	3	-27
DUP1	6/14/18	—	G	water			X	6 2 MR	-28
DUP2	6/14/18	—	G	water			X	3	-29

Possible Hazard Identification
☐ X Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company		Date/Time:	Company
Relinquished by: Molly A Barker	14 June 2018 1520	ARCADIS	Received by: Karl Loder	6-14-18 1520	TA
Relinquished by: Karl Loder	6-14-18 1800	TA	Received by: via FedEx	6/15/18 0900	TAEL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Albany
25 Kraft Road
Albany, NY 12205

480001-Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Molly Barker	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-110197-22802.1
Client Contact: Katie Bidwell	Phone: 518-344-9328	E-Mail: judy.stone@testamericainc.com		Page: Page 4 of 4
Company: ARCADIS US Inc		**Analysis Requested**		Job #: 158687

Address: 855 Route 146 Suite 210	**Due Date Requested:**
City: Clifton Park	**TAT Requested (days):** **Standard**
State, Zip: NY 12065	
Phone: 518-250-7300	PO #: **Project 00266401.0000**
Email: katie.bidwell@arcadis.com	WO #: Contract D007618
Project Name: NYSDEC-Standby VESTAL	Project #: **48005198**
Site: **Town of Vestal Water Supply**	SSOW#:

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	[redacted]	8260 C (MOD) TCL list OLM04.2 ; TMBs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
FIELD BLANK	6/14/18	0835	G	water			X	3	-30
4009-206 (MD)	6/14/18	1200	G	water			X	3	-31
Well 1-2A	6/14/18	0912	G	water			X	3	-32
Well 1-3 PRE	6/14/18	0910	G	water			X	3	-33
Well 1-3 POST	6/14/18	0905	G	water			X	3	-34
TRIP BLANK (S)	———	———	———	water			X		-35

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [X] Disposal By Lab [ ] Archive For ________ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Molly Barker	14 June 2018 1520	ARCADIS	Karl Zerda	6-14-18 1520	TA
Karl Zerda	6-14-18 1800	TA	Fed Ex	6/15/18 0900	TAEdi

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 158637

Number of Coolers: 2 IR Gun # 11

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.3 °C	2.3 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.5 °C	2.5 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: CA Date: 6/15/18

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-158637-1

Login Number: 158637
List Number: 1
Creator: Lysy, Susan

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	040682/040683
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to job narrative for details
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	N/A	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

MICROBAC®

Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J8D0402

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Received: 04/06/2018
Reported: 04/12/2018

Analytical Testing Parameters

Client Sample ID: 1-2A Raw
Sample Matrix: Drinking Water
Lab Sample ID: J8D0402-01
Collected By: JM-Client
Collection Date: 04/06/2018 13:01

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L	Q2		04/09/18 1900	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L	Q2		04/09/18 1900	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH

CERTIFICATE OF ANALYSIS

J8D0402

Client Sample ID:	1-2A Raw		
Sample Matrix:	Drinking Water	**Collected By:**	JM-Client
Lab Sample ID:	J8D0402-01	**Collection Date:**	04/06/2018 13:01

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			04/09/18 1900	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		04/09/18 1900	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		04/09/18 1900	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1900	RJH
Surrogate: 4-Bromofluorobenzene	84.6	Limit: 70-130		% Rec			04/09/18 1900	RJH
Surrogate: 1,2-Dichlorobenzene-d4	73.4	Limit: 70-130		% Rec			04/09/18 1900	RJH

CERTIFICATE OF ANALYSIS

J8D0402

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	JM-Client
Lab Sample ID:	J8D0402-02	**Collection Date:**	04/06/2018 13:03

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L	**Q2**		04/09/18 1928	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L	**Q2**		04/09/18 1928	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH

CERTIFICATE OF ANALYSIS

J8D0402

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	JM-Client
Lab Sample ID:	J8D0402-02	**Collection Date:**	04/06/2018 13:03

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			04/09/18 1928	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		04/09/18 1928	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		04/09/18 1928	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1928	RJH
Surrogate: 4-Bromofluorobenzene	83.0	Limit: 70-130		% Rec			04/09/18 1928	RJH
Surrogate: 1,2-Dichlorobenzene-d4	71.8	Limit: 70-130		% Rec			04/09/18 1928	RJH

CERTIFICATE OF ANALYSIS

J8D0402

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	JM-Client
Lab Sample ID:	J8D0402-03	**Collection Date:**	04/06/2018 13:08

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L	**Q2**		04/09/18 1955	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L	**Q2**		04/09/18 1955	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH

CERTIFICATE OF ANALYSIS

J8D0402

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	JM-Client
Lab Sample ID:	J8D0402-03	**Collection Date:**	04/06/2018 13:08

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			04/09/18 1955	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		04/09/18 1955	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		04/09/18 1955	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 1955	RJH
Surrogate: 4-Bromofluorobenzene	85.4	Limit: 70-130		% Rec			04/09/18 1955	RJH
Surrogate: 1,2-Dichlorobenzene-d4	70.4	Limit: 70-130		% Rec			04/09/18 1955	RJH

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	JM-Client
Lab Sample ID:	J8D0402-04	**Collection Date:**	04/06/2018 13:10

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L	**Q2**		04/09/18 2022	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L	**Q2**		04/09/18 2022	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH

CERTIFICATE OF ANALYSIS

J8D0402

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	JM-Client
Lab Sample ID:	J8D0402-04	**Collection Date:**	04/06/2018 13:10

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			04/09/18 2022	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		04/09/18 2022	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		04/09/18 2022	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			04/09/18 2022	RJH
Surrogate: 4-Bromofluorobenzene	82.2	Limit: 70-130		% Rec			04/09/18 2022	RJH
Surrogate: 1,2-Dichlorobenzene-d4	71.4	Limit: 70-130		% Rec			04/09/18 2022	RJH

Microbac Laboratories, Inc., New York Division

Chain of Custody

J8D0402

TAT 7 days

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 4/6/2018
Field Route ID: NY-Route 1 Bing

Client Sample ID: 1-2A Raw
Lab Sample ID: J8D0402-01
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 4-6-18 13:21

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear vial, HCL	A
		V-40ml Clear vial, HCL	B

Client Sample ID: 1-2A Finished
Lab Sample ID: J8D0402-02
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 4-6-18 13:03

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear Vial, Ascorbic Acid, HCL	A
		V-40ml Clear Vial, Ascorbic Acid, HCL	B

Client Sample ID: 1-3 Raw
Lab Sample ID: J8D0402-03
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 4-6-18 13:08

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear vial, HCL	A
		V-40ml Clear vial, HCL	B

Client Sample ID: 1-3 Finished
Lab Sample ID: J8D0402-04
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 4-6-18 13:10

Microbac Laboratories, Inc., New York Division

Chain of Custody

J8D0402

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 4/6/2018
Field Route ID: NY-Route 1 Bing

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear Vial, Ascorbic Acid, HCL	A
		V-40ml Clear Vial, Ascorbic Acid, HCL	B

Client Sample ID: 4-2 Raw
Lab Sample ID: J8D0402-05
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 4-6-18 13:25

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear vial, HCL	A
		V-40ml Clear vial, HCL	B

Client Sample ID: 4-2 Finished
Lab Sample ID: J8D0402-06
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 4-6-18 13:27

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear Vial, Ascorbic Acid, HCL	A
		V-40ml Clear Vial, Ascorbic Acid, HCL	B

Client Sample ID: Trip Blank
Lab Sample ID: J8D0402-07
Matrix: Drinking Water
Type: Trip Blank

Sampled Date & Time: 4-5-18 16:30

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear vial, HCL	A

Microbac Laboratories, Inc., New York Division

Chain of Custody

J8D0402

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 4/6/2018
Field Route ID: NY-Route 1 Bing

Sampled/Relinquished by:	Date/Time: 4-6-18 15:10	Received by: 4/6/18 1510
Printed Name: Bethany Robinson		Printed Name: Nicole H
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:

As Received at Laboratory: On Ice: (Yes) / No Temp 4.6 °C Total Bottles: 13

Microbac Laboratories may be unable to perform a portion of the requested testing in which case we will subcontract the analysis to an appropriately accredited laboratory. By signing this document you are acknowledging that you have been informed by Microbac that testing could be subcontracted and agree with this arrangement.

Notes:

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J8E1233

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Received: 05/21/2018
Reported: 05/29/2018

Analytical Testing Parameters

Client Sample ID: 1-2A Raw
Sample Matrix: Drinking Water
Lab Sample ID: J8E1233-01
Collected By: Julian Motola-Lab
Collection Date: 05/21/2018 10:57

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L	Q2		05/23/18 0406	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	1-2A Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-01	**Collection Date:**	05/21/2018 10:57

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			05/23/18 0406	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		05/24/18 1952	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		05/23/18 0406	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0406	RJH
Surrogate: 4-Bromofluorobenzene	72.0	Limit: 70-130		% Rec			05/24/18 1952	RJH
Surrogate: 4-Bromofluorobenzene	75.0	Limit: 70-130		% Rec			05/23/18 0406	RJH
Surrogate: 1,2-Dichlorobenzene-d4	72.4	Limit: 70-130		% Rec			05/24/18 1952	RJH
Surrogate: 1,2-Dichlorobenzene-d4	74.0	Limit: 70-130		% Rec			05/23/18 0406	RJH

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-02	**Collection Date:**	05/21/2018 11:00

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L	Q2		05/23/18 0433	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-02	**Collection Date:**	05/21/2018 11:00

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			05/23/18 0433	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		05/24/18 2019	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		05/23/18 0433	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0433	RJH
Surrogate: 4-Bromofluorobenzene	73.0	Limit: 70-130		% Rec			05/24/18 2019	RJH
Surrogate: 4-Bromofluorobenzene	76.0	Limit: 70-130		% Rec			05/23/18 0433	RJH
Surrogate: 1,2-Dichlorobenzene-d4	73.6	Limit: 70-130		% Rec			05/24/18 2019	RJH
Surrogate: 1,2-Dichlorobenzene-d4	73.4	Limit: 70-130		% Rec			05/23/18 0433	RJH

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-03	**Collection Date:**	05/21/2018 10:47

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L	Q2		05/23/18 0501	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-03	**Collection Date:**	05/21/2018 10:47

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			05/23/18 0501	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		05/24/18 2046	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		05/23/18 0501	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0501	RJH
Surrogate: 4-Bromofluorobenzene	72.4	Limit: 70-130		% Rec			05/24/18 2046	RJH
Surrogate: 4-Bromofluorobenzene	73.4	Limit: 70-130		% Rec			05/23/18 0501	RJH
Surrogate: 1,2-Dichlorobenzene-d4	73.0	Limit: 70-130		% Rec			05/24/18 2046	RJH
Surrogate: 1,2-Dichlorobenzene-d4	73.8	Limit: 70-130		% Rec			05/23/18 0501	RJH

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-04	**Collection Date:**	05/21/2018 10:50

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L	Q2		05/23/18 0528	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-04	**Collection Date:**	05/21/2018 10:50

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			05/23/18 0528	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		05/24/18 2114	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		05/23/18 0528	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0528	RJH
Surrogate: 4-Bromofluorobenzene	71.0	Limit: 70-130		% Rec			05/23/18 0528	RJH
Surrogate: 4-Bromofluorobenzene	70.4	Limit: 70-130		% Rec			05/24/18 2114	RJH
Surrogate: 1,2-Dichlorobenzene-d4	71.2	Limit: 70-130		% Rec			05/23/18 0528	RJH
Surrogate: 1,2-Dichlorobenzene-d4	70.6	Limit: 70-130		% Rec			05/24/18 2114	RJH

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-07	**Collection Date:**	05/20/2018 20:00

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L	Q2		05/23/18 0649	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J8E1233

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola-Lab
Lab Sample ID:	J8E1233-07	**Collection Date:**	05/20/2018 20:00

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			05/23/18 0649	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	**Q3,Y**		05/23/18 0649	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	**Y**		05/23/18 0649	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			05/23/18 0649	RJH
Surrogate: 4-Bromofluorobenzene	74.6	Limit: 70-130		% Rec			05/23/18 0649	RJH
Surrogate: 1,2-Dichlorobenzene-d4	73.6	Limit: 70-130		% Rec			05/23/18 0649	RJH

*Results in **bold** have exceeded a limit defined for this project. Limits are provided for reference but as regulatory limits change frequently, Microbac Laboratories, Inc. advises the recipient of this report to confirm such limits and units of concentration with the appropriate Federal, state or local authorities before acting on the data.*

Definitions

MCL:	US EPA Maximum Contaminant Level
NYVOA:	New York DOH Part 5 Public Water System MCLs
Q2:	LCS recovery is above acceptance limits. Results may be bias high.
Q3:	LCS recovery is below acceptance limits. The reported value is estimated.
RL:	Reporting Limit
Y:	This analyte is not on the laboratory's current scope of accreditation.

Project Requested Certification(s)

Microbac Laboratories, Inc., New York Division
NY Lab ID No.: 10795 — New York State Department of Health

Report Comments

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included.

Reviewed and Approved By:

Renee Lantz
Customer Relationship Specialist
Reported: 05/29/2018 16:44

Microbac Laboratories, Inc., New York Division

Chain of Custody

J8E1233

TAT 7 days

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 5/8/2018
Field Route ID: NY-Route 1 Bing

Client Sample ID: 1-2A Raw
Lab Sample ID: J8E1233-01
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 5-2-18 10:57

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear vial, HCL	A
		V-40ml Clear vial, HCL	B

Client Sample ID: 1-2A Finished
Lab Sample ID: J8E1233-02
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 5-2-18 11:05

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear Vial, Ascorbic Acid, HCL	A
		V-40ml Clear Vial, Ascorbic Acid, HCL	B

Client Sample ID: 1-3 Raw
Lab Sample ID: J8E1233-03
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 5-2-18 10:47

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear vial, HCL	A
		V-40ml Clear vial, HCL	B

Client Sample ID: 1-3 Finished
Lab Sample ID: J8E1233-04
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 5-2-18 10:50

Microbac Laboratories, Inc., New York Division

Chain of Custody

J8E1233

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 5/8/2018
Field Route ID: NY-Route 1 Bing

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear Vial, Ascorbic Acid, HCL	A
		V-40ml Clear Vial, Ascorbic Acid, HCL	B

Client Sample ID: 4-2 Raw
Lab Sample ID: J8E1233-05
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 5-21-18 11:24

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear vial, HCL	A
		V-40ml Clear vial, HCL	B

Client Sample ID: 4-2 Finished
Lab Sample ID: J8E1233-06
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 5-21-18 11:27

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear Vial, Ascorbic Acid, HCL	A
		V-40ml Clear Vial, Ascorbic Acid, HCL	B

Client Sample ID: Trip Blank
Lab Sample ID: J8E1233-07
Matrix: Drinking Water
Type: Trip Blank

Sampled Date & Time: 5-20-18 20:00

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14.00 days
		Container(s)	Designator
		V-40ml Clear vial, HCL	A

Microbac Laboratories, Inc., New York Division

Chain of Custody

J8E1233

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 5/8/2018
Field Route ID: NY-Route 1 Bing

Sampled/Relinquished by:	Date/Time: 5-21-18 16:50	Received by: Amber Schmidt
Printed Name: ~~Bethany Robinson~~		Printed Name: Amber Schmidt
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:

As Received at Laboratory: On Ice: (Yes) / No Temp 5.7 °C Total Bottles: 13

Microbac Laboratories may be unable to perform a portion of the requested testing in which case we will subcontract the analysis to an appropriately accredited laboratory. By signing this document you are acknowledging that you have been informed by Microbac that testing could be subcontracted and agree with this arrangement.

Notes:

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J8F1232

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Received: 06/19/2018
Reported: 06/25/2018

Analytical Testing Parameters

Client Sample ID: 1-2A Raw
Sample Matrix: Drinking Water
Lab Sample ID: J8F1232-01
Collected By: Julian Motola
Collection Date: 06/19/2018 11:00

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	1-2A Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-01	**Collection Date:**	06/19/2018 11:00

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			06/22/18 1437	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		06/22/18 1437	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		06/22/18 1437	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1437	RJH
Surrogate: 4-Bromofluorobenzene	77.8	Limit: 70-130		% Rec			06/22/18 1437	RJH
Surrogate: 1,2-Dichlorobenzene-d4	87.4	Limit: 70-130		% Rec			06/22/18 1437	RJH

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-02	**Collection Date:**	06/19/2018 11:05

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-02	**Collection Date:**	06/19/2018 11:05

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			06/22/18 1504	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		06/22/18 1504	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		06/22/18 1504	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1504	RJH
Surrogate: 4-Bromofluorobenzene	77.0	Limit: 70-130		% Rec			06/22/18 1504	RJH
Surrogate: 1,2-Dichlorobenzene-d4	86.6	Limit: 70-130		% Rec			06/22/18 1504	RJH

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-03	**Collection Date:**	06/19/2018 11:07

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-03	**Collection Date:**	06/19/2018 11:07

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			06/22/18 1531	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		06/22/18 1531	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		06/22/18 1531	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1531	RJH
Surrogate: 4-Bromofluorobenzene	76.8	Limit: 70-130		% Rec			06/22/18 1531	RJH
Surrogate: 1,2-Dichlorobenzene-d4	84.4	Limit: 70-130		% Rec			06/22/18 1531	RJH

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-04	**Collection Date:**	06/19/2018 11:10

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-04	**Collection Date:**	06/19/2018 11:10

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			06/22/18 1558	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	Y		06/22/18 1558	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	Y		06/22/18 1558	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1558	RJH
Surrogate: 4-Bromofluorobenzene	76.6	Limit: 70-130		% Rec			06/22/18 1558	RJH
Surrogate: 1,2-Dichlorobenzene-d4	86.0	Limit: 70-130		% Rec			06/22/18 1558	RJH

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-07	**Collection Date:**	06/18/2018 16:45

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Bromobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Bromochloromethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
n-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
tert-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
sec-Butylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Carbon tetrachloride	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Chlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Chloroethane (Ethyl chloride)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
2-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
4-Chlorotoluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Dibromomethane (Methylene bromide)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,2-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,4-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,3-Dichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Dichlorodifluoromethane (Freon-12)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,1-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,2-Dichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,1-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
cis-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
trans-1,2-Dichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
2,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,2-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,3-Dichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
cis-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
trans-1,3-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,1-Dichloropropene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Ethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Hexachlorobutadiene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Isopropylbenzene (Cumene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Methyl bromide (Bromomethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Methyl tert-butyl ether (MTBE)	<0.500	10 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Methyl chloride (Chloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Methylene chloride (Dichloromethane)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Naphthalene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
n-Propylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Styrene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,1,2,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,1,1,2-Tetrachloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Tetrachloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Toluene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,2,4-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J8F1232

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Julian Motola
Lab Sample ID:	J8F1232-07	**Collection Date:**	06/18/2018 16:45

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichlorobenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,1,2-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,1,1-Trichloroethane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Trichloroethene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Trichlorofluoromethane (Freon 11)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,2,3-Trichloropropane	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,3,5-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
1,2,4-Trimethylbenzene	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Vinyl chloride	<0.500	2 NYVOA	0.500	ug/L			06/22/18 1720	RJH
m,p-Xylene	<1.00	5 NYVOA	1.00	ug/L	**Y**		06/22/18 1720	RJH
o-Xylene	<0.500	5 NYVOA	0.500	ug/L	**Y**		06/22/18 1720	RJH
Xylenes (total)	<0.500	5 NYVOA	0.500	ug/L			06/22/18 1720	RJH
Surrogate: 4-Bromofluorobenzene	75.0	Limit: 70-130		% Rec			06/22/18 1720	RJH
Surrogate: 1,2-Dichlorobenzene-d4	85.2	Limit: 70-130		% Rec			06/22/18 1720	RJH

*Results in **bold** have exceeded a limit defined for this project. Limits are provided for reference but as regulatory limits change frequently, Microbac Laboratories, Inc. advises the recipient of this report to confirm such limits and units of concentration with the appropriate Federal, state or local authorities before acting on the data.*

Definitions

MCL:	US EPA Maximum Contaminant Level
NYVOA:	New York DOH Part 5 Public Water System MCLs
RL:	Reporting Limit
Y:	This analyte is not on the laboratory's current scope of accreditation.

Project Requested Certification(s)

Microbac Laboratories, Inc., New York Division
NY Lab ID No.: 10795 — New York State Department of Health

Report Comments

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included.

Reviewed and Approved By:

Renee Lantz
Customer Relationship Specialist
Reported: 06/25/2018 12:19

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Microbac Laboratories, Inc., New York Division

Chain of Custody

J8F1232

TAT 7 days

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 6/12/2018
Field Route ID: NY-Route 1 Bing

Client Sample ID: 1-2A Raw
Lab Sample ID: J8F1232-01
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 6-19-18 11:00

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	Container(s) V-40ml Clear vial, HCL V-40ml Clear vial, HCL	14.00 days Designator A B

Client Sample ID: 1-2A Finished
Lab Sample ID: J8F1232-02
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 6-19-18 11:05

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	Container(s) V-40ml Clear Vial, Ascorbic Acid, HCL V-40ml Clear Vial, Ascorbic Acid, HCL	14.00 days Designator A B

Client Sample ID: 1-3 Raw
Lab Sample ID: J8F1232-03
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 6-19-18 11:07

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	Container(s) V-40ml Clear vial, HCL V-40ml Clear vial, HCL	14.00 days Designator A B

Client Sample ID: 1-3 Finished
Lab Sample ID: J8F1232-04
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 6-19-18 11:10

Microbac Laboratories, Inc., New York Division

Chain of Custody

J8F1232

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 6/12/2018
Field Route ID: NY-Route 1 Bing

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	Container(s) V-40ml Clear Vial, Ascorbic Acid, HCL V-40ml Clear Vial, Ascorbic Acid, HCL	14.00 days Designator A B

Client Sample ID: 4-2 Raw
Lab Sample ID: J8F1232-05
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 6-19-18 11:30

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	Container(s) V-40ml Clear vial, HCL V-40ml Clear vial, HCL	14.00 days Designator A B

Client Sample ID: 4-2 Finished
Lab Sample ID: J8F1232-06
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 6-19-18 11:33

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	Container(s) V-40ml Clear Vial, Ascorbic Acid, HCL V-40ml Clear Vial, Ascorbic Acid, HCL	14.00 days Designator A B

Client Sample ID: Trip Blank
Lab Sample ID: J8F1232-07
Matrix: Drinking Water
Type: Trip Blank

Sampled Date & Time: 6-18-18 16:45

Analysis	Method	Field Results/Comments	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	Container(s) V-40ml Clear vial, HCL	14.00 days Designator A

Microbac Laboratories, Inc., New York Division

Chain of Custody

J8F1232

Town of Vestal

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Tenatively Scheduled: 6/12/2018
Field Route ID: NY-Route 1 Bing

Sampled/Relinquished by:	Date/Time: 6-19-18 14:10	Received by:
Printed Name: ~~Bethany Robinson~~		Printed Name: Kayla Conway
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:

As Received at Laboratory: On Ice: (Yes) / No Temp 0.4 °C Total Bottles: 13

Microbac Laboratories may be unable to perform a portion of the requested testing in which case we will subcontract the analysis to an appropriately accredited laboratory. By signing this document you are acknowledging that you have been informed by Microbac that testing could be subcontracted and agree with this arrangement.

Notes:

Arcadis CE, Inc.

855 Route 146

Suite 210

Clifton Park, New York 12065

Tel 518 250 7300

Fax 518 250 7301

www.arcadis.com