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NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Division of Environmental Remediation

REMEDIAL SYSTEM OPTIMIZATION REPORT - SECOND QUARTER 2017

Vestal Water Supply Site

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

January 2018

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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 2017 through June 2017 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 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. In addition to the above field activities, groundwater samples collected in June 2017 were analyzed for 1,4-dioxane and polyfluoroalkyl substances (PFAS) per the instructions of the NYSDEC project manager.

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 2017 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.

During the 2nd quarter sampling event, two groundwater collection methods were used. Groundwater samples were collected using passive diffusion bags (PDBs) in accordance with the RSO Work Plan and were submitted for analysis of TCL VOCs by USEPA Method 8260. Samples were also collected using low-flow groundwater sampling procedures to facilitate the collection of samples to be analyzed for 1,4-dioxane and PFAS which cannot be collected using passive diffusion bags. The low-flow samples were also analyzed for VOCs to compare the passive diffusion bag VOC results. All samples were submitted to TestAmerica-Buffalo following chain-of-custody sample handling procedures. The additional TCL VOCs were collected to assist in the ERT source area and the elevated benzene as mentioned above. During the 2nd quarter sampling event, the PDBs retrieved from wells 4009-16, 4009-21, and 4009-30 were noted to have been compromised (small hole in the bag). The cause of the holes is not known, but it is surmised that scaling on the sides of the well may cause the holes when the bags are either lowered into, or retrieved from, the wells. Since there was still sufficient sample volume in the PDB upon retrieval, the samples from these wells were still submitted for analysis, but the analytical results for these samples are flagged on the tables and figures. These wells remain on the sampling list and were sampled during the

quarterly event in October 2017 without incident. 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

Groundwater levels were measured on June 6, 2017 using an oil-water interface probe. 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. LNAPL has previously been identified in one or more of the ERT wells, due to inclement weather during the sampling event, only a few of the ERT wells were gauged during this event. The ERT wells will continue to be monitored during the next quarter.

The June 6, 2017 potentiometric maps (Figures 2-2, 2-3, and 2-4) provide groundwater flow information for the shallow, intermediate, and deep groundwater monitoring zones during the Well 1-1A treatment plant shutdown period.

2.1.1.1 June 2017 Potentiometric Maps (June 6, 2017)

As shown on Figures 2-2 and 2-3, the direction of groundwater flow in the shallow and intermediate groundwater monitoring zones is generally west to northwest. Figure 2-4 shows that the direction of groundwater flow in the deep groundwater monitoring zone between the Well 1-1A treatment facility and the Town of Vestal, Wells 1-2A and 1-3 is generally north to northeast, toward the Susquehanna River. The groundwater flow direction in the shallow, intermediate, and deep monitoring zones are generally consistent with the previous groundwater flow assessments for the respective monitoring zones.

2.1.2 June 2017 Groundwater Sampling

Groundwater samples were collected between June 20, and June 28, 2017. The PBDs that were deployed on June 6, 2017 were retrieved on June 20, prior to the low-flow sampling. With the exception of Well 1-1, all other quarterly monitoring wells were sampled using both methods PDB and low-flow sampling procedures (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 but was not sampled using the low-flow groundwater sampling procedures. Extraction Well 1-1A was sampled during the baseline event, but since the shutdown of the Well-1A treatment facility a sample is not able to be collected from this well.

2.1.2.1 June 2017 Groundwater Sampling Results (VOCs)

Groundwater results from the June 2017 groundwater sampling event are provided in Table 2-3. The VOCs measured at the highest concentrations were benzene, chloroethane, 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). Total VOC concentrations measured at the shallow, intermediate, and deep groundwater monitoring zones, during the June groundwater sampling event are presented on Figures 2-5, 2-6, 2-7, and 2-8, respectively.

As shown in Figure 2-5 and Table 2-3, with the exception of acetone, which is a common laboratory contaminant, VOCs were detected in the following two wells that are screened in the shallow groundwater zone; 4009-7 (48 µg/L) and 4009-9 (10 µg/L). In the sample collected from monitoring well 4009-9, cis-1,2-DCE was the only VOC detected at a concentration exceeding its respective NYSDEC Class GA Groundwater Standard. All other VOCs analyzed were non-detect in monitoring well 4009-9. In the sample collected from monitoring well 4009-7, 1,1-DCE and 1,1-DCA were detected at low estimated concentrations and TCE at a concentration lower than its respective NYSDEC Class GA Groundwater Standard. The remaining VOCs detected in the 4009-7 sample include cis-1,2-DCE and VC at concentrations greater than their respective standards. VOCs were not detected in the shallow groundwater zone monitoring wells 4009-10, 4009-11A, 4009-13A, 4009-16A, and 4009-30A during the June 2017 sampling event.

As shown on Figure 2-6 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 VOC concentrations in groundwater samples collected during the June 2017 sampling event were from well 4009-29I. The VOC concentrations in the intermediate groundwater zone ranged from 2.10 µg/L at monitoring well 4009-27I to the maximum concentration of total VOCs in groundwater sample collected from 4009-29I (2,346 µg/L).

The following eleven 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, 4009-22, 4009-28, 4009-29D, 4009-30 and Well 1-1 (Figure 2-7 and Table 2-3). Benzene (discussed below) was the only VOC detected in four of the eleven monitoring wells listed above at concentrations exceeding the NYSDEC Class GA Groundwater Standard of 1.0 µg/L ranging from 1.1 µg/L (4009-22) to 25 µg/L (4009-21). The total VOCs measured in the remaining eight deep monitoring wells is as follows; 4009-11 (318 µg/L), 4009-12 (106.4 µg/L), 4009-22 (1.98 µg/L), 4009-28 (4.0 µg/L), 4009-29D (69.5 µg/L), 4009-30 (1.89 µg/L) and Well 1-1 (584 µg/L).

Figure 2-8 shows the plume under the revised sample list which now includes three monitoring wells closer to the ERT source (4009-8, 4009-7, and 4009-26) extending the plume farther to the south and changing the shape of the plume from the 2015-2016 sampling events. As shown on Figure 2-8, the highest groundwater concentrations were detected in the 4009-29 well cluster. The area of highest concentrations extends northwest to Well 1-1, southwest toward the 4009-27 cluster and northeast toward 4009-11. Despite the high total VOC concentrations detected in the newly sampled wells, none of the three contained detections of benzene. Based on the horizontal and vertical distribution of VOCs, it appears that the long-term pumping at extraction Wells 1-1 and replacement Well 1-1A has caused the plume to be drawn from the water table in the vicinity of the source area, to greater than 100 feet bgs approximately 2,000 feet to the west.

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 2017 sampling event are generally consistent with the range of results reported during the last two years with the exception of three wells: 4009-11, 4009-12, and 4009-29S. VOC concentrations in 4009-11 and 4009-12 continue to fluctuate and 1,1,1-TCA has shown a slight decrease over time in monitoring well 4009-29S.

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. The concentration of VOCs in monitoring wells 4009-16A, 4009-18, 4009-19, and 4009-30A were non-detect. The PDBs in monitoring wells 4009-16, 4009-21, and 4009-30 were compromised, but all have shown consistent VOC exceedances including benzene in recent past results. 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 two years in the samples from monitoring wells 4009-12, 4009-14, 4009-15, 4009-16, 4009-21 and 4009-29I. Benzene was not detected at concentrations greater than the NYSDEC Class GA standard in the samples collected from the shallow and intermediate zones during the June 2017 sampling event. Benzene concentrations in the samples collected from deep monitoring wells 4009-12 (2.80 µg/L), 4009-14 (9.2 µg/L), 4009-15 (12 µg/L), 4009-16 (18 µg/L), 4009-21 (25 µg/L), 4009-22 (1.10 µg/L), 4009-28 (1.80 µg/L) and 4009-30 (1.10 µg/L), exceeded the NYSDEC Class GA Groundwater Standard of 1.0 µg/L for benzene during the June 2017 monitoring event (Figures 2-9 through 2-12). 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 in the samples from monitoring wells 4009-7, 4009-8, or 4009-26 during the June 2017 monitoring event. Benzene concentrations will continue to be monitored during the next quarter.

2.1.2.2 June 2017 Groundwater Sampling Results (PFAS and 1,4-dioxane)

At the direction of the NYSDEC, groundwater samples collected in June 2017 were also analyzed for 1,4-dioxane and PFAS. A guidance value/standard has not been established for 1,4-dioxane and concentrations ranged from non-detect (0.4 U µg/L) to 200 µg/L, though the majority of 1,4-dioxane concentrations were less than 5.0 µg/L. The United States Environmental Protection Agency (USEPA) Health Advisory Limit for PFAS in drinking water is 70 nanograms per liter (ng/L). During the June 2017 sampling event there were no detections of PFAS at concentrations greater than 70 ng/L in the shallow, intermediate, or deep groundwater monitoring wells. Five locations were non-detect (2.0 U ng/L) for all analyzed PFAS and the remaining 22 locations ranged in concentrations from non-detect to 13 ng/L. Groundwater results from the June 2017 groundwater sampling event are provided in Table 2-4.

2.1.3 VOC results using Low-Flow Sampling Procedures

In addition to analyzing the low-flow groundwater samples for PFAS and 1,4-dioxane samples the low flow samples were also analyzed for TCL VOCs for comparison to the PDB results. The PDB VOC data were generally comparable. Of the 27 monitoring wells sampled, only five had inconsistent total VOC concentrations including 4009-8, 4009-11, 4009-12, 4009-16, and 4009-21. In monitoring well 4009-8, 1,1,1-TCA concentrations were greater in the low-flow sample. There were several VOCs in the PDB sample 4009-11 that were greater in concentration including 1,1,1-TCA, 1,1-DCA, 1,1-DCE, cis 1,2-DCE, and VC. The concentration of benzene was greater in the low-flow sample for 4009-11. 1,1,1-TCA, 1,1-DCA, 1,1-DCE, cis 1,2-DCE, and TCE were all reported at a greater concentration in the low-flow sample for 4009-12. Benzene was the only VOC that was reported at a greater concentration in the low-flow

sample for 4009-16 and the PDB sample for 4009-21. As noted above the PDBs for 4009-16 and 4009-21 were compromised. Analytical results showing results for both sampling methods are on Table 2-5. The low-flow purge logs are provided in Appendix A.

2.1.4 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 4, 2017, May 19, 2017, and June 20, 2017. Pre-treatment groundwater samples were also collected by Arcadis from the Town of Vestal water supply wells 1-2A and 1-3 on April 26, 2017, May 24, 2017, and June 21, 2017. 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. Samples were also collected on June 21, 2017 for 1,4-dioxane and PFAS (Table 2-4).

VOCs associated with contamination from the source area were not detected in any of the pre-treatment effluent samples collected from the Town of Vestal water supply wells 1-2A and 1-3 during this reporting period. Similar to the monitoring well data, there were no exceedances for PFAS concentrations and only a slight detection of 1,4 dioxane in Well 1-2A (Table 2-4). A summary of the monthly analytical data is provided in Table 2-6. Laboratory analytical reporting forms are provided in Appendix B.

3 RECOMMENDATIONS

Town of Vestal Wells 1-2A and 1-3 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 post shutdown sampling at Town of Vestal Wells 1-2A and 1-3.
- Quarterly groundwater sampling (September 2017).

TABLES

Table 2-1 Summary of the Groundwater Monitoring Locatons
Remedial Site Optimization Report /Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

WELL I.D.	2017 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 2017
Vestal Water Supply Site
Site Number 7-04-009A

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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)
4009-1	831.98		7.43	NP	824.55	7.15	NP	824.83	7.26	NP	824.72	7.75	NP	824.23	7.80	NP	824.18
4009-2	827.78		18.16	NP	809.62	17.96	NP	809.82	17.90	NP	809.88	19.77	NP	808.01	20.22	NP	807.56
4009-3	823.47		16.92	NP	806.55	14.52	NP	808.95	15.10	NP	808.37	17.94	NP	805.53	17.23	NP	806.24
4009-4	822.22		11.87	NP	810.35	10.64	NP	811.58	10.80	NP	811.42	13.87	NP	808.35	13.65	NP	808.57
4009-5	824.36		18.47	NP	805.89	16.23	NP	808.13	17.70	NP	806.66	21.94	NP	802.42	18.85	NP	805.51
4009-6	827.73		20.88	NP	806.85	19.38	NP	808.35	19.50	NP	808.23	21.80	NP	805.93	21.73	NP	806.00
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
4009-12A	823.80		20.21	NP	803.59	16.60	NP	807.20	17.98	NP	805.82	21.35	NP	802.45	20.05	NP	803.75
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
4009-17	820.53		26.12	NP	794.41	12.95	NP	807.58	14.52	NP	806.01	17.66	NP	802.87	17.18	NP	803.35
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
4009-20	822.90		18.45	NP	804.45	15.60	NP	807.30	17.82	NP	805.08	20.25	NP	802.65	18.69	NP	804.21
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
4009-23S	824.48		16.65	NP	807.83	15.48	NP	809.00	14.88	NP	809.60	17.74	NP	806.74	18.33	NP	806.15
4009-23D	824.39		18.93	NP	805.46	16.37	NP	808.02	17.15	NP	807.24	20.50	NP	803.89	19.23	NP	805.16
4009-24	822.32		15.52	NP	806.80	13.38	NP	808.94	13.99	NP	808.33	16.94	NP	805.38	16.15	NP	806.17
4009-25S	823.61		14.77	NP	808.84	13.84	NP	809.77	13.95	NP	809.66	15.87	NP	807.74	16.00	NP	807.61
4009-25D	823.57		14.98	NP	808.59	13.70	NP	809.87	13.78	NP	809.79	15.85	NP	807.72	16.00	NP	807.57
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
WELL 1-1	832.36		29.09	NP	803.27	25.23	NP	807.13	25.50	NP	806.86	30.00	NP	802.36	28.33	NP	804.03
WELL 1-1A	831.13		24.93	NP	806.20	24.13	NP	807.00	26.72	NP	804.41	23.03	NP	808.10	27.10	NP	804.03
ERT-1S	824.01		12.65	11.72	810.57	11.83	10.88	811.37	11.53	10.62	811.71	13.96	12.95	809.19	14.96	14.02	808.25
ERT-1I	824.03		13.45	NP	810.58	12.43	NP	811.60	12.42	NP	811.61	15.17	NP	808.86	15.23	NP	808.80
ERT-1D	823.88		13.50	13.49	810.38	12.50	NP	811.38	12.42	NP	811.46	15.29	NP	808.59	15.18	NP	808.70
ERT-2S	824.67	*	14.19	NP	810.48	13.72	NP	810.95	13.00	NP	811.67	15.66	NP	809.01	15.81	NP	808.86
ERT-2I	824.54	*	14.07	NP	810.47	13.08	NP	811.46	13.06	NP	811.48	15.60	NP	808.94	15.71	15.70	808.83
ERT-2D	824.44	*	12.98	NP	811.46	12.88	NP	811.56	12.56	12.55	811.88	14.97	14.96	809.46	15.28	NP	809.16
ERT-3S	824.38		13.29	NP	811.09	12.94	NP	811.44	11.83	NP	812.55	14.14	NP	810.24	15.09	NP	809.29
ERT-3I	824.23		14.21	NP	810.02	13.23	NP	811.00	13.20	NP	811.03	15.73	NP	808.50	15.85	NP	808.38
ERT-3D	824.20		14.95	NP	809.25	14.62	NP	809.58	13.78	NP	810.42	16.72	16.71	807.47	16.20	NP	808.00
ERT-4S	823.54		13.32	NP	810.22	12.58	NP	810.96	12.85	NP	810.69	Dry	NP	--	Dry	NP	--
ERT-4I	823.49		14.23	NP	809.26	13.37	NP	810.12	13.42	NP	810.07	5.58	NP	817.91	15.70	NP	807.79
ERT-4D	823.63		14.55	NP	809.08	13.56	NP	810.07	13.63	NP	810.00	15.70	NP	807.93	15.90	NP	807.73
ERT-5	824.64	*	NM	NM	NM	12.34	NP	812.30	12.40	NP	812.24	15.28	NP	809.36	14.93	NP	809.71
ERT-6	824.74	*	14.25	NP	810.49	13.05	NP	811.69	13.15	13.14	811.59	16.03	NP	808.71	15.64	NP	809.10
ERT-7	823.96		15.38	NP	808.58	14.25	NP	809.71	14.55	NP	809.41	17.61	NP	806.35	16.80	NP	807.16
ERT-8	824.69		16.70	NP	807.99	15.13	NP	809.56	15.50	NP	809.19	18.57	NP	806.12	17.66	NP	807.03

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
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 2017
Vestal Water Supply Site
Site Number 7-04-009A

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)
4009-1	831.98	7.64	NP	824.34	6.89	NP	825.09	8.03	NP	823.95	7.41	NP	824.57	6.50	NP	825.48
4009-2	827.78	19.22	NP	808.56	18.11	NP	809.67	20.64	NP	807.14	18.93	NP	808.85	19.48	NP	808.30
4009-3	823.47	15.90	NP	807.57	14.87	NP	808.60	18.64	NP	804.83	16.3	NP	807.17	17.33	NP	806.14
4009-4	822.22	12.22	NP	810.00	10.80	NP	811.42	14.43	NP	807.79	12.03	NP	810.19	12.84	NP	809.38
4009-5	824.36	17.80	NP	806.56	16.77	NP	807.59	20.69	NP	803.67	18.65	NP	805.71	19.85	NP	804.51
4009-6	827.73	20.48	NP	807.25	19.23	NP	808.50	22.41	NP	805.32	20.57	NP	807.16	21.47	NP	806.26
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
4009-12A	823.80	17.91	NP	805.89	17.79	NP	806.01	22.03	NP	801.77	19.35	NP	804.45	20.70	NP	803.10
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
4009-17	820.53	14.55	NP	805.98	14.25	NP	806.28	18.50	NP	802.03	15.86	NP	804.67	16.98	NP	803.55
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
4009-20	822.90	17.04	NP	805.86	17.29	NP	805.61	21.29	NP	801.61	18.56	NP	804.34	19.55	NP	803.35
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
4009-23S	824.48	17.02	NP	807.46	14.17	NP	810.31	19.10	NP	805.38	16.71	NP	807.77	17.56	NP	806.92
4009-23D	824.39	17.93	NP	806.46	16.90	NP	807.49	19.13	NP	805.26	18.64	NP	805.75	19.95	NP	804.44
4009-24	822.32	16.19	NP	806.13	13.82	NP	808.50	NM	NM	NM	15.20	NP	807.12	16.35	NP	805.97
4009-25S	823.61	14.81	NP	808.80	13.73	NP	809.88	16.72	NP	806.89	14.68	NP	808.93	15.35	NP	808.26
4009-25D	823.57	14.75	NP	808.82	13.65	NP	809.92	16.70	NP	806.87	14.64	NP	808.93	15.32	NP	808.25
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
WELL 1-1	832.36	26.56	NP	805.80	26.46	NP	805.90	NM	NM	NM	NM	NM	NM	NM	NM	NM
WELL 1-1A	831.13	24.21	NP	806.92	25.37	NP	805.76	29.42	NP	801.71	25.15	NP	805.98	28.35	NP	802.78
ERT-1S	824.01	13.36	12.48	809.90	9.55	8.60	813.65	13.45	NP	810.56	12.73	12.10	810.74	12.68	12.10	810.84
ERT-1I	824.03	13.83	NP	810.20	12.46	NP	811.57	15.93	NP	808.10	13.60	NP	810.43	14.35	NP	809.68
ERT-1D	823.88	13.80	NP	810.08	10.80	10.72	813.01	15.97	NP	807.91	13.69	NP	810.19	14.49	NP	809.39
ERT-2S	824.67 *	14.50	NP	810.17	13.11	NP	811.56	16.46	NP	808.21	14.25	NP	810.42	14.97	NP	809.70
ERT-2I	824.54 *	14.36	NP	810.18	13.08	NP	811.46	16.35	NP	808.19	14.15	NP	810.39	14.88	NP	809.66
ERT-2D	824.44 *	14.21	NP	810.23	12.80	NP	811.64	16.39	NP	808.05	11.78	NP	812.66	13.54	NP	810.90
ERT-3S	824.38	13.94	NP	810.44	11.21	NP	813.17	15.40	NP	808.98	13.39	NP	810.99	NM	NM	NM
ERT-3I	824.23	14.53	NP	809.70	13.21	NP	811.02	16.57	NP	807.66	14.33	NP	809.90	NM	NM	NM
ERT-3D	824.20	15.01	NP	809.19	13.75	NP	810.45	17.22	NP	806.98	15.13	NP	809.07	NM	NM	NM
ERT-4S	823.54	13.18	NP	810.36	11.81	NP	811.73	Dry	NP	--	NM	NM	NM	Dry	NP	--
ERT-4I	823.49	14.46	NP	809.03	13.31	13.30	810.17	16.38	NP	807.11	NM	NM	NM	14.99	NP	808.50
ERT-4D	823.63	14.64	NP	808.99	13.51	13.49	810.10	16.57	NP	807.06	NM	NM	NM	15.19	NP	808.44
ERT-5	824.64 *	13.68	NP	810.96	12.45	NP	812.19	15.81	NP	808.83	13.70	NP	810.94	14.56	NP	810.08
ERT-6	824.74 *	14.39	NP	810.35	13.13	NP	811.61	16.64	NP	808.10	14.47	NP	810.27	15.35	NP	809.39
ERT-7	823.96	15.68	NP	808.28	14.45	NP	809.51	18.00	NP	805.96	15.98	NP	807.98	17.00	NP	806.96
ERT-8	824.69	16.56	NP	808.13	15.43	NP	809.26	18.96	NP	805.73	16.95	NP	807.74	17.95	NP	806.74

Notes
fbgs - feet below ground surface
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* - 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
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 2017
Vestal Water Supply Site
Site Number 7-04-009A

WELL I.D.	Top of Riser (ft AMSL)		9/15/2016			11/3/2016			4/10/2017			6/6/2017		
			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)
4009-1	831.98		8.56	NP	823.42	7.30	NP	824.68	7.22	NP	824.76	7.23	NP	824.75
4009-2	827.78		20.81	NP	806.97	20.05	NP	807.73	11.14	NP	816.64	17.95	NP	809.83
4009-3	823.47		19.43	NP	804.04	17.42	NP	806.05	7.68	NP	815.79	14.11	NP	809.36
4009-4	822.22		15.29	NP	806.93	13.85	NP	808.37	5.27	NP	816.95	10.11	NP	812.11
4009-5	824.36		21.92	NP	802.44	19.40	NP	804.96	NM	NP	NM	15.98	NP	808.38
4009-6	827.73		22.71	NP	805.02	21.46	NP	806.27	11.58	NP	816.15	19.33	NP	808.40
4009-7	824.27		21.92	NP	802.35	19.39	NP	804.88	5.33	NP	818.94	16.22	NP	808.05
4009-8	824.52		22.74	NP	801.78	19.84	NP	804.68	8.94	NP	815.58	17.04	NP	807.48
4009-9	825.05		23.19	NP	801.86	21.28	NP	803.77	8.85	NP	816.20	18.16	NP	806.89
4009-10	831.31		29.13	NP	802.18	27.52	NP	803.79	15.13	NP	816.18	24.32	NP	806.99
4009-11	830.06		21.10	NP	808.96	26.83	NP	803.23	17.43	NP	812.63	23.93	NP	806.13
4009-11A	830.80		20.63	NP	810.17	20.40	NP	810.40	11.4	NP	819.40	13.59	NP	817.21
4009-12	823.34		22.51	NP	800.83	19.45	NP	803.89	9.25	NP	814.09	16.16	NP	807.18
4009-12A	823.80		22.95	NP	800.85	19.92	NP	803.88	9.71	NP	814.09	16.67	NP	807.13
4009-13	816.28		15.23	NP	801.05	11.80	NP	804.48	2.23	NP	814.05	8.84	NP	807.44
4009-13A	816.17		14.73	NP	801.44	12.25	NP	803.92	1.24	NP	814.93	9.02	NP	807.15
4009-14	820.71		9.71	NP	811.00	16.68	NP	804.03	6.85	NP	813.86	14.02	NP	806.69
4009-15	826.54		25.79	NP	800.75	22.68	NP	803.86	12.59	NP	813.95	19.31	NP	807.23
4009-16	826.72		26.08	NP	800.64	22.80	NP	803.92	13.08	NP	813.64	24.04	NP	802.68
4009-16A	826.84		26.49	NP	800.35	22.70	NP	804.14	12.85	NP	813.99	19.97	NP	806.87
4009-17	820.53		19.59	NP	800.94	16.24	NP	804.29	5.57	NP	814.96	14.29	NP	806.24
4009-18	834.78		34.24	NP	800.54	30.77	NP	804.01	20.99	NP	813.79	27.95	NP	806.83
4009-19	824.94		24.76	NP	800.18	21.00	NP	803.94	11.2	NP	813.74	18.16	NP	806.78
4009-20	822.90		22.68	NP	800.22	18.84	NP	804.06	9.23	NP	813.67	16.1	NP	806.80
4009-21	825.02	**	24.96	NP	800.06	21.17	NP	803.85	11.55	NP	813.47	18.41	NP	806.61
4009-22	817.40		13.85	NP	803.55	13.09	NP	804.31	2.21	NP	815.19	9.41	NP	807.99
4009-23S	824.48		20.12	NP	804.36	18.83	NP	805.65	9.04	NP	815.44	14.09	NP	810.39
4009-23D	824.39		22.10	NP	802.29	19.54	NP	804.85	8.95	NP	815.44	16.32	NP	808.07
4009-24	822.32		18.51	NP	803.81	16.39	NP	805.93	NM	NP	NM	NM	NM	NM
4009-25S	823.61		17.18	NP	806.43	16.08	NP	807.53	7.3	NP	816.31	13.41	NP	810.20
4009-25D	823.57		17.16	NP	806.41	16.04	NP	807.53	6.16	NP	817.41	13.3	NP	810.27
4009-26	824.31		22.39	NP	801.92	19.62	NP	804.69	5.72	NP	818.59	16.85	NP	807.46
4009-27S	826.19		24.96	NP	801.23	21.97	NP	804.22	11.31	NP	814.88	18.9	NP	807.29
4009-27I	826.03		24.83	NP	801.20	21.87	NP	804.16	11.58	NP	814.45	18.75	NP	807.28
4009-27D	825.87		24.65	NP	801.22	21.70	NP	804.17	11.54	NP	814.33	18.52	NP	807.35
4009-28	821.59		20.79	NP	800.80	17.78	NP	803.81	7.35	NP	814.24	14.52	NP	807.07
4009-29S	825.77		24.71	NP	801.06	21.72	NP	804.05	11.39	NP	814.38	18.51	NP	807.26
4009-29I	825.68		24.79	NP	800.89	21.80	NP	803.88	11.44	NP	814.24	18.48	NP	807.20
4009-29D	825.67		24.79	NP	800.88	21.75	NP	803.92	12.29	NP	813.38	18.39	NP	807.28
4009-30	827.50	**	26.6	NP	800.90	23.32	NP	804.18	12.29	NP	815.21	20.86	NP	806.64
4009-30A	826.69	**	26.32	NP	800.37	22.73	NP	803.96	12.83	NP	813.86	19.83	NP	806.86
WELL 1-1	832.36		NM	NM	NM	NM	NM	NM	12.56	NP	819.80	NM	NM	NM
WELL 1-1A	831.13		30.39	NP	800.74	27.50	NP	803.63	NM	NP	NM	24.35	NP	806.78
ERT-1S	824.01		15.29	13.86	807.50	NM	NM	NM	6.49	5.7	817.52	NM	NM	NM
ERT-1I	824.03		16.72	NP	807.31	NM	NM	NM	7.04	NP	816.99	NM	NM	NM
ERT-1D	823.88		16.91	NP	806.97	NM	NM	NM	6.59	NP	817.29	NM	NM	NM
ERT-2S	824.67	*	17.11	NP	807.56	NM	NM	NM	7.48	NP	817.19	NM	NM	NM
ERT-2I	824.54	*	17.03	NP	807.51	NM	NM	NM	7.34	NP	817.20	NM	NM	NM
ERT-2D	824.44	*	14.74	NP	809.70	NM	NM	NM	7.44	NP	817.00	NM	NM	NM
ERT-3S	824.38		Dry	NP	--	NM	NM	NM	8.05	NP	816.33	10.85	NP	813.53
ERT-3I	824.23		17.17	NP	807.06	NM	NM	NM	7.47	NP	816.76	12.64	NP	811.59
ERT-3D	824.20		18.16	NP	806.04	NM	NM	NM	7.64	NP	816.56	13.17	NP	811.03
ERT-4S	823.54		Dry	NP	--	NM	NM	NM	6.21	NP	817.33	NM	NM	NM
ERT-4I	823.49		16.89	NP	806.60	NM	NM	NM	NM	NP	NM	NM	NM	NM
ERT-4D	823.63		17.07	NP	806.56	NM	NM	NM	NM	NP	NM	13.1	NP	810.53
ERT-5	824.64	*	16.69	NP	807.95	NM	NM	NM	7.02	NP	817.62	NM	NM	NM
ERT-6	824.74	*	17.47	NP	807.27	NM	NM	NM	NM	NP	NM	NM	NM	NM
ERT-7	823.96		18.98	NP	804.98	NM	NM	NM	7.72	NP	816.24	NM	NM	NM
ERT-8	824.69		19.96	NP	804.73	NM	NM	NM	8.59	NP	816.10	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
Corrected based on assumed LNAPL density of 0.85 g/cm3

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-1 2/20/2014 Shallow ug/L	4009-1 5/28/2014 Shallow ug/L	4009-1 8/28/2014 Shallow ug/L	4009-1 12/9/2014 Shallow ug/L	4009-2 2/20/2014 Shallow ug/L	4009-2 5/28/2014 Shallow ug/L	4009-2 8/28/2014 Shallow ug/L	4009-2 12/9/2014 Shallow ug/L	4009-3 2/20/2014 Shallow ug/L	4009-3 5/28/2014 Shallow ug/L	4009-3 8/28/2014 Shallow ug/L	4009-3 12/9/2014 Shallow ug/L	4009-4 2/20/2014 Intermediate ug/L	4009-4 5/28/2014 Intermediate ug/L	4009-4 8/28/2014 Intermediate ug/L	4009-4 12/9/2014 Intermediate ug/L	4009-5 2/20/2014 Intermediate ug/L	4009-5 5/28/2014 Intermediate ug/L	4009-5 8/28/2014 Intermediate 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 UJ	1.0 U	1.0 U	1.0 U	1.6 J	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 U	1.0 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.0 UJ	1.0 U	1.1	1.3	0.9 J	1.5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 U	1.0 UJ
1,1-Dichloroethane	5	1.0 U	0.5 J	1.0 UJ	0.37 J	2.7	2.3	2.6 J	3.4	**6.3**	**6.6**	**7.5 J**	4.8	1.0 U	0.4 J	1.0 UJ	1.0 U	2.7	3.0 J	1.3 J
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.3	1.1	1.1 J	0.87 J	1.0 U	1.0 U	1.0 UJ	1.0 U	2.2	1.8 J	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 UJ	5.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	2.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 U	1.0 UJ
2-Butanone (MEK)	50	1.3 J	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U	1.5 J	10 U	10 UJ	10 U	10 U	50 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 UJ	10 U	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	25 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 UJ	10 U	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	25 U	5.0 UJ
Acetone	50*	10	4.2 J	12 J	10 U	7.2 J	3.5 J	9.9 J	10 U	10		4.6 J	12 J	10 U	12	3.4 J	8.0 J	10 U	11	50 U	11 J
Benzene	1	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	**3.2**	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	**3.6 J**	1.0 U	1.0 U	5.0 U	**1.7 J**
Bromodichloromethane	50	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 U	1.0 UJ
cis-1,2-Dichloroethene	5	1.6	2.0	2.2 J	2.4	**14**	**12**	**9.0 J**	**6.9**	**77**	**65**	**63 J**	**48**	1.0 U	**79**	1.3 J	0.45 J	**250 D**	**280**	**170 J**
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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	10.0 U	2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	13 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	4.6 J	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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 U	1.0 UJ
Tetrachloroethene	5	1.4	0.4 J	1.7 J	0.84 J*	1.0 U	1.0 U	1.0 UJ	0.51 J*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	5.0 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 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.6 J	1.0 U	1.0 U	5.0 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 UJ	0.46 J	1.0 U	1.0 U	1.0 UJ	0.45 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0	5.0 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 UJ	1.0 U*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	5.0 U	1.0 UJ
Trichloroethene	5	1.4	1.1	1.7 J	1.5	2.9	2.7	2.3 J	2.5	**26**	**15**	**12 J**	**11**	1.0 U	1.5	1.0 UJ	1.0 U	**21**	**19**	**12 J**
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5.0 U	1.0 UJ
Vinyl chloride	2	1.0 U	1.0 U	1.0 UJ	1.0 U	**6.9**	1.3	**5.1 J**	**6.5**	**11**	**13**	**33 J**	**16**	1.0 U	1.0 U	1.0 UJ	1.0 U	**39**	**41**	**14 J**
Xylenes, Total		2.0 U	2 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	10 U	2.0 UJ
Total VOCs		15.7	8.2	17.6	5.11	34.8	26.3	29.8	21.8	132	105	130	81.1	13.5	84.3	13.5	0.45	327	349	210
Total VOCs (w/o Acteone or Methlyene Chloride)		5.7	4.0	5.6	5.11	27.6	22.8	19.9	21.8	122	101	118	81.1	1.50	80.9	5.50	0.45	316	345	199

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-5	4009-6	4009-6	4009-6	4009-6	4009-7	4009-7	4009-7	4009-7	4009-7	4009-7	4009-8	4009-8	4009-8	4009-8	4009-8	4009-8	4009-9	4009-9
Sampling Date	GA	12/9/2014	2/20/2014	5/28/2014	8/28/2014	12/9/2014	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/10/2017	6/20/2017	2/20/2014	5/28/2014	8/28/2014	12/9/2014	4/10/2017	6/20/2017	2/20/2014	5/28/2014
Groundwater Monitoring Zone	Standard	Intermediate	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	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
1,1,1-Trichloroethane	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	790 D	1000	2900 DJ	1500	560	490	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	14	13 J	20 UDJ	17 J	5.1 J	10 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	0.5 J	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.7 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 J	0.48 J	1.0 UJ	3.3 U	1.1	0.59 J	40	62	72 DJ	58	51	45	1.0 U	1.0 U
1,1-Dichloroethene	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.29 J	1.0 UJ	3.3 U	0.44 J	0.38 J	31	120	94 DJ	120	31	80	1.0 U	1.0 U
1,2,3-Trimethylbenzene		13 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 UJ	17 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	130 U	10 U	10 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	5.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U	1.0 UJ	6.7 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	50 U	10 U	10 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,2-Dichloropropane	1	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
2-Butanone (MEK)	50	25 U	10 U	10 U	10 UJ	10 U	10 U	1.4 J	10 UJ	33 U	10 U *	10 U	10 U	200 U	200 UDJ	250 U	100 U *	100 U	1.4 J	10 U
2-Hexanone	50*	25 U	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 UJ	33 U	5.0 U	5.0 U	5.0 U	100 U	100 UDJ	250 U	50 U	50 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		25 U	5.0 U	5.0 U	5.0 UJ	10 U	5.0 U	5.0 U	5.0 UJ	33 U	5.0 U	5.0 U	5.0 U	100 U	100 UDJ	250 U	50 U	50 U	5.0 U	5.0 U
Acetone	50*	25 U	8.5 J	10 U	9.8 J	10 U	5.3 J	7.1 J	14 J	33 U	3.4 J	4.7 J	9.6 J	200 U	200 UDJ	250 U	100 U	100 U	12	3.3 J
Benzene	1	0.62 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.1	1.0 U	0.41 J	3.3 U	1.0 U	1.0 U	0.67 J	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Bromodichloromethane	50	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Bromoform	50*	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U*	10 U	10 U	1.0 U	1.0 U
Bromomethane	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Carbon disulfide		2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Carbon tetrachloride	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Chlorobenzene	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Chloroethane	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.3 J	1.0 UJ	3.3 U	1.0 U	1.0 U	2.2	20 U	20 UDJ	25 U	7.8 J	3.7 J	1.0 U	1.0 U
Chloroform	7	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	0.6 J	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Chloromethane		2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	170	1.0 U	1.0 U	1.0 UJ	0.24 J	20	46	36 J	38	42	41	440 D	310	550 DJ	490	230	190	6.3	4.0
cis-1,3-Dichloropropene	0.4	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Cyclohexane		2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Dibromochloromethane	50	2.5 U*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 UJ	3.3 U*	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Ethylbenzene	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Methyl Acetate		25 U	2.5 U	2.5 U	2.5 UJ	10 U	2.5 U	2.5 U	2.5 UJ	33 U	2.5 U	2.5 U	2.5 U	50 U	50 UDJ	250 U	25 U	25 U	2.5 U	2.5 U
Methyl Cyclohexane		2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Methylene Chloride	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	9.1 DJ	25 U	10 U	10 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	2.5 U	0.3 J	0.27 J	1.0 UJ	0.23 J	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Styrene	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Tetrachloroethene	5	2.5 U*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 UJ	3.3 U*	1.0 U	1.0 U	1.3	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Toluene	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	0.69 J	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1.1	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	2.5 U*	1.0 U	1.0 U	1.0 UJ	1.0 U*	1.0 U	1.0 U	1.0 UJ	3.3 U*	1.0 U	1.0 U	1.0 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Trichloroethene	5	14	0.5 J	0.61 J	1.0 UJ	0.37 J	2.1	4.1	3.3 J	2.7 J	0.93 J	1.2	19	20 U	20 UDJ	7.1 J	150	160	0.5 J	0.66 J
Trichlorofluoromethane	5	2.5 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	3.3 U	1.0 U	1.0 U	1 U	20 U	20 UDJ	25 U	10 U	10 U	1.0 U	1.0 U
Vinyl chloride	2	31	1.0 U	1.0 U	1.0 UJ	1.0 U	2.5	3.1	3.1 J	3.0 J	22	4.6	44	140	92 DJ	44	30	15	1.0 U	1.0 U
Xylenes, Total		5.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ	6.7 U	2.0 U	2.0 U	2.0 U	40 U	40 UDJ	50 U	20 U	20 U	1.0 U	2.0 U
Total VOCs		218	9.29	0.88	9.80	0.84	32.0	62.8	56.8	43.7	69.9	52.5	1394	1645	3717	2236	1065	983.7	20.2	7.96
Total VOCs (w/o Acteone or Methlyene Chloride)		218	0.79	0.88	0.0	0.84	26.7	55.7	42.8	43.7	66.47	47.77	1384	1645	3717	2236	1065	983.7	8.24	4.66

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
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	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10	4009-10
Sampling Date	GA	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	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	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 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 UJ	0.32 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	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 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 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 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 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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	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	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	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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	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	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50*	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 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 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 UJ	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	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	10	3.2 J	7.5 J	10 U	9.2 J	10 U	10 U	10 U	10 U
Benzene	1	**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	0.6 J	0.53 J	**2.3 J**	**26**	1.0 U	**1.8**	0.97 J	1.0 U	**1.9**
Bromodichloromethane	50	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	**13 J**	**7.0**	1.9	**15**	**21**	4.0	**21**	**22**	**19**	**8.2**	**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
cis-1,3-Dichloropropene	0.4	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	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 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		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	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 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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	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 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 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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	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 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	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	2.0	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 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 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 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 UJ	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	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	1.0 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 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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total		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 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		26.0	9.10	9.52	18.99	24.4	8.24	22.04	26.3	21.1	12.7	13.10	12.6	3.73	9.80	26.3	9.20	1.80	0.97	0.0	1.9
Total VOCs (w/o Acteone or Methlyene Chloride)		15.0	9.10	2.42	18.99	24.4	4.74	22.04	26.3	21.1	9.17	10.00	2.6	0.53	2.3	26.3	0.0	1.80	0.97	0.0	1.9

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-10	4009-10	4009-10	4009-10	4009-11	4009-11	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
Sampling Date	GA	9/29/2016	11/28/2016	4/10/2017	6/20/2017	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	2/20/2014	5/28/2014
Groundwater Monitoring Zone	Standard	Shallow	Shallow	Shallow	Shallow	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	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
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9 J	1.0 U	1.0 U	1.0 U	**79**	1.0 U	**57**	**87**	1.0 U	1.0 U	**170**	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 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
1,1,2-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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 J	1.2	1.0 U	1.0 U	2.9	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 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
1,1-Dichloroethane	5	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	**20**	0.76 J	**13**	**21**	2.1	2.8	**43.0**	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 UJ	1.0 U	1.0 U	1.0 U	**8.7**	1.0 U	3.4	5.4	1.0 U	1.0 U	**27.0**	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 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
1,2,4-Trichlorobenzene	5	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
1,2,4-Trimethylbenzne	5	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
1,2-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 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
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 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
1,2-Dichlorobenzene	3	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
1,2-Dichloroethane	0.6	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	0.21 J	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 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
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 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
1,3-Dichlorobenzene	3	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
1,4-Dichlorobenzene	3	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
2-Butanone (MEK)	50	10 U	10 U	10 U *	10 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	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 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
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 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
Acetone	50*	10 U	10 U	3.4 J	10 U	7.8 J	4.6 J	10 UJ	10 U	6.7 J	10 U	10 U	4.4 J	10 U	10 U	10 U	3.7 J	3.6 J	9.8 J	4.1 J
Benzene	1	0.65 J	**3.4**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	**7.8**	**5.6**	**8.4**	1.0 U	**18**	1.0 U	**1.3**	**16**	**15**	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 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
Bromoform	50*	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
Bromomethane	5	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
Carbon disulfide		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
Carbon tetrachloride	5	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
Chlorobenzene	5	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
Chloroethane	5	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	1.5	1.5	1.2	1.8	1.0 U	1.0 U	1.8	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 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
Chloromethane		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
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 UJ	1.0 U	1.0 U	1.0 U	**12**	1.0 U	**8.8**	**15**	1.0 U	1.0 U	**35**	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 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
Cyclohexane		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
Dibromochloromethane	50	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
Dichlorodifluoromethane	5	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
Ethylbenzene	5	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
Isopropylbenzne (Cumene)	5	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
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 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	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 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
Methylene Chloride	5	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
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 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
Styrene	5	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
Tetrachloroethene	5	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
Toluene	5	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 U	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
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 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
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 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
Trichloroethene	5	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	1.1	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 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
Vinyl chloride	2	1.0 U	2.0 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	**19**	1.0 U	**14**	**17**	2.0 U	1.1	**37**	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 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
Total VOCs		0.65	3.4	3.4	0.0	7.80	4.60	1.90	8.80	13.3	9.40	140	25.45	98.14	150	18.9	23.5	322	9.80	4.10
Total VOCs (w/o Acteone or Methlyene Chloride)		0.65	3.4	0.0	0.0	0.0	0.0	1.90	8.80	6.60	9.40	140	21.05	98.14	150	18.92	19.75	318	0.0	0.0

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
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	4009-11A	4009-11A	4009-11A	4009-11A	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12	4009-12
Sampling Date	GA	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	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	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	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 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	**32**	**43**	1.0 U	**290**	1.0 U	**180**	**67**	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		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	1.0 U	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	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	4.0	**6.5**	1.0 U	**29**	1.8	**25**	**29**	3.1	2.9
1,1-Dichloroethene	5	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	3.4	**6.1**	1.0 U	**30**	1.0 U	**20**	**8.5**	1.0 U	1.0 U
1,2,3-Trimethylbenzene		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	110 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	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	44 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 UJ	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	220 U	10 U	50 U	10 U	10 U	10 U
2-Hexanone	50*	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	220 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		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	220 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U
Acetone	50*	10 J	10 U	7.6 J	10 U	10 U	4.6 J	3.5 J	10 U	10 U	4.1 J	5.4 J	5.8 J	3.8 J	7.0 J	220 U	7.1 J	50 U	10 U	10 U	10 U
Benzene	1	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	**1.5**	**1.6**	22 U	**2.7**	**2.9 J**	**2.4**	**6.7**	**7.5**
Bromodichloromethane	50	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	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	22 U*	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	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	22 U	1.0 U	5.0 U	0.83 J	1.0 U	1.0 U
Chloroform	7	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	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	**13**	**9.5**	**8.5**	**63**	4.1	**41**	**18**	1.5	1.1
cis-1,3-Dichloropropene	0.4	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		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	2.5 U	2.5 U	220 U	2.5 U	13 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	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	22 U	1.0 U	5.0 U	1.0 U	0.50 JB	1.0 U
Methyl Tert Butyl Ether	10	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	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	0.8 J	0.74 J	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	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	**17**	**18**	1.0 U	**64**	1.0 U	**39**	**11**	0.77 J	0.81 J
Trichlorofluoromethane	5	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	22 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	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	**6.1**	**3.7**	0.9 J	**30**	**2.3**	**51**	**41**	1.7	1.4
Xylenes, Total		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	44 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U
Total VOCs		10.0	0.0	7.60	0.0	0.0	4.60	3.50	0.0	0.0	4.1	5.4	81.3	93.9	18.7	506	18.0	359	178	14.3	13.7
Total VOCs (w/o Acteone or Methlyene Chloride)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.5	90.1	11.7	506	10.9	359	178	13.8	13.7

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-12	4009-12	4009-12	4009-12	DUP-01	4009-12A	4009-12A	4009-12A	4009-12A	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	9/29/2016	11/28/2016	4/10/2017	6/20/2017	6/20/2017	2/20/2014	5/28/2014	8/28/2014	12/9/2014	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
Groundwater Monitoring Zone	Standard	Deep	Deep	Deep	Deep	Deep	Intermediate	Intermediate	Intermediate	Intermediate	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	**100**	**45**	**220**	**34**	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
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	2 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	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	1.9 J	1.0 J	2.8	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
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	2 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	1.0 U	1.0 U
1,1-Dichloroethane	5	2.4	2.9	**18**	**9.2**	**20**	4.3	**7.8**	4.3	2.8	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
1,1-Dichloroethene	5	1.0 U	1.0 U	3.2	7.7	8.0	3.8	1.3	0.6 J	0.53 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
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 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
1,2,4-Trichlorobenzene	5	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 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
1,2,4-Trimethylbenzne	5	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 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
1,2-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	2.0 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
1,2-Dibromoethane (Ethylene Dibromide)	5	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 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
1,2-Dichlorobenzene	3	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 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
1,2-Dichloroethane	0.6	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 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
1,2-Dichloropropane	1	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 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
1,3,5-Trimethylbenzene (Mesitylene)	5	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 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
1,3-Dichlorobenzene	3	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 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
1,4-Dichlorobenzene	3	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 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
2-Butanone (MEK)	50	10 U	10 U	10 U *	20 U	10.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	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	10 U	5.0 U	5.0 U	5.0 U	5.0 U	10 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
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	10 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
Acetone	50*	10 U	10 U	5.5 J	20 U	3.3 J	9.9 J	3.9 J	10 U	10 U	8.4 J	3.8 J	10 UJ	10 U	8.9 J	10 U	10 U	3.5 J	10 U	10 U	10 U
Benzene	1	**8.7**	**9.1**	**3.6**	**2.8**	**2.1**	1.0 U	1.0 U	0.57 J	0.31 J	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**
Bromodichloromethane	50	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 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
Bromoform	50*	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 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
Bromomethane	5	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 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
Carbon disulfide		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 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
Carbon tetrachloride	5	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 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
Chlorobenzene	5	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 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
Chloroethane	5	1.0 U	1.0 U	1.1	2.0 U	1.2	1.0 U	**7.5**	**7.0**	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
Chloroform	7	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 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
Chloromethane		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 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
cis-1,2-Dichloroethene	5	1.0	0.95 J	**11**	**8.7**	**29**	**15**	**18**	**15**	**14**	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
cis-1,3-Dichloropropene	0.4	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 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
Cyclohexane		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 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
Dibromochloromethane	50	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 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
Dichlorodifluoromethane	5	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 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
Ethylbenzene	5	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 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
Isopropylbenzne (Cumene)	5	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 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
Methyl Acetate		2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	2.5 U	10 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
Methyl Cyclohexane		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 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
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 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	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	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 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
Styrene	5	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 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
Tetrachloroethene	5	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 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
Toluene	5	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.55 J	0.53 J	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
trans-1,2-Dichloroethene	5	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 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
trans-1,3-Dichloropropene	0.4	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 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
Trichloroethene	5	0.55 J	0.60 J	3.0	**10**	**30**	**19**	**2.2**	1.0	0.30 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
Trichlorofluoromethane	5	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 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
Vinyl chloride	2	1.1	1.6	**5.7**	**22**	**56**	**6.4**	1.0 U	1.7	**6.5**	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
Xylenes, Total		2.0 U	2.0 U	2.0 U	4.0 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	2.0 U	2.0 U
Total VOCs		13.8	15.2	146	107.4	372	92.4	41.3	30.7	28.5	8.40	7.92	7.50	1.55	9.90	1.70	3.20	3.20	5.90	1.90	1.90
Total VOCs (w/o Acteone or Methlyene Chloride)		13.8	15.2	146	106.4	369.1	82.5	37.4	30.7	28.5	0.0	4.12	7.50	1.55	1.00	1.70	3.20	3.20	2.40	1.90	1.90

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-13 4/26/2017 Deep ug/L	4009-13 6/20/2017 Deep ug/L	4009-13A 2/20/2014 Shallow ug/L	4009-13A 5/28/2014 Shallow ug/L	4009-13A 8/28/2014 Shallow ug/L	4009-13A 12/9/2014 Shallow ug/L	4009-13A 4/20/2015 Shallow ug/L	4009-13A 7/29/2015 Shallow ug/L	4009-13A 11/4/2015 Shallow ug/L	4009-13A 3/28/2016 Shallow ug/L	4009-13A 6/30/2016 Shallow ug/L	4009-13A 9/29/2016 Shallow ug/L	4009-13A 11/28/2016 Shallow ug/L	4009-13A 4/26/2017 Shallow ug/L	4009-13A 6/20/2017 Shallow ug/L	4009-14 2/20/2014 Deep ug/L	4009-14 5/28/2014 Deep ug/L	4009-14 8/28/2014 Deep ug/L	4009-14 12/9/2014 Deep ug/L
1,1,1-Trichloroethane	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	1.0 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 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 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 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 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 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 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	5.0 U
1,2,4-Trichlorobenzene	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	1.0 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 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 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	2.0 U
1,2-Dibromoethane (Ethylene Dibromide)	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	1.0 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 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 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 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 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 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 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 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	10 U	10 U	10 U
2-Hexanone	50*	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	10 U
4-Methyl-2-pentanone (MIBK)		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	10 U
Acetone	50*	10 U	4.2 J	8.4 J	10 U	11 J	10 U	6.8 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	3.0 J	4.1 J	6.3 J	4.3 J	11
Benzene	1	0.41 J	1.0 U	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	0.54 J
Bromodichloromethane	50	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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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	2.5 U	2.5 U	10 U
Methyl Cyclohexane		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 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 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 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 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 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	0.91 J	1.0	0.92 J
trans-1,2-Dichloroethene	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	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 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 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 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 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 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		0.41	4.2	8.40	0.58	11.0	0.96	6.80	0.0	0.44	1.20	0.0	0.0	0.0	3.0	4.1	6.30	5.21	12.0	1.46
Total VOCs (w/o Acteone or Methlyene Chloride)		0.41	0.0	0.0	0.58	0.0	0.96	0.0	0.0	0.44	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.91	1.00	1.46

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
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	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15	4009-15
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	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	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
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	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	1.1
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	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
1,1,2-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	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
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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
1,1-Dichloroethane	5	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	0.5 J	0.53 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	0.98 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	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
1,2,3-Trimethylbenzene		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	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
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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
1,2,4-Trimethylbenzne	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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
1,2-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	NS	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
1,2-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	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
1,2-Dichlorobenzene	3	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	1.0 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	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
1,2-Dichloropropane	1	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	1.0 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	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
1,3-Dichlorobenzene	3	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	1.0 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	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
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	10.0 U	10 U	1.3 J	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	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	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
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	NS	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
Acetone	50*	7.1 J	10 U	3.1 J	10 U	4.1 J	10 U	10 U	NS	3.4 J	7.5 J	5.1 J	7.2 J	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
Benzene	1	**1.2**	**4.0**	**12**	**18**	**14**	**15**	**17**	NS	**9.2**	1.0 U	1.0 U	0.5 J	0.86 J	**1.8**	**9.1**	**8.0**	**9.1**	**8.5**	**7.8**	**9.0**	0.97 J
Bromodichloromethane	50	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	1.0 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	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
Bromomethane	5	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	1.0 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	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
Carbon tetrachloride	5	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	1.0 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	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
Chloroethane	5	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	1.0 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	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
Chloromethane		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	1.0 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	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
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	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
Cyclohexane		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	1.0 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	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
Dichlorodifluoromethane	5	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	1.0 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	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
Isopropylbenzne (Cumene)	5	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	1.0 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	NS	2.5 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
Methyl Cyclohexane		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	1.0 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	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
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	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
Styrene	5	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	1.0 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	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
Toluene	5	1.0	1.2	1.2	0.78 J	1.0 U	0.55 J	1.0 U	NS	1.0 U	1.0 U	0.56 J	0.61 J	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
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	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
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	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
Trichloroethene	5	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	1.0 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	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
Vinyl chloride	2	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	1.0 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	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
Total VOCs		9.30	5.20	16.3	18.78	18.1	15.6	17.0	-	12.6	8.02	7.49	8.31	1.58	8.37	10.1	13.74	14.77	17.6	12.7	17.4	7.6
Total VOCs (w/o Acteone or Methlyene Chloride)		2.20	5.20	13.2	18.78	14.0	15.6	17.0	-	9.2	0.52	2.39	1.11	1.58	2.57	10.1	8.84	9.67	8.50	8.41	9.00	3.05

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-15 6/20/2017 Deep ug/L	4009-16 2/20/2014 Deep ug/L	4009-16 5/28/2014 Deep ug/L	4009-16 8/28/2014 Deep ug/L	4009-16 12/9/2014 Deep ug/L	4009-16 4/20/2015 Deep ug/L	4009-16 7/29/2015 Deep ug/L	4009-16 11/4/2015 Deep ug/L	4009-16 3/28/2016 Deep ug/L	4009-16 6/30/2016 Deep ug/L	4009-16 9/29/2016 Deep ug/L	4009-16 11/28/2016 Deep ug/L	4009-16^ 4/10/2017 Deep ug/L	4009-16^ 6/20/2017 Deep ug/L	4009-16A 2/20/2014 Shallow ug/L	4009-16A 5/28/2014 Shallow ug/L	4009-16A 8/28/2014 Shallow ug/L	4009-16A 12/9/2014 Shallow 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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	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	5.0 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	NS	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	NS	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	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	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	1.0 U	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	10.0 U	1.6 J	10 U	10 U	10 U
2-Hexanone	50*	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	NS	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	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	10 U
Acetone	50*	9.5 J	5.9 J	3.5 J	7.1 J	10 U	6.0 J	10 U	10 U	10 U	4.5 J	10 U	10 U	NS	4.2 J	12	4.0 J	7.6 J	10 U
Benzene	1	**12**	1.0 U	1.0 U	**8.2**	0.39 J	1.0 U	1.0 U	1.0 U	1.0 U	**8.4**	**8.0**	**1.8**	NS	**18.0**	1.0 U	**1.9**	**7.2**	**8.0**
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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	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	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	2.5 U	2.5 U	2.5 U	10 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	NS	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	NS	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	NS	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	NS	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	NS	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	1.5	1.0 U	1.0 U	1.0 U	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
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	NS	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	NS	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	NS	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	NS	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	NS	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	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		21.5	5.90	3.50	16.8	0.39	6.00	0.0	0.0	0.0	12.9	8.69	1.80		22.2	13.6	5.90	14.8	8.00
Total VOCs (w/o Acteone or Methlyene Chloride)		12	0.0	0.0	9.70	0.39	0.0	0.0	0.0	0.0	8.4	8.69	1.80		18	1.60	1.90	7.20	8.00

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-16A 4/20/2015 Shallow ug/L	4009-16A 7/29/2015 Shallow ug/L	4009-16A 11/4/2015 Shallow ug/L	4009-16A 3/28/2016 Shallow ug/L	4009-16A 6/30/2016 Shallow ug/L	4009-16A 9/29/2016 Shallow ug/L	4009-16A 11/28/2016 Shallow ug/L	4009-16A 4/10/2017 Shallow ug/L	4009-16A 6/20/2017 Shallow ug/L	4009-18 5/6/2015 Deep ug/L	4009-18 7/29/2015 Deep ug/L	4009-18 11/4/2015 Deep ug/L	4009-18 3/28/2016 Deep ug/L	4009-18 6/30/2016 Deep ug/L	4009-18 9/29/2016 Deep ug/L	4009-18 11/28/2016 Deep ug/L	4009-18 4/10/2017 Deep ug/L	4009-18 6/20/2017 Deep 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	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
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
1,1,2-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
1,1,2-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
1,1-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
1,1-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
1,2,3-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
1,2,4-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
1,2,4-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
1,2-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
1,2-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
1,2-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
1,2-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
1,2-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
1,3,5-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
1,3-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
1,4-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
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U *	10 U	3.3 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	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
Acetone	50*	6.4 J	10 U	10 U	10 U	10 U	10 U	10 U	5.0 J	3.8 J	10	10 U	10 U	10 U	10 U	10 U	10 U	6.4 J	4.1 J
Benzene	1	**5.7**	**11**	**3.0**	**4.2**	0.49 J	**1.4**	**36**	**1.8**	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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	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
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	0.58 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
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
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
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
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
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
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
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
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
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
Total VOCs		12.1	11.0	3.00	4.20	0.49	1.40	36.0	6.80	3.8	14.16	1.00	0.0	0.99	0.83	0.47	1.70	7.23	4.1
Total VOCs (w/o Acteone or Methlyene Chloride)		5.70	11.0	3.00	4.20	0.49	1.40	36.0	1.80	0.0	4.16	1.00	0.0	0.41	0.83	0.47	1.70	0.83	0.0

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-19 4/20/2015 Deep ug/L	4009-19 7/29/2015 Deep ug/L	4009-19 11/4/2015 Deep ug/L	4009-19 3/28/2016 Deep ug/L	4009-19 6/30/2016 Deep ug/L	4009-19 9/29/2016 Deep ug/L	4009-19 11/28/2016 Deep ug/L	4009-19 4/10/2017 Deep ug/L	4009-19 6/20/2017 Deep ug/L	4009-21 4/20/2015 Deep ug/L	4009-21 7/29/2015 Deep ug/L	4009-21 11/4/2015 Deep ug/L	4009-21 3/28/2016 Deep ug/L	4009-21 6/30/2016 Deep ug/L	4009-21 9/29/2016 Deep ug/L	4009-21 11/28/2016 Deep ug/L	4009-21^ 4/10/2017 Deep ug/L	4009-21^ 6/20/2017 Deep ug/L	4009-22 12/3/2013 Deep ug/L	4009-22 2/20/2014 Deep ug/L	4009-22 5/28/2014 Deep 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
1,1,2,2-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
1,2,4-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	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 *	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
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*	8.5 J	10 U	10 U	10 U	10 U	10 U	10 U	4.2 J	3.4 J	7.9 J	10 U	10 U	10 U	10 U	10 U	10 U	7.1 J	4.5 J	3.1 J	12	10 U
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	**11**	**31**	**21**	**21**	**19**	**24**	**25**	0.7 J	0.7 J	0.92 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
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	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	2.5 U	2.5 U	2.5 U	2.5 U	1.0 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
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	0.64 J	1.0 U	1.0 U	1.0 U	1.0 U	0.44 J	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	0.7 J	0.6 J	1.1
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		11.2	1.00	0.0	0.0	0.0	0.0	0.0	4.2	3.4	7.90	0.0	11.0	31.64	21.0	21.0	19.0	31.1	29.9	4.44	13.2	2.02
Total VOCs (w/o Acteone or Methlyene Chloride)		2.70	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	31.0	21.0	21.0	19.0	24.0	25.0	1.34	1.24	2.02

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-22 8/28/2014 Deep ug/L	4009-22 12/9/2014 Deep ug/L	4009-22 4/20/2015 Deep ug/L	4009-22 7/29/2015 Deep ug/L	4009-22 11/4/2015 Deep ug/L	4009-22 3/28/2016 Deep ug/L	4009-22 6/30/2016 Deep ug/L	4009-22 9/29/2016 Deep ug/L	4009-22 11/28/2016 Deep ug/L	4009-22 4/10/2017 Deep ug/L	4009-22 6/20/2017 Deep ug/L	4009-23S 2/20/2014 Shallow ug/L	4009-23S 5/28/2014 Shallow ug/L	4009-23S 8/28/2014 Shallow ug/L	4009-23S 7/29/2015 Shallow ug/L	4009-23D 2/20/2014 Intermediate ug/L	4009-23D 5/28/2014 Intermediate ug/L	4009-23D 8/28/2014 Intermediate ug/L	4009-23D 7/29/2015 Intermediate ug/L	4009-24 2/20/2014 Shallow ug/L	4009-24 5/28/2014 Shallow 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 UJ	NS	**130 D**	**720**	**140 DJ**	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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 UJ	NS	24	18	12 J	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	3.2	4.4	2.5 J	NS	**250 D**	**420**	**220 DJ**	NS	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 UJ	NS	**31**	**78**	**23 J**	NS	1.0 U	1.0 U
1,2,3-Trimethylbenzene		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	1.8	0.38 J	0.44 J	NS	10 UD	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	**8.6**	2.0	4.2 J	NS	10 UD	10 U	1.0 UJ	NS	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	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 UJ	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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 UJ	NS	0.4 J	10 U	0.39 J	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	4.4	1.2	4.0 J	NS	10 UD	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	10 UJ	NS	10 U	100 U	10 UJ	NS	1.4 J	10 U
2-Hexanone	50*	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 UJ	NS	5.0 U	50 U	5.0 UJ	NS	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		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 UJ	NS	5.0 U	50 U	5.0 UJ	NS	5.0 U	5.0 U
Acetone	50*	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	6.1 J	10 U	7.2 J	NS	8.3 J	100 U	9.8 J	NS	9.3 J	4.2 J
Benzene	1	0.98 J	0.82 J	**1.2**	**1.1**	**1.2**	**1.6**	**1.3**	**1.3**	**1.1**	**1.1**	**1.1**	**1.8**	**1.8**	**1.8 J**	NS	1.0 U	10 U	0.62 J	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	1.2 J	NS	**11**	**11**	**8.2 J**	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	2.2	2.2	1.9 J	NS	**580 D**	**450**	**460 DJ**	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	0.8 J	0.61 J	0.85 J	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	0.83 J	1.0 UJ	NS	1.0 U	10 U	1.0 UJ	NS	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	**5.3**	**3.6**	**5.8 J**	NS	1.0 U	10 U	1.0 UJ	NS	1.0 U	1.0 U
Methyl Acetate		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	2.5 U	2.5 U	2.5 UJ	NS	2.5 U	25 U	2.5 UJ	NS	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	0.7 J	0.5 J	1.0 UJ	NS	0.3 J	10 U	1.0 UJ	NS	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J	1.0 U	1.0 U	1.0 U	1.8	0.69 J	1.0 U	1.0 U	1.0 UJ	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	1.0 U	1.0 U
Toluene	5	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	1.0 U	1.0 U	1.0 UJ	NS	1.0 U	10 U	1.0 UJ	NS	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	2.4	2.8	1.8 J	NS	2.3	10 U	1.3 J	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	1.6	1.6	1.3 J	NS	**8.7**	**8.3 J**	**6.1 J**	NS	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	NS	1.0 U	10 U	1.0 UJ	NS	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	0.9 J	1.1	1.1 J	NS	**630 D**	**440**	**530 DJ**	NS	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	NS	2.0 U	20 U	2.0 UJ	NS	2.0 U	2.0 U
Total VOCs		12.8	1.46	8.63	2.20	2.01	2.98	5.30	2.20	2.40	10.40	6.9	39.8	23.1	34.1	NS	1676	2145	1411	NS	10.7	4.20
Total VOCs (w/o Acteone or Methlyene Chloride)		1.81	1.46	2.13	2.20	2.01	2.52	1.30	2.20	2.40	2.10	1.98	33.7	23.1	26.9	NS	1667	2145	1402	NS	1.40	0.0

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-24 8/28/2014 Shallow ug/L	4009-24 7/29/2015 Shallow ug/L	4009-25S 2/20/2014 Shallow ug/L	4009-25S 5/28/2014 Shallow ug/L	4009-25S 8/28/2014 Shallow ug/L	4009-25S 7/29/2015 Shallow ug/L	4009-25D 7/29/2015 Shallow ug/L	4009-26 2/20/2014 Intermediate ug/L	4009-26 5/28/2014 Intermediate ug/L	4009-26 8/28/2014 Intermediate ug/L	4009-26 12/9/2014 Intermediate ug/L	4009-26 4/20/2015 Intermediate ug/L	4009-26 7/29/2015 Intermediate ug/L	4009-26 4/10/2017 Intermediate ug/L	4009-26 6/20/2017 Intermediate ug/L	4009-27S 2/20/2014 Intermediate ug/L	4009-27S 5/28/2014 Intermediate ug/L	4009-27S 8/28/2014 Intermediate ug/L	4009-27S 12/9/2014 Intermediate ug/L	4009-27S 4/20/2015 Intermediate ug/L	4009-27S 7/29/2015 Intermediate ug/L
1,1,1-Trichloroethane	5	1.0 UJ	NS	**2600 D**	**3300**	**9900 DJ**	NS	NS	**98**	**370**	**150 DJ**	**92**	NS	NS	**100**	**350**	**54**	61	65 J	49	61	62
1,1,2,2-Tetrachloroethane	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 UJ	NS	31	40 U	40 UDJ	NS	NS	7.7	13	6.0 DJ	7.7	NS	NS	5.3	5.7	2.8	3.4	2.3 J	2.6	3.3	3.3
1,1,2-Trichloroethane	1	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 UJ	NS	**87**	**140**	**120 DJ**	NS	NS	**27**	**39**	**16 DJ**	**14**	NS	NS	**30**	**43**	1.9	2.2	2.2 J	1.9 J	2.6	2.7
1,1-Dichloroethene	5	1.0 UJ	NS	**110 D**	**410**	**650 DJ**	NS	NS	**6.0**	**46**	**9.9 DJ**	**7.8**	NS	NS	3.8	**34**	**5.7**	**8.9**	**5.6 J**	4.6	**6.2**	**10**
1,2,3-Trimethylbenzene		1.0 UJ	NS	40 UD	40 U	40 UDJ	NS	NS	2.0 UD	8.0 U	2.0 UDJ	10 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	10 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2 U	1.0 U	1.0 U
1,2,4-Trimethylbenzne	5	1.0 UJ	NS	40 UD	40 U	40 UDJ	NS	NS	2.0 UD	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane	0.04	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	4.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	4.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	**0.9 J**	1.0 UJ	2.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 UJ	NS	40 UD	40 U	40 UDJ	NS	NS	2.0 UD	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 UJ	NS	10 U	400 U	400 UDJ	NS	NS	10 U	80 U	20 UDJ	20 U	NS	NS	20 U *	20 U	10 U	10 U	10 UJ	20 U	10 U	10 U
2-Hexanone	50*	5.0 UJ	NS	5.0 U	200 U	200 UDJ	NS	NS	5.0 U	40 U	10 UDJ	20 U	NS	NS	10 U	10 U	5.0 U	5.0 U	5.0 UJ	20 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)		5.0 UJ	NS	5.0 U	200 U	200 UDJ	NS	NS	5.0 U	40 U	10 UDJ	20 U	NS	NS	10 U	10 U	5.0 U	5.0 U	5.0 UJ	20 U	5.0 U	5.0 U
Acetone	50*	10 UJ	NS	10 U	400 U	400 UDJ	NS	NS	10	80 U	20 UDJ	20 U	NS	NS	7.4 J	20 U	9.9 J	3.8 J	8.1 UJ	20 U	8.1 J	10 U
Benzene	1	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	0.81 J	8.0 U	2.0 UDJ	0.55 J	NS	NS	2.0 U	0.87 J	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U*	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	3.6	3.1	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Chloroform	7	0.44 J	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Chloromethane		1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	2.2 J	NS	**180 D**	**210**	**490 DJ**	NS	NS	**120 D**	**190**	**96 DJ**	**85**	NS	NS	**81**	**130**	**18**	**20**	**19 J**	**19**	**21**	**24**
cis-1,3-Dichloropropene	0.4	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Cyclohexane		1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	3.9	**5.8 J**	**5.0 DJ**	2.8	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Isopropylbenzne (Cumene)	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 UJ	NS	2.5 U	100 U	100 UDJ	NS	NS	2.5 U	20 U	5.0 UDJ	20 U	NS	NS	5.0 U	5 U	2.5 U	2.5 U	2.5 UJ	20 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	**8.4**	2.0 UDJ	2.0 U	NS	NS	2.0 U	1.8 J	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Styrene	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.1	8.0 U	0.97 DJ	0.89 J	NS	NS	0.84 J	1.1 J	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Toluene	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 UJ	NS	2.9	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 UJ	NS	**32**	40 U	**2900 DJ**	NS	NS	**45**	**71**	**47 DJ**	**49**	NS	NS	**45**	**63**	**25**	**28**	**24 J**	**22**	**25**	**28**
Trichlorofluoromethane	5	1.0 UJ	NS	1.0 U	40 U	40 UDJ	NS	NS	1.0 U	8.0 U	2.0 UDJ	2.0 U	NS	NS	2.0 U	2 U	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 UJ	NS	**3.7**	40 U	40 UDJ	NS	NS	**12**	**21**	**13 DJ**	**9.4**	NS	NS	**5.2**	**11**	1.0 U	1.0 U	1.0 UJ	2.0 U	1.0 U	1.0 U
Xylenes, Total		2.0 UJ	NS	2.0 U	80 U	80 UDJ	NS	NS	2.0 U	16.0 U	4.0 UDJ	4.0 U	NS	NS	4.0 U	4 U	2.0 U	2.0 U	2.0 UJ	4.0 U	2.0 U	2.0 U
Total VOCs		2.64	NS	3047	4060	14060	NS	NS	332	764	344	269	NS	NS	282	644	117	128	126	99.1	127.2	130
Total VOCs (w/o Acteone or Methlyene Chloride)		2.64	NS	3047	4060	14060	NS	NS	322	756	344	269	NS	NS	275	642	107	124	118	99.1	119.1	130

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-27S 11/4/2015 Intermediate ug/L	4009-27S 3/28/2016 Intermediate ug/L	4009-27S 6/30/2016 Intermediate ug/L	4009-27S 9/29/2016 Intermediate ug/L	4009-27S 11/28/2016 Intermediate ug/L	4009-27S** 4/10/2017 Intermediate ug/L	4009-27S** 6/20/2017 Intermediate ug/L	4009-27I 2/20/2014 Intermediate ug/L	4009-27I 5/28/2014 Intermediate ug/L	4009-27I 8/28/2014 Intermediate ug/L	4009-27I 12/9/2014 Intermediate ug/L	4009-27I 4/20/2015 Intermediate ug/L	4009-27I 7/29/2015 Intermediate ug/L	4009-27I 11/4/2015 Intermediate ug/L	4009-27I 3/28/2016 Intermediate ug/L	4009-27I 6/30/2016 Intermediate ug/L
1,1,1-Trichloroethane	5	**61**	**58**	**54**	**54**	**61**	**54**	**46**	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
1,1,2,2-Tetrachloroethane	5	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 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		3.5	2.9	2.7	2.4	2.6	3.0	2.4	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
1,1,2-Trichloroethane	1	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 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	2.4	2.4	2.1	2.0	2.5	2.4	2.1	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
1,1-Dichloroethene	5	**7.0**	4.5	5.0	4.9	**8.8**	**5.1**	**9.1**	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
1,2,3-Trimethylbenzene		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 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	20 U *	20 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	10 U	10 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	10 U	10 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	10 U	10 U	10 U	10 U	20 U	20 U	5.8 J	10 U	7.9 J	10 U	9.3 J	10 U	10 U	10 U	10 U
Benzene	1	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	0.71 J	1.0 U	1.0 U	1.0 U	1.0 U	0.61 J	0.95 J
Bromodichloromethane	50	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 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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
Carbon tetrachloride	5	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 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	2.0 U	2.0 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	1.0 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 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	2.0 U	2.0 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	2.0 U	2.0 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	**21**	**22**	**20**	**20**	**23**	**20**	**17**	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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	2.0 U	2.0 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	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
Methyl Cyclohexane		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 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	0.48 J	1.0 U	1.0 U	1.0 U	2.0 U	1.2 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
Methyl Tert Butyl Ether	10	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 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	2.0 U	2.0 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	2.0 U	2.0 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	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 UJ	0.77 J	0.87 J	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	2.0 U	2.0 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	2.0 U	2.0 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	**25**	**24**	**23**	**22**	**24**	**22**	**24**	1.4	1.1	1.2 J	0.34 J	1.0 U	1.9	1.0 U	1.4	0.84 J
Trichlorofluoromethane	5	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 UJ	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	1.2	1.0 U	1.0 U	2.0 U	2.0 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
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 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		120	114	108	105	119	107	101.8	7.20	1.47	11.1	1.97	10.17	2.21	0.61	1.79	3.49
Total VOCs (w/o Acteone or Methlyene Chloride)		120	114	108	105	119	107	100.6	1.40	1.47	3.21	1.97	0.87	2.21	0.61	1.79	3.49

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-27I 9/29/2016 Intermediate ug/L	4009-27I 11/28/2016 Intermediate ug/L	DUP_01[2] 4/10/2017 Intermediate ug/L	4009-27I 6/20/2017 Intermediate ug/L	4009-27D 2/20/2014 Deep ug/L	4009-27D 5/28/2014 Deep ug/L	4009-27D 8/28/2014 Deep ug/L	4009-27D 12/9/2014 Deep ug/L	4009-27D 4/20/2015 Deep ug/L	4009-27D 7/29/2015 Deep ug/L	4009-27D 11/4/2015 Deep ug/L	4009-27D 3/28/2016 Deep ug/L	4009-27D 6/30/2016 Deep ug/L	4009-27D 9/29/2016 Deep ug/L	4009-27D 11/28/2016 Deep ug/L	4009-27D** 4/10/2017 Deep ug/L	4009-27D 6/20/2017 Deep ug/L	4009-28 2/20/2014 Deep ug/L	4009-28 5/28/2014 Deep ug/L	4009-28 8/28/2014 Deep ug/L	4009-28 12/9/2014 Deep 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 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	1.3	2.7	1.0 U	3.0
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 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 U	0.4 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 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 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	0.28 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 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	0.3 J	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 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	5.0 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 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 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 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	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 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 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 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 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 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 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 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 U *	10 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	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 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	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 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	10 U
Acetone	50*	10 U	10 U	6.4 J	3.3 J	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	7.9 J	3.7 J	6.8 J	10 U
Benzene	1	**4.6**	**1.5**	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	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 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 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 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 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 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 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 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 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 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 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	0.25 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 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 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 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 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 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 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 U	2.5 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	2.5 U	2.5 U	10 U
Methyl Cyclohexane		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 UJ	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	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 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 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 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 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 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 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	0.75 J	1.7	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 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 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	1.0 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		4.60	1.50	7.15	5.40	9.80	4.80	8.48	0.0	7.10	0.0	0.0	0.60	0.0	0.0	0.0	3.9	3.5	9.20	6.71	6.80	3.53
Total VOCs (w/o Acteone or Methlyene Chloride)		4.60	1.50	0.75	2.10	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30	3.01	0.0	3.53

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-28 4/20/2015 Deep ug/L	4009-28 7/29/2015 Deep ug/L	4009-28 11/4/2015 Deep ug/L	4009-28 3/28/2016 Deep ug/L	4009-28 6/30/2016 Deep ug/L	4009-28 9/29/2016 Deep ug/L	4009-28 11/28/2016 Deep ug/L	4009-28 4/10/2017 Deep ug/L	4009-28 6/20/2017 Deep ug/L	4009-29S 2/20/2014 Intermediate ug/L	4009-29S 5/28/2014 Intermediate ug/L	4009-29S 8/28/2014 Intermediate ug/L	4009-29S 12/9/2014 Intermediate ug/L	4009-29S 4/20/2015 Intermediate ug/L	4009-29S 7/29/2015 Intermediate ug/L	4009-29S 11/4/2015 Intermediate ug/L	4009-29S 3/28/2016 Intermediate ug/L	4009-29S 6/30/2016 Intermediate ug/L	4009-29S 9/29/2016 Intermediate ug/L	4009-29S 11/28/2016 Intermediate ug/L	4009-29S** 4/10/2017 Intermediate ug/L
1,1,1-Trichloroethane	5	2.9	2.9	2.3	1.9	2.5	2.5	2.5	1.0 U	1.0 U	**710 D**	**650**	**1000 DJ**	**480**	**830**	**850**	**760**	**800 D**	**460**	**430**	**23**	**480**
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	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
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	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
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	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
1,1-Dichloroethane	5	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	**130 D**	**35**	**46 D**	**29**	**38**	**55**	**49**	**58**	**69**	**52**	**50**	**82**
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	**92**	**89**	**62 D**	**33**	**37**	**130**	**84**	**45**	**33**	**27**	3.2	**32**
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	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
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	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
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	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
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	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
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	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
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	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
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	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
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	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
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	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
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	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
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	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
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U *	10 U	10 U	100 U	100 UD	170 U	200 U	200 U	200 U	200 U	200 U	10 U	20 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	50 U	50 UD	170 U	100 U	100 U	100 U	100 U	100 U	5.0 U	10 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	50 U	50 UD	170 U	100 U	100 U	100 U	100 U	100 U	5.0 U	10 U	5.0 U
Acetone	50*	6.1 J	10 U	10.0 U	10.0 U	10 U	10 U	10 U	9.3 J	4.4 J	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
Benzene	1	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	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	**98**	**2.7**
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	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
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	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
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	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
Carbon disulfide		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	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
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	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
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	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
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	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
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	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
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	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
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	**260 D**	**340**	**410 D**	**270**	**320**	**480**	**310**	**390 D**	**190**	**200**	**59**	**180**
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	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
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	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
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	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
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	1.3	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
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	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
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	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
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	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
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	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
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	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
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	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
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	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
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	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
Toluene	5	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	10 U	10 UD	17 U	20 U	20 U	20 U	20 U	20 U	1.0 U	1.5	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	1.5	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
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	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
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	**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**
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	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
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	**43**	**15**	**42 D**	**16 J**	**24**	**65**	**82**	**120 D**	**78**	**95**	**2.5**	**130**
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	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
Total VOCs		9.22	2.90	0.0	2.90	2.50	2.50	2.50	14.00	8.4	1560	1129	1594	837	1257.7	1587	1285	1434	830	804	245	936
Total VOCs (w/o Acteone or Methlyene Chloride)		3.12	2.90	0.0	2.90	2.50	2.50	2.50	4.70	4.0	1554	1129	1594	832	1257.7	1587	1285	1434	830	804	237	931

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-29S 6/20/2017 Intermediate ug/L	4009-29I 4/20/2015 Intermediate ug/L	4009-29I 7/29/2015 Intermediate ug/L	DUP_02[1] 7/29/2015 Intermediate ug/L	4009-29I 11/4/2015 Intermediate ug/L	DUP_02[1] 11/4/2015 Intermediate ug/L	4009-29I 3/28/2016 Intermediate ug/L	DUP_02[1] 3/28/2016 Intermediate ug/L	4009-29I 6/30/2016 Intermediate ug/L	DUP_02[2] 6/30/2016 Intermediate ug/L	4009-29I 9/29/2016 Intermediate ug/L	4009-29I 11/28/2016 Intermediate ug/L	DUP_02[2] 11/28/2016 Intermediate ug/L	4009-29I** 4/10/2017 Intermediate ug/L	4009-29I 6/20/2017 Intermediate ug/L	DUP-02 6/20/2017 Intermediate ug/L	4009-29D 2/20/2014 Deep ug/L	4009-29D 5/28/2014 Deep ug/L	4009-29D 8/28/2014 Deep ug/L	4009-29D 12/9/2014 Deep ug/L	4009-29D 4/20/2015 Deep ug/L
1,1,1-Trichloroethane	5	**440**	**1500**	**1700**	**1700**	**1400**	**1300**	**1400 D**	**1300 D**	**1200**	**1300**	1.0 U	2.0 U	2.0 U	**1000**	**1200**	**1200**	1.0 U	**80**	**1200 DJ**	**170**	**290**
1,1,2,2-Tetrachloroethane	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		5.5 J	15 J	40 U	20	40 U	20 U	14	15	15 J	15 J	1.0 U	2.0 U	2.0 U	12	14 J	11	1.0 U	1.1	14	2.9 J	3.6 J
1,1,2-Trichloroethane	1	10 U	40 U	40 U	20 U	40 U	20 U	0.57 J	0.77 J	25 U	25 U	1.0 U	2.0 U	2.0 U	0.60 J	20 U	10 U	1.0 U	1.0 U	0.65 J	5.7 U	5.0 U
1,1-Dichloroethane	5	**52**	**100**	**100**	**97**	**90**	**81**	**69**	**73**	**71**	**74**	4.4	3.9	4.0	**89**	**82**	**76**	1.1	**16**	**150 DJ**	**27**	**51**
1,1-Dichloroethene	5	**67**	**85**	**240**	**240**	**200**	**160**	**77**	**81**	**93**	**92**	1.9	2.0 U	2.0 U	**80**	**190**	**180**	1.0 U	**12**	**130 DJ**	**27**	**29**
1,2,3-Trimethylbenzene		10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	29 U	5.0 U
1,2,4-Trichlorobenzene	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
1,2,4-Trimethylbenzne	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
1,2-Dibromo-3-Chloropropane	0.04	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	11 U	5.0 U
1,2-Dibromoethane (Ethylene Dibromide)	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
1,2-Dichlorobenzene	3	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
1,2-Dichloroethane	0.6	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	0.72 J	5.7 U	5.0 U
1,2-Dichloropropane	1	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
1,3-Dichlorobenzene	3	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
1,4-Dichlorobenzene	3	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
2-Butanone (MEK)	50	100 U	400 U	400 U	200 U	400 U	200 U	10 U	10 U	250 U	250 U	10 U	20 U	20 U	10 U *	200 U	100 U	10 U	10 U	10 U	57 U	50 U
2-Hexanone	50*	50 U	200 U	200 U	100 U	200 U	100 U	5.0 U	5.0 U	130 U	130 U	5.0 U	10 U	10 U	5.0 U	100 U	50 U	5.0 U	5.0 U	5.0 U	57 U	25 U
4-Methyl-2-pentanone (MIBK)		50 U	200 U	200 U	100 U	200 U	100 U	5.0 U	5.0 U	130 U	130 U	5.0 U	10 U	10 U	5.0 U	100 U	50 U	5.0 U	5.0 U	5.0 U	57 U	25 U
Acetone	50*	100 U	400 U	400 U	200 U	400 U	200 U	10 U	10 U	250 U	250 U	5.6 J	6.1 J	20 U	5.2 J	200 U	100 U	6.9 J	10 U	10 U	57 U	50 U
Benzene	1	10 U	40 U	40 U	20 U	40 U	20 U	0.48 J	0.57 J	25 U	25 U	**75**	**120**	**110**	0.71 J	20 U	10 U	1.0 U	1.0 U	0.72 J	5.7 U	5.0 U
Bromodichloromethane	50	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Bromoform	50*	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Bromomethane	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Carbon disulfide		10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	0.35 J	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Carbon tetrachloride	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Chlorobenzene	5	10 U	40 U	40 U	20 U	40 U	20 U	1.3	1.5	25 U	25 U	1.0 U	2.0 U	2.0 U	1.1	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Chloroethane	5	10 U	40 U	40 U	20 U	40 U	20 U	2.7	3.1	25 U	25 U	**51**	**29**	**27**	3.9	20 U	10 U	1.0 U	1.4	**8.8 DJ**	5.7 U	2.5 J
Chloroform	7	10 U	40 U	40 U	20 U	40 U	20 U	0.77 J	0.80 J	25 U	25 U	1.0 U	2.0 U	2.0 U	0.67 J	20 U	10 U	1.0 U	1.0 U	0.83 J	5.7 U	5.0 U
Chloromethane		10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
cis-1,2-Dichloroethene	5	**210**	**380**	**530**	**520**	**410**	**390**	**420 D**	**400 D**	**340**	**340**	**45**	**41**	**41**	**330**	**360**	**340**	1.4	**25**	**400 DJ**	**150**	**210**
cis-1,3-Dichloropropene	0.4	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Cyclohexane		10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Dibromochloromethane	50	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Dichlorodifluoromethane	5	10 U	40 U	40 U	20 U	40 U	20 U	1.9	2.1	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.5	5.7 U	5.0 U
Ethylbenzene	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Isopropylbenzne (Cumene)	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Methyl Acetate		25 U	100 U	100 U	50 U	100 U	50 U	2.5 U	2.5 U	63 U	63 U	2.5 U	5.0 U	5.0 U	2.5 U	50 U	25 U	2.5 U	2.5 U	2.5 U	57 U	13 U
Methyl Cyclohexane		10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Methylene Chloride	5	7.1 J	**18 J**	40 U	20 U	40 U	20 U	0.60 J	0.48 J	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	**15 J**	**6.8 J**	1.0 U	1.0 U	1.0 U	2.0 J*	5.0 U
Methyl Tert Butyl Ether	10	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Styrene	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Tetrachloroethene	5	10 U	40 U	40 U	20 U	40 U	20 U	1.8	1.8	25 U	25 U	1.0 U	2.0 U	2.0 U	1.4	20 U	10 U	1.0 U	1.0 U	1.0	5.7 U	5.0 U
Toluene	5	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	2.2	1.7 J	1.7 J	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
trans-1,2-Dichloroethene	5	10 U	40 U	40 U	20 U	40 U	20 U	1.3	1.2	25 U	25 U	1.0 U	2.0 U	2.0 U	1.2	20 U	10 U	1.0 U	1.0 U	1.8	5.7 U	5.0 U
trans-1,3-Dichloropropene	0.4	10 U	40 U	40 U	20 U	40 U	20 U	1.0 U	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Trichloroethene	5	**27**	**410**	**550**	**550**	**480**	**440**	**450 D**	**410 D**	**370**	**390**	3.5	2.0	2.1	**340**	**390**	**360**	1.8	**17**	**400 DJ**	**26**	**20**
Trichlorofluoromethane	5	10 U	40 U	40 U	20 U	40 U	20 U	0.92 J	1.0 U	25 U	25 U	1.0 U	2.0 U	2.0 U	1.0 U	20 U	10 U	1.0 U	1.0 U	1.0 U	5.7 U	5.0 U
Vinyl chloride	2	**68**	**92**	**140**	**140**	**110**	**110**	**94**	**99**	**85**	**100**	2.0	2.0	2.0 U	**130**	**110**	**100**	**4.7**	**12**	**170 DJ**	**34**	**55**
Xylenes, Total		20 U	80 U	80 U	40 U	80 U	40 U	2.0 U	2.0 U	50 U	50 U	2.0 U	4.0 U	4.0 U	2.0 U	40 U	20 U	2.0 U	2.0 U	2.0 U	11 U	10 U
Total VOCs		876.6	2600	3260	3267	2690	2481	2536	2390	2174	2311	191	206	186	1995	2361	2274	15.9	165	2480	439	674
Total VOCs (w/o Acteone or Methlyene Chloride)		870	2582	3260	3267	2690	2481	2536	2390	2174	2311	185	200	186	1990	2346	2267	9.00	165	2480	437	674

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
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	4009-30	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
Sampling Date	GA	7/29/2015	11/4/2015	3/28/2016	6/30/2016	9/29/2016	11/28/2016	4/10/2017	6/20/2017	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	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	Deep	Deep	Deep	Deep	Deep	Deep	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	ug/L	ug/L
1,1,1-Trichloroethane	5	**30**	**14**	**23**	**16**	**14**	**21**	**270**	**31**	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
1,1,2,2-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	0.40 J	1.0 U	1.0 U	1.0 U	4.2	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
1,1,2-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	**12**	4.2	**5.5**	4.0	3.7	**6.3**	**44**	**8.1**	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	**5.7**	2.0	2.0	1.3	1.1	2.8	**26**	2.0	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	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	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-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*	10 U	10 U	10 U	10 U	10 U	10 U	4.5 J	3.5 J	7.0 J	10 U	10 U	10 U	7.3 J	4.9 J	10 U	7.2 J	5.3 J	6.9 J	10 U	10 U	10 U	10 U
Benzene	1	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	0.44 J	1.0 U	0.44 J	0.56 J	1.0	1.0 U	**1.1**	0.75 J	**2.5**	0.60 J	**2.2**	0.43 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
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	1.0 U	1.0 U	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	1.2	1.2	1.5	2.0	1.0 U	4.4	2.2	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
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	**37**	**8.0**	**9.9**	**5.7**	**5.4**	**9.5**	**130**	**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
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	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	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	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	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
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	0.78 J	0.94 J	3.3	2.0	1.8	1.7	**61**	**7.2**	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
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	**7.8**	**7.2**	**8.3**	**7.5**	**6.5**	**15**	**73**	**11**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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		94.0	37.54	54.08	38.0	34.5	56.3	612.6	75.0	8.84	0.82	0.96	1.40	8.39	5.98	1.93	8.50	7.2	7.65	2.50	0.60	2.20	0.43
Total VOCs (w/o Acteone or Methlyene Chloride)		94.0	37.54	53.60	38.0	34.5	56.3	612.6	71.5	1.84	0.82	0.96	0.91	1.09	1.08	1.93	1.30	1.89	0.75	2.50	0.60	2.20	0.43

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

Table 2-3 Summary of Groundwater Results
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	NYSDEC GA Standard ug/L	4009-30A 9/29/2016 Shallow ug/L	4009-30A 11/28/2016 Shallow ug/L	4009-30A 4/10/2017 Shallow ug/L	4009-30A 6/20/2017 Shallow ug/L	Well 1-1 4/20/2015 Deep ug/L	Well 1-1 7/29/2015 Deep ug/L	Well 1-1 11/4/2015 Deep ug/L	Well 1-1 3/28/2016 Deep ug/L	Well 1-1 6/30/2016 Deep ug/L	Well 1-1 9/29/2016 Deep ug/L	Well 1-1 11/28/2016 Deep ug/L	Well 1-1^ 4/10/2017 Deep ug/L	Well 1-1 6/20/2017 Deep ug/L
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	**220**	**240**	**350**	**250**	**210**	**310**	**220**	NS	**360**
1,1,2,2-Tetrachloroethane	5	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
1,1,2-Trichloro-1,2,2-Trifluoroethane		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
1,1,2-Trichloroethane	1	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
1,1-Dichloroethane	5	0.51 J	0.63 J	1.0 U	1.0 U	**15**	**18**	**28**	**22**	**14**	**22**	**18**	NS	**32**
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	**10**	**30**	**41**	**16**	5.0 U	**20**	**31**	NS	**57**
1,2,3-Trimethylbenzene		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
1,2,4-Trichlorobenzene	5	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
1,2,4-Trimethylbenzne	5	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
1,2-Dibromo-3-Chloropropane	0.04	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
1,2-Dibromoethane (Ethylene Dibromide)	5	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
1,2-Dichlorobenzene	3	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
1,2-Dichloroethane	0.6	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
1,2-Dichloropropane	1	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
1,3,5-Trimethylbenzene (Mesitylene)	5	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
1,3-Dichlorobenzene	3	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
1,4-Dichlorobenzene	3	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
2-Butanone (MEK)	50	10 U	10 U	10 U *	10 U	40 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U
2-Hexanone	50*	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
4-Methyl-2-pentanone (MIBK)		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
Acetone	50*	10 U	10 U	5.6 J	3.6 J	40 U	50 U	50 U	50 U	50 U	50 U	50 U	NS	50 U
Benzene	1	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
Bromodichloromethane	50	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
Bromoform	50*	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
Bromomethane	5	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
Carbon disulfide		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
Carbon tetrachloride	5	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
Chlorobenzene	5	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
Chloroethane	5	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
Chloroform	7	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
Chloromethane		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
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	**39**	**66**	**82**	**68**	**52**	**77**	**62**	NS	**96**
cis-1,3-Dichloropropene	0.4	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
Cyclohexane		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
Dibromochloromethane	50	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
Dichlorodifluoromethane	5	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
Ethylbenzene	5	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
Isopropylbenzne (Cumene)	5	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
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 U	10 U	13 U	13 U	13 U	13 U	13 U	13 U	NS	13 U
Methyl Cyclohexane		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
Methylene Chloride	5	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
Methyl Tert Butyl Ether	10	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
Styrene	5	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
Tetrachloroethene	5	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
Toluene	5	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
trans-1,2-Dichloroethene	5	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
trans-1,3-Dichloropropene	0.4	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
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	**41**	**64**	**81**	**59**	**56**	**69**	**66**	NS	**89**
Trichlorofluoromethane	5	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
Vinyl chloride	2	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
Xylenes, Total		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
Total VOCs		0.51	0.63	5.60	3.6	329	418	582	425	336	504	397		641
Total VOCs (w/o Acteone or Methlyene Chloride)		0.51	0.63	0.00	0.0	329	418	582	419	336	504	397		641

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

Table 2-4 Summary of Groundwater Results - 1, 4- Dioxane and PFAS
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	USEPA Health Advisory Limit (HAL) for drinking water (ng/L)	4009-7 6/28/2017 Shallow	4009-8 6/28/2017 Intermediate	4009-9 6/26/2017 Shallow	4009-10 6/26/2017 Shallow	4009-11 6/26/2017 Deep	4009-11A 6/26/2017 Shallow	4009-12 6/23/2017 Deep
1,4 Dioxane (µg/L)	--	0.73	2.8	0.4 U	0.4 U	3.8	0.4 U	3.4
Perfluorobutanesulfonic acid (PFBS)	--	10.2	3.22	1.23 J	4.85	2.0 U	2.0 U	2.26
Perfluorohexanesulfonic acid (PFHxS)	--	2.0 U	5.02	2.01	17.9	26	2.88	3.16
Perfluoroheptanoic acid (PFHpA)	--	2.0 U	1.68 J	1.49 J	1.3 J	0.81 J	2.0 U	2.51
Perfluorooctanic acid (PFOA)	70	9.75	12.7	15	6.32	2.94	8.59	6.76
Perfluorooctanesulfonic acid (PFOS)	70	7.02	9.51	15.5	6.19	2.0 U	6.8	2.0 U
Perfluorononanoic acid (PFNA)	--	6.18	1.06 J	2.73	2.0 U	3.83	2.0 U	2.0 U
Total PFAS	70	33.15	33.19	37.96	36.6	33.58	18.3	14.7

Notes
USEPA Health Advisory Limit (HAL) for drinking water
- Concentration exceeds Guidance Value
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
ng/L - Nanograms/Liter
-- No Guidance Value
Unless otherwise noted, sample results are in ng/L

Table 2-4 Summary of Groundwater Results - 1, 4- Dioxane and PFAS
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	USEPA Health Advisory Limit (HAL) for drinking water (ng/L)	4009-13 6/25/2017 Deep	4009-13A 6/25/2017 Shallow	4009-14 6/23/2017 Deep	4009-15 6/23/2017 Deep	4009-16 6/21/2017 Deep	4009-16A 6/21/2017 Shallow	4009-18 6/21/2017 Deep
1,4 Dioxane (µg/L)	--	0.4 U	0.4 U	0.4 U	0.4 U	0.91	0.4 U	0.40 U
Perfluorobutanesulfonic acid (PFBS)	--	2.0 U	12.9	2.0 U	2.0 U	2.0 U	2.43	2.0 U
Perfluorohexanesulfonic acid (PFHxS)	--	6.38	2.02	6.79	2.0 U	5.01	4.28	1.11 J
Perfluoroheptanoic acid (PFHpA)	--	2.0 U	2.52	2.0 U	2.0 U	2.0 U	2.67	2.0 U
Perfluorooctanic acid (PFOA)	70	1.21 J	5.63	2.0 U	2.0 U	6.22	8.88	2.25
Perfluorooctanesulfonic acid (PFOS)	70	1.81 J	2.0 U	2.0 U	2.0 U	2.0 U	9.18	2.28
Perfluorononanoic acid (PFNA)	--	2.0 U	2.0 U	2.0 U	2.0 U	3.05	3.65	10.7
Total PFAS	70	9.4	23.1	6.8	0.0	14.28	31.09	16.34

Notes
USEPA Health Advisory Limit (HAL) for drinking water
- Concentration exceeds Guidance Value
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
ng/L - Nanograms/Liter
-- No Guidance Value
Unless otherwise noted, sample results are in ng/L

Table 2-4 Summary of Groundwater Results - 1, 4- Dioxane and PFAS
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	USEPA Health Advisory Limit (HAL) for drinking water (ng/L)	4009-19 6/22/2017 Deep	4009-21 6/21/2017 Deep	4009-22 6/23/2017 Deep	4009-26 6/28/2017 Intermediate	4009-27S 6/27/2017 Intermediate	4009-27I 6/27/2017 Intermediate	4009-27D 6/27/2017 Deep
1,4 Dioxane (µg/L)	--	0.85	0.78	0.78	3.7	0.73	0.21 J	0.4 U
Perfluorobutanesulfonic acid (PFBS)	--	2.0 U	2.0 U	2.0 U	3.36	1.87 J	2.18	4.5
Perfluorohexanesulfonic acid (PFHxS)	--	2.0 U	2.0 U	2.09	4.37	1.12 J	1.86 J	3.14
Perfluoroheptanoic acid (PFHpA)	--	2.0 U	2.0 U	2.0 U	2.0 U	1.63 J	2.0 U	2.0 U
Perfluorooctanic acid (PFOA)	70	2.0 U	2.0 U	2.0 U	9.62	3.4	3.79	2.0 U
Perfluorooctanesulfonic acid (PFOS)	70	2.0 U	2.0 U	2.0 U	8.44	2.0 U	2.0 U	2.0 U
Perfluorononanoic acid (PFNA)	--	2.0 U	2.0 U	3.57	1.14 J	2.0 U	2.0 U	2.0 U
Total PFAS	70	0.0	0.0	5.66	26.93	4.3	7.8	7.7

Notes
USEPA Health Advisory Limit (HAL) for drinking water
- Concentration exceeds Guidance Value
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
ng/L - Nanograms/Liter
-- No Guidance Value
Unless otherwise noted, sample results are in ng/L

Table 2-4 Summary of Groundwater Results - 1, 4- Dioxane and PFAS
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Groundwater Monitoring Zone Units	USEPA Health Advisory Limit (HAL) for drinking water (ng/L)	4009-28 6/23/2017 Deep	4009-29S 6/27/2017 Intermediate	4009-29I 6/27/2017 Intermediate	4009-29D 6/27/2017 Deep	4009-30 6/22/2017 Deep	4009-30A 6/22/2017 Shallow	Well 1-2A Influent 6/21/2017 ug/L	Well 1-3 Influent 6/21/2017 ug/L
1,4 Dioxane (µg/L)	--	0.61	2.40	5.9	200	0.4 U	0.4 U	0.39 J	0.4 U
Perfluorobutanesulfonic acid (PFBS)	--	2.0 U	2.57	2.5	2.0 U	2.0 U	1.75 J	2.0 U	0.96 J
Perfluorohexanesulfonic acid (PFHxS)	--	2.0 U	2.63	3.51	2.0 U	0.9 J	3.65	2.0 U	3.07
Perfluoroheptanoic acid (PFHpA)	--	2.0 U	1.62 J	1.81 J	2.0 U	2.0 U	2.54	2.0 U	5.29
Perfluorooctanic acid (PFOA)	70	2.0 U	6.28	8.48	2.0 U	2.0 U	8.59	2.0 U	4.79
Perfluorooctanesulfonic acid (PFOS)	70	2.0 U	2.73	7.26	2.0 U	2.0 U	7.43	2.0 U	7.19
Perfluorononanoic acid (PFNA)	--	2.0 U	2.0 U	0.69 J	2.0 U	2.0 U	1.52 J	2.0 U	4.80
Total PFAS	70	0.0	15.8	24.25	0.0	0.9	25.48	0.0	26.10

Notes
USEPA Health Advisory Limit (HAL) for drinking water
- Concentration exceeds Guidance Value
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
ng/L - Nanograms/Liter
-- No Guidance Value
Unless otherwise noted, sample results are in ng/L

Table 2-5 Summary of Groundwater Results, PDB and Low-Flow Sampling Procedures
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-7		4009-8		4009-9		4009-10		4009-11		4009-11A	
Sampling Date	GA	6/20/2017	6/28/2017	6/20/2017	6/28/2017	6/20/2017	6/26/2017	6/20/2017	6/26/2017	6/20/2017	6/26/2017	6/20/2017	6/26/2017
Groundwater Monitoring Zone	Standard	Shallow		Intermediate		Shallow		Shallow		Deep		Shallow	
Units	ug/L	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow
1,1,1-Trichloroethane	5	1.0 U	1.0 U	**490**	**1500**	1.0 U	1.0 U	1.0 U	1.0 U	**170**	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.9	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	0.59 J	1.1	**45**	**86**	1.0 U	1.0 U	1.0 U	1.0 U	**43**	3.1	1.0 U	1.0 U
1,1-Dichloroethene	5	0.38 J	0.34 J	**80**	**38**	1.0 U	1.0 U	1.0 U	1.0 U	**27**	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	10 U	10 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
2-Butanone (MEK)	50	10 U	10 U	100 U	100 U	10 U	10 U	10 U	10 U	10 U	4.8 J	10 U	10 U
2-Hexanone	50*	5.0 U	5.0 U	50 U	50 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*	4.7 J	3.7 J	100 U	100 U	3.1 J	10 U	10 U	10 U	3.6 J	76	5.4 J	10 U
Benzene	1	1.0 U	0.45 J	10 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**13**	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8 J	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	3.7 J	**16**	1.0 U	1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	10 U	10 U	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	**41**	**48**	**190**	**260**	**10**	**12**	1.0 U	1.0 U	**35**	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	10 U	10 U	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 Cyclohexane		1.0 U	0.62 J	10 U	10 U	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	10 U	10 U	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	0.29 J	10 U	10 U	1.0 U	0.43 J	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 *	10 U	10 U *	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	10 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8 J	1.0 U	1.0 U
Trichloroethene	5	1.2	2.0	**160**	**220**	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	**4.6**	**10**	**15**	**15**	1.0 U	1.0 U	1.0 U	1.0 U	**37**	1.4	1.0 U	1.0 U
Total VOCs		52.5	66.5	983.7	2135	13.10	12.43	0.0	0.0	322	99.9	5.4	0.0
Total VOCs (w/o Acteone or Methlyene Chloride)		**48**	**63**	**983.7**	**2135**	**10.00**	**12.43**	**0.0**	**0.0**	**318**	**23.86**	**0.0**	**0.0**

Notes
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[2]-This is a duplicate sample from 4009-27I
µg/L - Micrograms per Liter

Table 2-5 Summary of Groundwater Results, PDB and Low-Flow Sampling Procedures
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-12	DUP-01	4009-12	4009-13		4009-13A		4009-14		4009-15	
Sampling Date	GA	6/20/2017	6/20/2017	6/23/2017	6/20/2017	6/26/2017	6/20/2017	6/26/2017	6/20/2017	6/23/2017	6/20/2017	6/23/2017
Groundwater Monitoring Zone	Standard	Deep			Deep		Shallow		Deep		Deep	
Units	ug/L	PDB	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow
1,1,1-Trichloroethane	5	**45**	**220**	**430**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 J	2.8	7.1 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
1,1-Dichloroethane	5	**9.2**	**20**	**30**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.56 J
1,1-Dichloroethene	5	**7.7**	**8.0**	**75**	1.0 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	2.0 U	1.0 U	10 U	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	20 U	10 U	100 U	10 U	10 U	10 U	10 U	10 U	10 U *	10 U	10 U *
2-Hexanone	50*	10 U	5.0 U	50 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*	20 U	3.3 J	100 U	4.2 J	10 U	4.1 J	10 U	3.4 J	10 U	9.5 J	3.4 J
Benzene	1	**2.8**	**2.1**	10 U	1.0 U	1.0 U	1.0 U	1.0 U	**9.2**	**2.5**	**12**	1.0 U
Carbon disulfide		2.0 U	1.0 U	10 U	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	2.0 U	1.2	10 U	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	2.0 U	1.0 U	10 U	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	**8.7**	**29**	**110**	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	2.0 U	1.0 U	10 U	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 Cyclohexane		2.0 U	1.0 U	10 U	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 J	1.0 U	10 U	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	2.0 U	1.0 U	10 U	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	2.0 U	1.0 U	10 U	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	2.0 U	1.0 U	10 U	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	**10**	**30**	**100**	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	**22**	**56**	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total VOCs		107	372	752	4.2	0.0	4.1	0.0	12.6	2.5	21.5	5.96
Total VOCs (w/o Acteone or Methlyene Chloride)		**106.4**	**369.1**	**752**	**0.0**	**0.0**	**0.0**	**0.0**	**9.2**	**2.5**	**12**	**2.56**

Notes
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[2]-This is a duplicate sample from 4009-27I
µg/L - Micrograms per Liter

Table 2-5 Summary of Groundwater Results, PDB and Low-Flow Sampling Procedures
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-16		4009-16A		4009-18		4009-19		4009-21	
Sampling Date	GA	6/20/2017	6/22/2017	6/20/2017	6/22/2017	6/20/2017	6/21/2017	6/20/2017	6/22/2017	6/20/2017	6/21/2017
Groundwater Monitoring Zone	Standard	Deep		Shallow		Deep		Deep		Deep	
Units	ug/L	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow
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
1,1,2-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
1,1-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
1,1-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
1,2-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
2-Butanone (MEK)	50	10.0 U	3.6 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	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	4.2 J	140	3.8 J	10 U	4.1 J	10 U	3.4 J	10 U	4.5 J	10 U
Benzene	1	**18**	**47**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**25**	0.77 J
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
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
Chloroform	7	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
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
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
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
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	0.44 J	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
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
Toluene	5	1.0 U	0.93 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
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
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
Total VOCs		22.2	191.5	3.8	0.58	4.1	0.0	3.4	0.0	29.9	0.77
Total VOCs (w/o Acteone or Methlyene Chloride)		**18**	**51.5**	**0.0**	**0.58**	**0.0**	**0.0**	**0.0**	**0.0**	**25.0**	**0.77**

Notes
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µg/L - Micrograms per Liter

Table 2-5 Summary of Groundwater Results, PDB and Low-Flow Sampling Procedures
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-22		4009-26		4009-27S		4009-27I		4009-27D	
Sampling Date	GA	6/20/2017	6/23/2017	6/20/2017	6/28/2017	6/20/2017	6/27/2017	6/20/2017	6/27/2017	6/20/2017	6/27/2017
Groundwater Monitoring Zone	Standard	Deep		Intermediate		Intermediate		Intermediate		Deep	
Units	ug/L	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow
1,1,1-Trichloroethane	5	1.0 U	1.0 U	**350**	**410**	**46**	**45**	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	5.7	5.6	2.4	2.0	0.4 J	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	**43**	**46**	2.1	2.0	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	**34**	**18**	**9.1**	4.0	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	2 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	2.8 J	20 U	20 U	20 U	20 U	10 U	10 U	10 U	10 U
2-Hexanone	50*	5.0 U	1.5 J	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	4.2 J	9.8 J	20 U	20 U	20 U	20 U	3.3 J	10 U	3.5 J	10 U
Benzene	1	**1.1**	**1.1**	0.87 J	0.89 J	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	2 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	3.1	3.0	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	2 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	**130**	**140**	**17**	**19**	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	2 U	2.1	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Cyclohexane		1.0 U	1.0 U	2 U	0.43 J	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	0.69 J	1.0 U	1.8 J	1.0 J B	1.2 J	2.0 J	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	2 U	0.37 J	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.1 J	1.3 J *	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	0.88 J	1.3	2 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	**63**	**69**	**24**	**20**	1.7	1.5	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	**11**	**10**	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total VOCs		6.9	16.5	644	689.7	101.8	94.0	5.40	1.50	3.5	0.0
Total VOCs (w/o Acteone or Methlyene Chloride)		**1.98**	**6.7**	**642**	**688.7**	**101**	**92**	**2.10**	**1.50**	**0.0**	**0.0**

Notes
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µg/L - Micrograms per Liter

Table 2-5 Summary of Groundwater Results, PDB and Low-Flow Sampling Procedures
Remedial Site Optimization Report Second Quarter 2017
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC	4009-28		4009-29S		4009-29I	DUP-02	4009-29I	4009-29D		4009-30		4009-30A	
Sampling Date	GA	6/20/2017	6/23/2017	6/20/2017	6/27/2017	6/20/2017	6/20/2017	6/27/2017	6/20/2017	6/27/2017	6/20/2017	6/22/2017	6/20/2017	6/22/2017
Groundwater Monitoring Zone	Standard	Deep		Intermediate		Intermediate			Deep		Deep		Shallow	
Units	ug/L	PDB	Low Flow	PDB	Low Flow	PDB	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow	PDB	Low Flow
1,1,1-Trichloroethane	5	1.0 U	2.6	**440**	**460**	**1200**	**1200**	**1100**	**31**	**9.7**	1.0 U	2.4	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.0 U	5.5 J	10 U	14 J	11	14 J	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	**52**	**44**	**82**	**76**	**75**	**8.1**	3.0	0.79 J	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	**67**	**30**	**190**	**180**	**72**	2.0	0.65 J	1.0 U	0.4 J	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	10 U	10 U	20 U	10 U	20 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 *	100 U	100 U	200 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50*	5.0 U	5.0 U *	50 U	50 U	100 U	50 U	100 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50*	4.4 J	10 U	100 U	100 U	200 U	100 U	200 U	3.5 J	10.0 U	5.3 J	10 U	3.6 J	10 U
Benzene	1	**1.6**	1.0 U	10 U	10 U	20 U	10 U	20 U	1.0 U	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U
Carbon disulfide		0.2 J	1.0 U	10 U	10 U	20 U	10 U	20 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	10 U	10 U	20 U	10 U	20 U	2.2	1.3	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	10 U	10 U	20 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.43 J
cis-1,2-Dichloroethene	5	1.0 U	1.0 U	**210**	**190**	**360**	**340**	**360**	**10**	4.4	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	10 U	10 U	20 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Cyclohexane		1.0 U	1.0 U	10 U	10 U	20 U	10 U	20 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	7.1 J	10 U	**15 J**	**6.8 J**	20 U	1.0 U	0.45 J	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	10 U	10 U	20 U	10 U	20 U	1.0 U	0.97 J	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	10 U	10 U	20 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	2.2	1.0 U	10 U	10 U	20 U	10 U	20 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	**27**	**100**	**390**	**360**	**340**	**7.2**	2.5	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	**68**	**52**	**110**	**100**	**110**	**11**	**5.0**	1.0 U	1.0 U	1.0 U	1.0 U
Total VOCs		8.4	2.6	876.6	896.0	2361	2274	2091	73.0	28.0	7.2	2.8	3.6	0.43
Total VOCs (w/o Acteone or Methlyene Chloride)		**4.0**	**2.6**	**870**	**896**	**2346**	**2267**	**2071**	**69.5**	**27.0**	**1.89**	**2.8**	**0.0**	**0.43**

Notes
NYSDEC GA GW Standard - New York State Department of Environmental Conservation Groundwater Standard
- Concentration exceeds NYSDEC Class GA Standard
Only detections are shown on table
U - Compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or reported concentration is estimated
[1]-This is a duplicate sample from 4009-12
[2]-This is a duplicate sample from 4009-27I
µg/L - Micrograms per Liter

Table 2-6 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 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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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	NS	NS	NS
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
Total VOCs		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 2-6 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC GA	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	Standard	4/9/2015	4/20/2015	5/6/2015	5/12/2015	6/9/2015	6/25/2015	7/29/2015	8/11/2015	8/28/2015	9/15/2015	9/24/2015	10/12/2015	11/4/2015	11/10/2015	12/21/2015	1/19/2016	1/27/2016	2/16/2016
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	0.5 U	1.0 U	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
1,1,2,2-Tetrachloroethane	5	0.5 U	1.0 U	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
1,1,2-Trichloro-1,2,2-Trifluoroethane		NA	1.0 U	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
1,1,2-Trichloroethane	1	0.5 U	1.0 U	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
1,1-Dichloroethane	5	0.5 U	1.0 U	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
1,1-Dichloroethene	5	0.5 U	1.0 U	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
1,2,3-Trimethylbenzene		0.5 U	1.0 U	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
1,2,4-Trichlorobenzene	5	0.5 U	1.0 U	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
1,2,4-Trimethylbenzne	5	0.5 U	1.0 U	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
1,2-Dibromo-3-Chloropropane	0.04	NA	1.0 U	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
1,2-Dibromoethane (Ethylene Dibromide)	5	NA	1.0 U	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
1,2-Dichlorobenzene	3	0.5 U	1.0 U	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
1,2-Dichloroethane	0.6	0.5 U	1.0 U	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
1,2-Dichloropropane	1	0.5 U	1.0 U	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
1,3,5-Trimethylbenzene (Mesitylene)	5	0.5 U	1.0 U	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
1,3-Dichlorobenzene	3	0.5 U	1.0 U	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
1,4-Dichlorobenzene	3	0.5 U	1.0 U	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
2-Butanone (MEK)	50	NA	10 U	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
2-Hexanone	50*	NA	5.0 U	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
4-Methyl-2-pentanone (MIBK)		NA	5.0 U	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
Acetone	50*	NA	10 U	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
Benzene	1	0.5 U	1.0 U	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
Bromodichloromethane	50	NA	1.0 U	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
Bromoform	50*	NA	1.0 U	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
Bromomethane	5	0.5 U	1.0 U	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
Carbon disulfide		NA	1.0 U	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
Carbon tetrachloride	5	0.5 U	1.0 U	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
Chlorobenzene	5	0.5 U	1.0 U	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
Chloroethane	5	0.5 U	1.0 U	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
Chloroform	7	NA	1.0 U	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
Chloromethane		0.5 U	1.0 U	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
cis-1,2-Dichloroethene	5	0.5 U	1.0 U	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
cis-1,3-Dichloropropene	0.4	0.5 U	1.0 U	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
Cyclohexane		NA	1.0 U	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
Dibromochloromethane	50	NA	1.0 U	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
Dichlorodifluoromethane	5	0.5 U	1.0 U	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
Ethylbenzene	5	0.5 U	1.0 U	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
Isopropylbenzne (Cumene)	5	0.5 U	1.0 U	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
Methyl Acetate		NA	2.5 U	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
Methyl Cyclohexane		NA	1.0 U	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
Methylene Chloride	5	0.5 U	1.0 U	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
Methyl Tert Butyl Ether	10	0.5 U	1.0 U	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
Styrene	5	0.5 U	1.0 U	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
Tetrachloroethene	5	0.5 U	1.0 U	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
Toluene	5	0.5 U	1.0 U	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
trans-1,2-Dichloroethene	5	0.5 U	1.0 U	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
trans-1,3-Dichloropropene	0.4	0.5 U	1.0 U	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
Trichloroethene	5	0.5 U	1.0 U	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
Trichlorofluoromethane	5	0.5 U	1.0 U	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
Vinyl chloride	2	0.5 U	1.0 U	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
Xylenes, Total		0.5 U	2.0 U	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
Total VOCs		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 2-6 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC GA	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	Standard	2/26/2016	3/22/2016	3/28/2016	4/20/2016	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
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	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	0.5 U	1.0 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	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
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	NA	1.0 U	NA	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
1,1,2-Trichloroethane	1	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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
1,1-Dichloroethane	5	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	0.5 U	1.0 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	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
1,2,3-Trimethylbenzene		1.0 U	NA	1.0 U	NA	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
1,2,4-Trichlorobenzene	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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
1,2,4-Trimethylbenzne	5	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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
1,2-Dibromo-3-Chloropropane	0.04	1.0 U	NA	1.0 U	NA	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
1,2-Dibromoethane (Ethylene Dibromide)	5	1.0 U	NA	1.0 U	NA	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
1,2-Dichlorobenzene	3	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	0.5 U	1.0 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	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
1,2-Dichloropropane	1	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	0.5 U	1.0 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	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
1,3-Dichlorobenzene	3	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	0.5 U	1.0 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	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
2-Butanone (MEK)	50	10 U	NA	10 U	NA	10 U	NA	10 U	10 U	NA	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	5.0 U	NA	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	5.0 U	NA	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	10 U	NA	NA	10 U	NA	10 U	NA	10 U	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	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
Bromodichloromethane	50	1.0 U	0.5 U	1.0 U	0.5 U	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
Bromoform	50*	1.0 U	0.5 U	1.0 U	0.5 U	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
Bromomethane	5	1.0 U	0.5 U	1.0 U	0.5 U	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
Carbon disulfide		1.0 U	0.5 U	1.0 U	0.5 U	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
Carbon tetrachloride	5	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	0.5 U	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	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
Chloroethane	5	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	0.5 U	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	1.0 U	NA	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	0.5 U	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
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	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
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	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
Cyclohexane		1.0 U	NA	1.0 U	NA	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
Dibromochloromethane	50	1.0 U	NA	1.0 U	NA	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
Dichlorodifluoromethane	5	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	0.5 U	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	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
Isopropylbenzne (Cumene)	5	1.0 U	NA	1.0 U	NA	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
Methyl Acetate		2.5 U	NA	2.5 U	NA	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
Methyl Cyclohexane		1.0 U	NA	1.0 U	NA	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
Methylene Chloride	5	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	0.5 U	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	NA	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
Styrene	5	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	0.5 U	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	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
Toluene	5	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	0.5 U	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	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
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	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
Trichloroethene	5	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	0.5 U	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	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
Vinyl chloride	2	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	0.5 U	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	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
Total VOCs		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 2-6 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC GA	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-2A	Well 1-3	Well 1-3	Well 1-3	Well 1-3
Sampling Date	Standard	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent	Influent
Units	ug/L	11/28/2016 ug/L	12/16/2016 ug/L	12/29/2016 ug/L	1/13/2017 ug/L	1/31/2017 ug/L	2/7/2017 ug/L	2/27/2017 ug/L	3/7/2017 ug/L	3/23/2017 ug/L	4/4/2017 ug/L	4/26/2017 ug/L	5/19/2017 ug/L	5/24/2017 ug/L	6/20/2017 ug/L	6/21/2017 ug/L	7/22/2014 ug/L	7/30/2014 ug/L	8/18/2014 ug/L	8/28/2014 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
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
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	NA	NA	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	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	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	NA	NA	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	0.5 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	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	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	NA	NA	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	NA	1.0 U	NA	1.0 U	NA	1.0 U	NA	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	0.5 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	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	0.5 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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	0.5 U	1.0 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
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
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
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	10 U	NA	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	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	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	0.5 U	1.0 U	0.5 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*	NA	1.0 U*	NA	1.0 U	0.5 U	1.0 U	0.5 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	NA	1.0 U	NA	1.0 U	0.5 U	1.0 U	0.5 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	NA	1.0 U	NA	1.0 U	0.5 U	1.0 U	0.5 U	1 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	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	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
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	0.5 U	1.0 U	0.5 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	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	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	NA	NA	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*	NA	1.0 U*	NA	1.0 U	NA	1.0 U	NA	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	0.5 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	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	NA	1.0 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	NA	NA	2.5 U
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	NA	NA	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	1.0 U	0.5 U	1.0 U	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 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	NA	1.0 U	NA	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	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	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	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	1.0 U	0.5 U	NA	0.5 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	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	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
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 2-6 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC GA	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent	Well 1-3 Influent
Sampling Date	Standard	9/29/2014	9/30/2014	10/21/2014	10/28/2014	11/11/2014	11/24/2014	12/9/2014	12/18/2014	1/20/2015	1/29/2015	2/25/2015	2/25/2015	3/12/2015	3/19/2015	4/9/2015	4/20/2015	5/6/2015	5/12/2015
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	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	1.0 U	0.5 U
1,1,2,2-Tetrachloroethane	5	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	1.0 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		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	1.0 U	NA
1,1,2-Trichloroethane	1	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	1.0 U	0.5 U
1,1-Dichloroethane	5	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	1.0 U	0.5 U
1,1-Dichloroethene	5	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	1.0 U	0.5 U
1,2,3-Trimethylbenzene		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	1.0 U	NA
1,2,4-Trichlorobenzene	5	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	1.0 U	0.5 U
1,2,4-Trimethylbenzne	5	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	1.0 U	0.5 U
1,2-Dibromo-3-Chloropropane	0.04	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	1.0 U	NA
1,2-Dibromoethane (Ethylene Dibromide)	5	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	1.0 U	NA
1,2-Dichlorobenzene	3	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	1.0 U	0.5 U
1,2-Dichloroethane	0.6	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	1.0 U	0.5 U
1,2-Dichloropropane	1	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	1.0 U	0.5 U
1,3,5-Trimethylbenzene (Mesitylene)	5	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	1.0 U	0.5 U
1,3-Dichlorobenzene	3	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	1.0 U	0.5 U
1,4-Dichlorobenzene	3	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	1.0 U	0.5 U
2-Butanone (MEK)	50	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	10 U	NA
2-Hexanone	50*	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	5.0 U	NA
4-Methyl-2-pentanone (MIBK)		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	5.0 U	NA
Acetone	50*	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	10 U	NA
Benzene	1	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	1.0 U	0.5 U
Bromodichloromethane	50	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	1.0 U	NA
Bromoform	50*	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	1.0 U	NA
Bromomethane	5	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	1.0 U	0.5 U
Carbon disulfide		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	1.0 U	NA
Carbon tetrachloride	5	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	1.0 U	0.5 U
Chlorobenzene	5	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	1.0 U	0.5 U
Chloroethane	5	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	1.0 U	0.5 U
Chloroform	7	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	1.0 U	NA
Chloromethane		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	1.0 U	0.5 U
cis-1,2-Dichloroethene	5	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	1.0 U	0.5 U
cis-1,3-Dichloropropene	0.4	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	1.0 U	0.5 U
Cyclohexane		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	1.0 U	NA
Dibromochloromethane	50	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	1.0 U	NA
Dichlorodifluoromethane	5	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	1.0 U	0.5 U
Ethylbenzene	5	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	1.0 U	0.5 U
Isopropylbenzne (Cumene)	5	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	1.0 U	0.5 U
Methyl Acetate		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	2.5 U	NA
Methyl Cyclohexane		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	1.0 U	NA
Methylene Chloride	5	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	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	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	1.0 U	0.5 U
Styrene	5	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	1.0 U	0.5 U
Tetrachloroethene	5	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	1.0 U	0.5 U
Toluene	5	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	1.0 U	0.5 U
trans-1,2-Dichloroethene	5	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	1.0 U	0.5 U
trans-1,3-Dichloropropene	0.4	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	1.0 U	0.5 U
Trichloroethene	5	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	1.0 U	0.5 U
Trichlorofluoromethane	5	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	1.0 U	0.5 U
Vinyl chloride	2	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	1.0 U	0.5 U
Xylenes, Total		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	2.0 U	1.5 U
Total VOCs		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 2-6 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 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
1,1,1-Trichloroethane	5	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
1,1,2,2-Tetrachloroethane	5	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
1,1,2-Trichloro-1,2,2-Trifluoroethane		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
1,1,2-Trichloroethane	1	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
1,1-Dichloroethane	5	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
1,1-Dichloroethene	5	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
1,2,3-Trimethylbenzene		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
1,2,4-Trichlorobenzene	5	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
1,2,4-Trimethylbenzne	5	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
1,2-Dibromo-3-Chloropropane	0.04	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
1,2-Dibromoethane (Ethylene Dibromide)	5	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
1,2-Dichlorobenzene	3	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
1,2-Dichloroethane	0.6	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
1,2-Dichloropropane	1	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
1,3,5-Trimethylbenzene (Mesitylene)	5	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
1,3-Dichlorobenzene	3	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
1,4-Dichlorobenzene	3	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
2-Butanone (MEK)	50	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
2-Hexanone	50*	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
4-Methyl-2-pentanone (MIBK)		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
Acetone	50*	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
Benzene	1	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
Bromodichloromethane	50	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
Bromoform	50*	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
Bromomethane	5	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
Carbon disulfide		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
Carbon tetrachloride	5	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
Chlorobenzene	5	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
Chloroethane	5	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
Chloroform	7	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
Chloromethane		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
cis-1,2-Dichloroethene	5	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
cis-1,3-Dichloropropene	0.4	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
Cyclohexane		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
Dibromochloromethane	50	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
Dichlorodifluoromethane	5	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
Ethylbenzene	5	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
Isopropylbenzne (Cumene)	5	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
Methyl Acetate		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
Methyl Cyclohexane		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
Methylene Chloride	5	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
Methyl Tert Butyl Ether	10	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
Styrene	5	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
Tetrachloroethene	5	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
Toluene	5	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
trans-1,2-Dichloroethene	5	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
trans-1,3-Dichloropropene	0.4	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
Trichloroethene	5	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
Trichlorofluoromethane	5	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
Vinyl chloride	2	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
Xylenes, Total		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
Total VOCs		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 2-6 Summary of Town of Vestal Municipal Well Sampling Results
Remedial Site Optimization
Vestal Water Supply Site
Site Number 7-04-009A

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

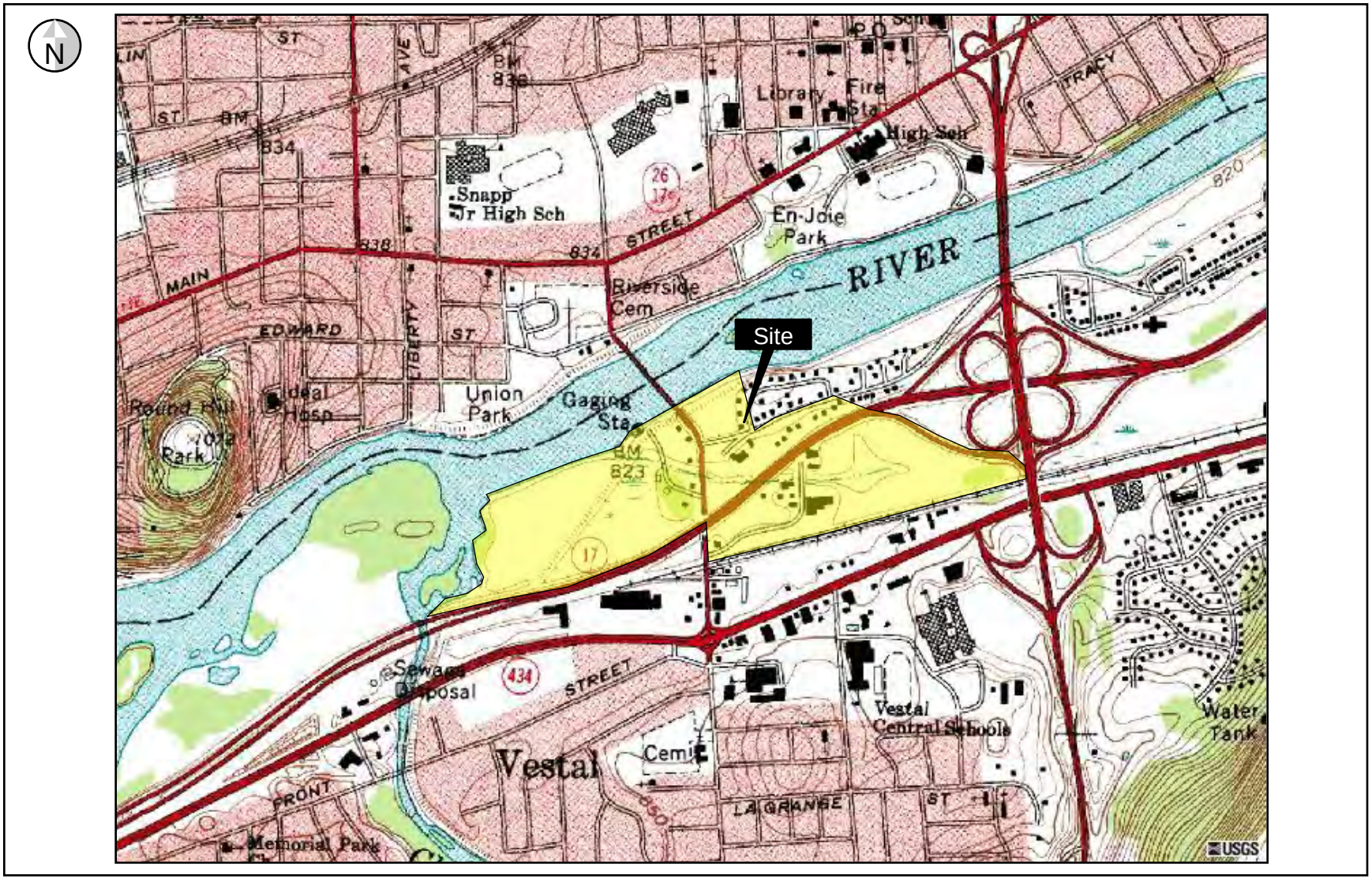
µg/L - Micrograms per Liter
NA - Not Analyzed
NS - Not Sampled
U - Compound was not detected at the indicated concentration
* LCS or LCSD exceeds the control limits
** Well 1-2A was frozen and unable to be sampled

FIGURES

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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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N.

N. MAIN ST.

OLD VESTAL RD.

GROUNDWATER TREATMENT PLANT

WELL 1-1A

WELL 1-1

SUSQUEHANNA RIVER

PUMPHOUSE RD.

WELL 1-3

WELL 1-2A

WELL 1-2

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
4009-23D
4009-23S
4009-24
4009-25D
4009-25S
4009-26
4009-27D
4009-27I
4009-27S
4009-28
4009-29D
4009-29I
4009-29S
4009-30
4009-30A

ERT-1D
ERT-1I
ERT-1S
ERT-3D
ERT-3I
ERT-3S
ERT-4D
ERT-4I
ERT-4S
ERT-7
ERT-8

STAGE RD.

NYS ROUTE 17

NYS ROUTE 434

LEGEND

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

150 0 150 300

SCALE: 1"=300'

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

ARCADIS
Infrastructure · Water · Environment · Buildings

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

VESTAL WATER SUPPLY
VESTAL, NEW YORK

MONITORINIG WELL LOCATION MAP

SCALE: AS SHOWN

MARCH 2017

FIGURE 2-1



LEGEND

Well 1-1A
EXTRACTION WELL & IDENTIFIER

4009-16A
804.12
MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)

808
GROUNDWATER ELEVATION
POTENTIOMETRIC CONTOUR
(Feet AMSL)

Well 1-3
WATER SUPPLY WELL & IDENTIFIER

*** Anomalous Reading not used for contouring**

0 350 700
APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Shallow Potentiometric Surface with Well 1-1A Inactive (June 6, 2017)

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Figure **2-2**



LEGEND

Well 1-1A
EXTRACTION WELL & IDENTIFIER

4009-12A
803.75
MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)

808
GROUNDWATER ELEVATION
POTENTIOMETRIC CONTOUR
(Feet AMSL)

Well 1-3
WATER SUPPLY WELL & IDENTIFIER

*** Anomalous Reading not used for contouring**

0 350 700
APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Intermediate Potentiometric Surface with Well 1-1A Inactive (June 6, 2017)

ARCADIS

Figure **2-3**



LEGEND

Well 1-1A
EXTRACTION WELL & IDENTIFIER

4009-15
804.01
MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)

805
GROUNDWATER ELEVATION
POTENTIOMETRIC CONTOUR
(Feet AMSL)

Well 1-3
WATER SUPPLY WELL & IDENTIFIER

*** Anomalous Reading not used for contouring**

0 350 700
APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Deep Potentiometric Surface with Well 1-1A Inactive (June 6, 2017)

ARCADIS

Figure **2-4**



LEGEND

- **Well 1-3** — WATER SUPPLY WELL & IDENTIFIER
- **4009-7** / **42.8** — MONITORING WELL & IDENTIFIER; Total VOC Concentration(ug/L); "ND" indicates no detection
- **Well 1-1** — EXTRACTION WELL & IDENTIFIER

TOTAL VOCS (ug/l)

- 50-100
- 100-500
- 500-1,000
- 1,000-5,000
- 5,000-10,000
- 10,000-50,000
- 50,000-100,000
- 100,000-500,000
- 500,000-1,000,000

0 350 700

APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Total VOC Concentrations- PDB (Shallow Wells)
June 20, 2017

ARCADIS

Figure **2-5**



LEGEND

Well 1-3 — WATER SUPPLY WELL & IDENTIFIER

4009-12A
30.7
MONITORING WELL & IDENTIFIER
Total VOC Concentration(ug/L); "ND" indicates no detection

Well 1-1 — EXTRACTION WELL & IDENTIFIER

TOTAL VOCS (ug/l)

- 50-100
- 100-500
- 500-1,000
- 1,000-5,000
- 5,000-10,000
- 10,000-50,000
- 50,000-100,000
- 100,000-500,000
- 500,000-1,000,000

0 350 700

APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Total VOC Concentrations-PDB (Intermediate Wells) June 20, 2017

ARCADIS

Figure **2-6**



LEGEND

- **Well 1-3** — WATER SUPPLY WELL & IDENTIFIER
- **4009-15** / 1.1 — MONITORING WELL & IDENTIFIER; Total VOC Concentration(ug/L); "ND" indicates no detection
- **Well 1-1** — EXTRACTION WELL & IDENTIFIER

TOTAL VOCS (ug/l)

- 50-100
- 100-500
- 500-1,000
- 1,000-5,000
- 5,000-10,000
- 10,000-50,000
- 50,000-100,000
- 100,000-500,000
- 500,000-1,000,000

* PDB was compromised when collecting the sample

0 — 350 — 700

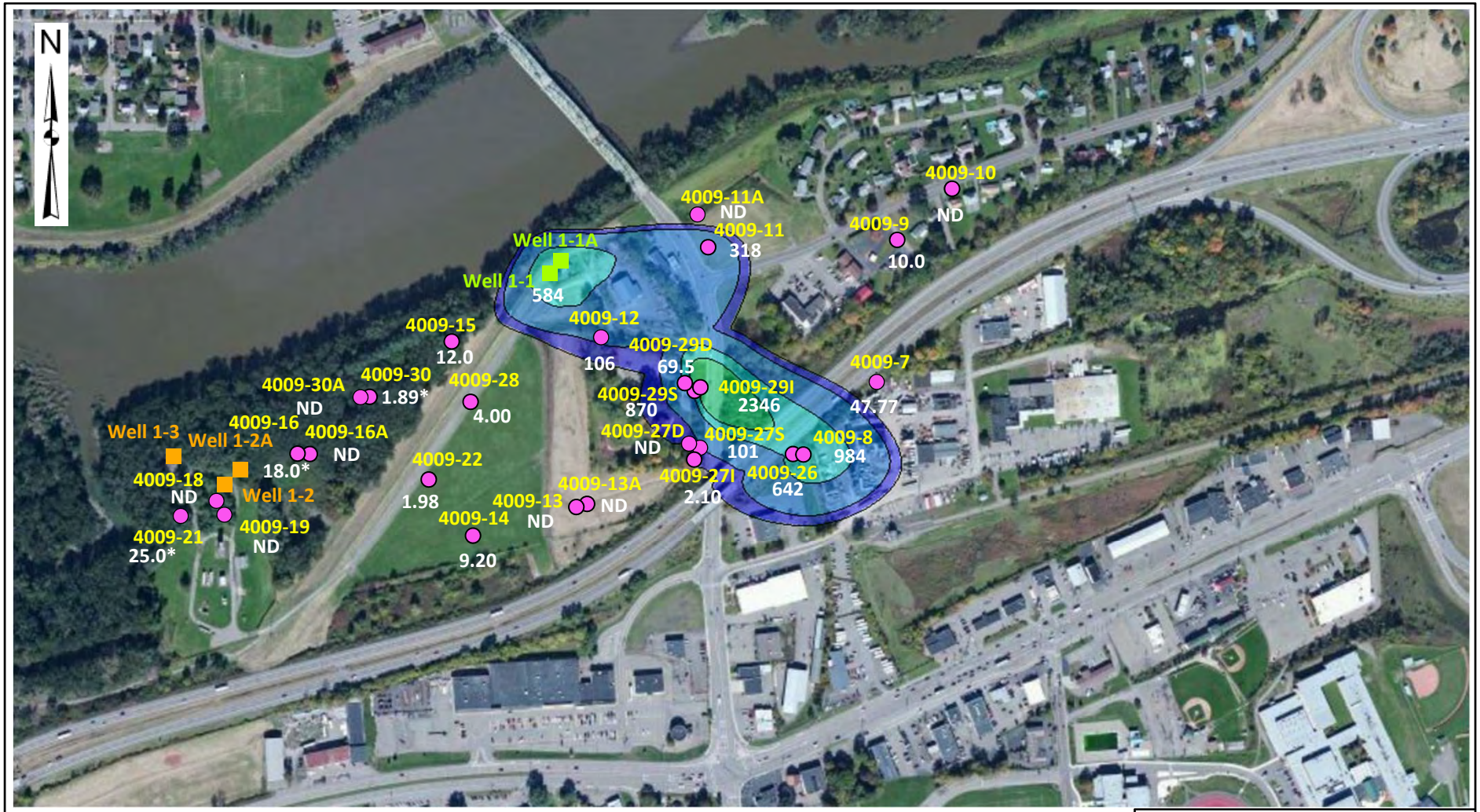
APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Total VOC Concentrations - PDB (Deep Wells)
June 20, 2017

ARCADIS

Figure **2-7**



LEGEND

- **Well 1-3** — WATER SUPPLY WELL & IDENTIFIER
- **4009-7** / **55.7** — MONITORING WELL & IDENTIFIER; Total VOC Concentration(ug/L); "ND" indicates no detection
- **Well 1-1** — EXTRACTION WELL & IDENTIFIER

TOTAL VOCS (ug/l)

- 50-100
- 100-500
- 500-1,000
- 1,000-5,000
- 5,000-10,000
- 10,000-50,000
- 50,000-100,000
- 100,000-500,000
- 500,000-1,000,000

* PDB was compromised when collecting the sample

0 — 350 — 700

APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Total VOC Concentrations - PDB (All Wells)
June 20, 2017

ARCADIS

Figure **2-8**



LEGEND

Well 1-3	WATER SUPPLY WELL & IDENTIFIER
4009-7 / 42.8	MONITORING WELL & IDENTIFIER; Benzene Concentration(ug/L); "ND" indicates no detection
Well 1-1	EXTRACTION WELL & IDENTIFIER

Concentration of Benzene (ug/l)

- 1.0 - 5.0
- 5.0 - 10
- 10 – 50 +

0 350 700

APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Benzene Concentrations - PDBs (Shallow Wells)
June 20, 2017

ARCADIS

Figure **2-9**



LEGEND

Well 1-3 — WATER SUPPLY WELL & IDENTIFIER

4009-12A / **30.7** — MONITORING WELL & IDENTIFIER; Benzene Concentration(ug/L); "ND" indicates no detection

Well 1-1 — EXTRACTION WELL & IDENTIFIER

Concentration of Benzene (ug/l)

- 1.0 - 5.0
- 5.0 - 10
- 10 – 50 +

0 350 700

APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Benzene Concentrations - PDBs (Intermediate Wells)
June 20, 2017

ARCADIS

Figure
2-10



LEGEND

Well 1-3 — WATER SUPPLY WELL & IDENTIFIER

4009-15 / 1.1 — MONITORING WELL & IDENTIFIER; Benzene Concentration(ug/L); "ND" indicates no detection

Well 1-1 — EXTRACTION WELL & IDENTIFIER

Concentration of Benzene (ug/l)

- 1.0 - 5.0
- 5.0 - 10
- 10 – 50 +

* PDB was compromised when collecting the sample

0 350 700

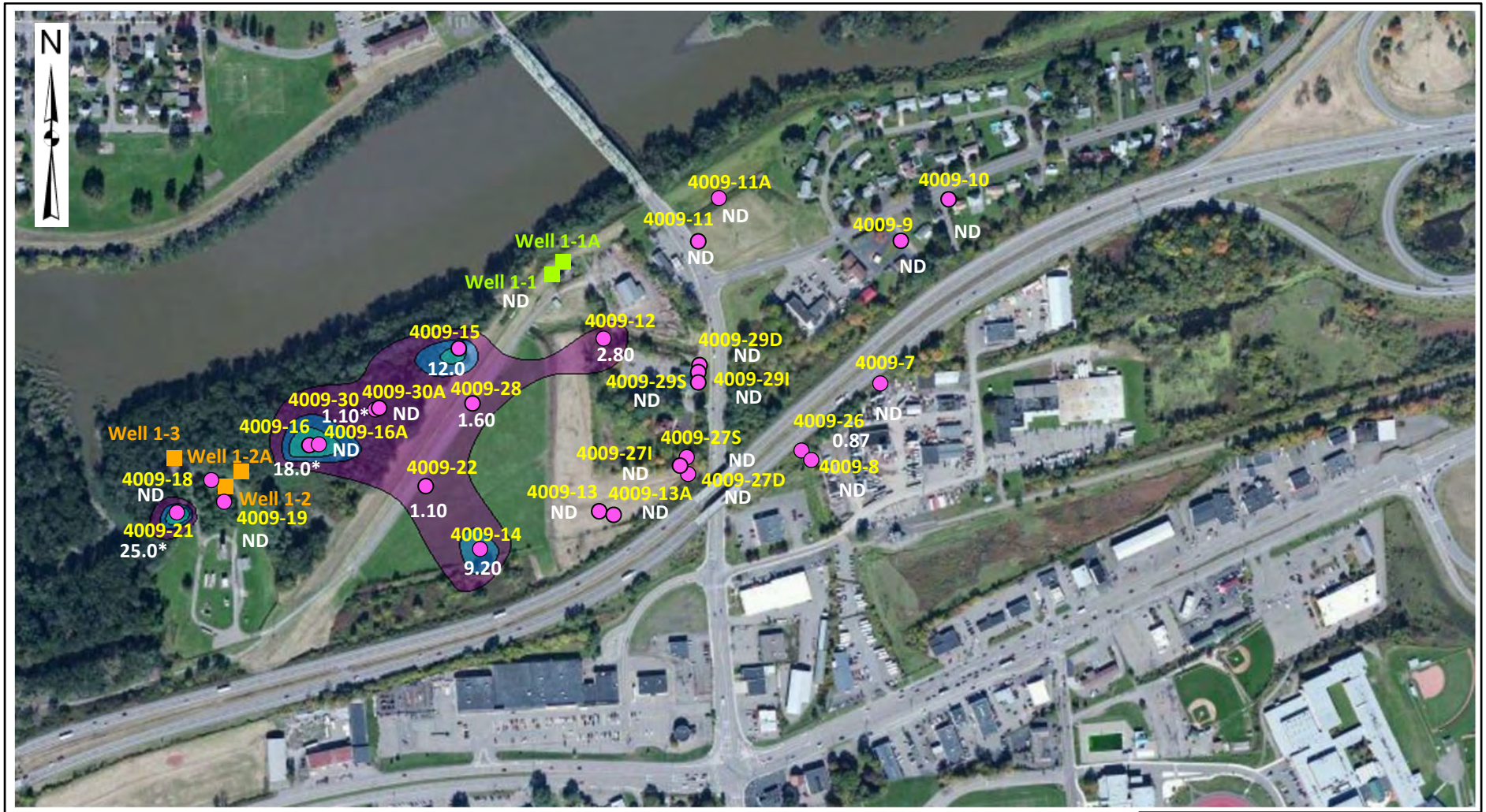
APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Benzene Concentrations - PDBs (Deep Wells)
June 20, 2017

ARCADIS

Figure **2-11**



LEGEND

- Well 1-3 — WATER SUPPLY WELL & IDENTIFIER
- 4009-7 / 55.7 — MONITORING WELL & IDENTIFIER; Benzene Concentration(ug/L); "ND" indicates no detection
- Well 1-1 — EXTRACTION WELL & IDENTIFIER

Concentration of Benzene (ug/l)

- 1.0 - 5.0
- 5.0 - 10
- 10 – 50 +

*PDB was compromised when collecting the sample

0 350 700

APPROXIMATE SCALE IN FEET

Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

Benzene Concentrations - PDBs (All Wells)
June 20, 2017

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Figure **2-12**

APPENDIX A

Low-Flow Purge Logs June 2017

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas + SEllsworth **Well ID:** 4009-7

Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/28/17

Weather: 70-80's, sunny **Time In:** 1100 **Time Out:** 1245

Well Information

Depth to Water: 17.74 (feet) (from MP)

Total Depth: 32.2 (feet) (from MP)

Length of Water Column: 14.46 (feet)

Volume of Water in Well: 2.36 (gal)

Intake depth for tubing: 29.5 (feet)

screen 27-32

Well Type:	Flushmount ☐		Stick-Up ☑	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☐		No ☑	
Measuring Point Marked:	Yes ☑		No ☐	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 1130

Pump Stop Time: 1230 Water-Quality Meter Type: Horiba

Total Volume Removed: 1.9 (gal) Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1130	1135	1140	1145	1150	1155	1200	1205	1210
Volume Purged (Gal)	0.05	0.1	0.12	0.3	0.5	0.8	1.0	1.3	1.5
Rate (mL/min)	150	150	150	150	150	150	150	150	150
Depth to Water (ft.)	17.93	17.93	17.93	17.98	17.98	17.98	17.98	17.98	17.98
pH	|	6.02	5.90	5.81	5.77	5.74	5.69	5.67	5.68
Temp. (C)	|	19.10	17.48	15.50	15.41	15.20	15.00	15.61	15.51
Conductivity (mS/cm)	|	2.47	2.42	2.34	2.36	2.40	2.75	3.11	3.12
Dissolved Oxygen (mg/L)	|	1.90	1.13	0.94	0.88	0.78	0.78	0.71	0.69
ORP (mV)	|	95	94	93	93	79	54	43	38
Turbidity (NTU)	|	3.72	3.49	4.04	4.21	4.44	2.40	4.53	4.38
Notes:	Horiba plugged in @ 1135								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		↓
1,4 Dioxane	2		↓
Color:			
Odor:			
Appearance:			
Sample ID: 4009-7	Sample Time: 1220		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID -	Dup. Time: -		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, no sheen, odorless

Final: clear, odorless, no sheen

PID: 0.3ppm

4009-7 continued

Vestal Water Supply — Site

June 2017 GW Sampling — Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: S. Ellsworth and A. Thomas
Well ID: 4009-7
Client / Job Number: NYSDEC/00266401.0000
Date: 6/28/17
Weather: 70-80s, sunny
Time In: 1130 **Time Out:**

Parameter:	1	2	3	4	5	6	7	8	9
Time	1215	Sample @ 1220							
Volume Purged (Gal)	1.7								
Rate (mL/min)	150 ✓								
Depth to Water (ft.)	17.98 ✓								
pH	5.68 ✓								
Temp. (C)	15.49								
Conductivity (mS/cm)	3.13 ✓								
Dissolved Oxygen (mg/L)	0.65								
ORP (mV)	36 ✓								
Turbidity (NTU)	4.00 ✓								
Notes:									

Parameter:	1	2	3	4	5	6	7	8	9
Time									
Volume Purged (Gal)									
Rate (mL/min)									
Depth to Water (ft.)									
pH									
Temp. (C)									
Conductivity (mS/cm)									
Dissolved Oxygen (mg/L)									
ORP (mV)									
Turbidity (NTU)									
Notes:									

Vestal Water Supply

Site | *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas and SEllsworth
Client / Job Number: 00266401.0000 NYSDEC
Weather: 70's, sunny

Well ID: 4009-8
Date: 6/28/17
Time In: 0900 **Time Out:** 1030

Well Information

screen 35-40

Depth to Water:	18.55 (feet)	(from MP)
Total Depth:	42.78 (feet)	(from MP)
Length of Water Column:	24.23 (feet)	
Volume of Water in Well:	3.95 (gal)	
Intake depth for tubing:	37.5 (feet)	

Well Type:	Flushmount ☐		Stick-Up ☑		
Well Material:	Stainless Steel ☐		PVC ☑		
Well Locked:	Yes ☑		No ☐		
Measuring Point Marked:	Yes ☑		No ☐		
Well Diameter:	1"	2"	Other:		

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:	
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:	
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:	

Pump Start Time: 0920
Pump Stop Time: 1020
Water-Quality Meter Type: Honda
Total Volume Removed: 2 (gal)
Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	0920	0925	0930	0935	0940	0945	0950	0955	1000
Volume Purged (Gal)	0.2	0.4	0.6	0.8	0.95	1.1	1.3	1.55	1.8
Rate (mL/min)	~~220~~ 200	220	220	180	200	200	200	200	175
Depth to Water (ft.)	18.59	18.61	18.62	18.62	18.62	18.62	18.62	18.62	18.62
pH		6.63	6.80	6.87	6.66	6.61	6.60	6.59	6.59
Temp. (C)		15.99	15.21	14.92	14.90	14.76	14.94	14.90	15.10
Conductivity (mS/cm)		1.32	1.29	1.36	1.53	1.55	1.56	1.57	1.58
Dissolved Oxygen (mg/L)		1.56	1.02	0.89	0.81	0.75	0.72	0.71	0.78
ORP (mV)		190	170	133	14	-1	-10	-14	-17
Turbidity (NTU)		8.70	23.3	9.78	5.21	3.85	2.13	3.04	2.06
Notes:	Honda not plugged in until 0925								

1 Sample at 1005 1

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-8	Sample Time: 1005		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: first water was orange, cleared up quick. Odorless, no sheen

Final: clear, odorless, no sheen

~~Stopped~~ decreased rate at 0935

PID = 6.5ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: A Thomas + SEIS Wash **Well ID:** ~~4009~~ 4009-9
Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/26/17
Weather: 70's, sunny **Time In:** 9:15 **Time Out:** 11:10

Well Information

Depth to Water:	19.2 (feet) (from MP)
Total Depth:	27.80 (feet) (from MP)
Length of Water Column:	8.6 (feet)
Volume of Water in Well:	5.6 (gal)
Intake depth for tubing:	25 (feet)

Well Type:	Flushmount ☑		Stick-Up ☐	
Well Material:	Stainless Steel ☑		PVC ☐	
Well Locked:	Yes ☐		No ☑	
Measuring Point Marked:	Yes ☐		No ☐	
Well Diameter:	1"	2"	Other:	4"

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Pump Start Time: 0955
Pump Stop Time: 1050 Water-Quality Meter Type: Horiba
Total Volume Removed: 1 (gal) Did well go dry: Yes ☐ No ☑

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1000	1005	1010	1015	1020	1025	1030	1035	Sample @ 1040
Volume Purged (Gal)	0.05	0.1	0.22	0.3	0.4	0.5	6.6	0.7	
Rate (mL/min)	100	90	85	85	80	85	85	85	
Depth to Water (ft.)	19.34	19.39	19.40	19.40	19.40	19.40	19.40	19.4	
pH	6.36	6.36	6.45	6.47	6.48	6.48	6.48	6.48	
Temp. (C)	19.74	19.74	18.78	18.29	17.94	17.70	17.23	17.28	
Conductivity (mS/cm)	1.42	1.42	1.40	1.40	1.40	1.40	1.40	1.41	
Dissolved Oxygen (mg/L)	1.40	1.40	1.21	1.14	1.09	1.07	1.05	1.02	
ORP (mV)	208	208	169	138	120	112	106	102	
Turbidity (NTU)	8.78	8.75	10.3	9.37	8.07	8.36	8.42	7.42	
Notes:	Didn't take Hanby until 1005								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-9	Sample Time: 1040		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID: -	Dup. Time: -		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, slight yellow tint. odorless. no sheen
Final: clear, no sheen, odorless

PID = 0.0

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Suzie Ellsworth & Aubrey Thomas **Well ID:** 4009-10
Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/26/17
Weather: sun, 70's **Time In:** 0940 **Time Out:** 1100

Well Information

Depth to Water:	25.29 (feet)	(from MP)
Total Depth:	44.54 (feet)	(from MP)
Length of Water Column:	19.25 (feet)	
Volume of Water in Well:	12.6 (gal)	
Intake depth for tubing:	40 (feet)	

Well Type:	Flushmount	☒	Stick-Up	☐	
Well Material:	Stainless Steel	☒	PVC	☐	
Well Locked:	Yes	☐	No	☒	
Measuring Point Marked:	Yes	☐	No	☒	
Well Diameter:	1"	2"	Other:	4"	

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☒	Monsoon	☐	Other:
Tubing/Bailer Material:	Steel	☐	Polyethylene	☒	Teflon	☐	Other:
Sampling Method:	Bailer	☐	Peristaltic	☒	Monsoon	☐	Other:

Pump Start Time: 0950
Pump Stop Time: 1043 Water-Quality Meter Type: Horiba
Total Volume Removed: 1.25 (gal) Did well go dry: Yes ☐ No ☒

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1000	1005	1010	1015	1020	1025	1035		
Volume Purged (Gal)	0.3	0.45	0.60	0.75	0.90	1.05	SAMPLE		
Rate (mL/min)	125	120	120	120	120	120			
Depth to Water (ft.)	25.25	25.25	25.25	25.25	25.25	25.25			
pH	5.95	6.23	6.31	6.37	6.39	6.41			
Temp. (C)	19.18	18.05	18.07	17.72	17.75	17.52			
Conductivity (mS/cm)	2.80	2.79	2.77	2.77	2.76	2.77			
Dissolved Oxygen (mg/L)	5.35	5.02	4.86	4.80	4.79	4.71			
ORP (mV)	157	135	130	128	126	124			
Turbidity (NTU)	9.38	6.51	5.55	8.07	8.21	7.91			
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		"
1,4-Dioxane	2		"
Color: None			
Odor: None			
Appearance: No sheen.			
Sample ID: 4009-10	Sample Time: 1035		
MS/MSD: Yes ☐	No ☒		
Duplicate: Yes ☐	No ☒		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By:	SME		

Problems / Observations

Initial: Turbid, orange particulate, No odor no sheen.

Final: Clear, colorless, odorless, no sheen.

PID = 0.0ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: S. Ellsworth ; A. Thomas
Well ID: 4009-11
Client / Job Number: NYSDEC 00266401.0000
Date: 6/26/17
Weather: 70-80's, sunny
Time In: 1130 **Time Out:** 1340

Well Information

Depth to Water: 25.95 (feet) (from MP)
Total Depth: 152.81 (feet) (from MP)
Length of Water Column: (feet) 126.86
Volume of Water in Well: (gal) 20.68
Intake depth for tubing: 114.5 (feet)

Well Type:	Flushmount	☑	Stick-Up	☐	
Well Material:	Stainless Steel	☐	PVC	☑	
Well Locked:	Yes	☐	No	☑	
Measuring Point Marked:	Yes	☐	No	☑	
Well Diameter:	1"	2"	Other:		

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:	
Tubing/Bailer Material:	Steel	☐	Polyethylene	☑	Teflon ☐	Other:	
Sampling Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:	

Pump Start Time: 1157
Pump Stop Time: 1335
Water-Quality Meter Type: Horiba
Total Volume Removed: 1.5 (gal)
Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9 1255
Time	1205	1210	1215	1220	1225	1230	1235	1240	~~1245~~
Volume Purged (Gal)	0.25	0.4	0.55	0.70	0.85	1.0	1.15	1.30	
Rate (mL/min)	120	120	120	120	120	120	120	120	
Depth to Water (ft.)	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	
pH	8.55	9.68	9.87	9.91	9.95	9.97	10.02	10.05	
Temp. (C)	27.20	21.85	22.09	21.27	20.93	20.45	20.19	19.89	
Conductivity (mS/cm)	0.901	0.961	0.939	0.947	0.954	0.959	0.977	0.978	
Dissolved Oxygen (mg/L)	2.14	1.78	1.55	1.52	1.46	1.47	1.45	1.44	
ORP (mV)	-192	-223	-230	-233	-236	-241	-241	-242	
Turbidity (NTU)	13.4	13.4	12.3	17.1	11.4	11.7	12.0	12.0	
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		"
1,4-Dioxane	2		"
Color: None			
Odor: ~~N~~ trace			
Appearance: No sheen			
Sample ID: 4009-11	Sample Time: 1255		
MS/MSD: Yes ☑	No ☐		
Duplicate: Yes ☐	No ☑		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By: SME			

Problems / Observations

Inital: clear, colorless, odor, no sheen

Final: clear, colorless, odor, no sheen

PID: 0.0 ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Kennedy + Siebuhr **Well ID:** 4009-11A

Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/26/17

Weather: 70s, sunny, random rain shower **Time In:** 1130 **Time Out:** 1300

Well Information

Depth to Water: 14.05 (feet) (from MP)

Total Depth: 34.43 (feet) (from MP)

Length of Water Column: 20.38 (feet)

Volume of Water in Well: 3.33 (gal)

Intake depth for tubing: 28 (feet) screen 22.7-27.7

Well Type:	Flushmount ☑		Stick-Up ☐	
Well Material:	Stainless Steel ☑		PVC ☐	
Well Locked:	Yes ☐		No ☑	
Measuring Point Marked:	Yes ☐		No ☑	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 1155

Pump Stop Time: 1250 Water-Quality Meter Type: Horiba

Total Volume Removed: 1.1 (gal) Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1200	1205	1210	1215	1220	1225	1230	1235	Sampled @ 1240
Volume Purged (Gal)	2000 gal	0.25	0.5	0.6	0.75	0.85	0.95	1.0	
Rate (mL/min)	0+4210	150	150	120	90	90	90	70	
Depth to Water (ft.)	14.51	15.05	16.16	16.75	17.05	17.23	17.34	17.45	
pH		6.02	5.94	5.93	5.93	5.94	5.94	5.96	
Temp. (C)		14.12	14.13	14.49	15.56	16.13	16.47	16.22	
Conductivity (mS/cm)		0.742	0.745	0.760	0.796	0.800	0.812	0.813	
Dissolved Oxygen (mg/L)		1.12	0.90	0.78	0.73	0.70	0.67	0.68	
ORP (mV)		124	110	105	105	106	107	107	
Turbidity (NTU)		5.00	2.84	1.58	1.66	1.45	1.27	1.22	
Notes:	Horiba hooked up @ 1205								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-11A	Sample Time: 12:40		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, odorless, no sheen

Final: S. A. A.

PID: 0.0

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: A Thomas + J Ellsworth
Well ID: 4009-12
Client / Job Number: NYSDEC 00266401.0000
Date: 6/23/17
Weather: 80's, overcast, some rain
Time In: 1400 **Time Out:** 1545

Well Information

Depth to Water: 17.91 (feet) (from MP)
Total Depth: 113.65 (feet) (from MP)
Length of Water Column: 95.74 (feet)
Volume of Water in Well: 15.6 (gal)
Intake depth for tubing: 111 (feet)

Screen 108.7-113.5

Well Type:	Flushmount ☑		Stick-Up ☐	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☑		No ☐	
Measuring Point Marked:	Yes ☐		No ☑	
Well Diameter:	1"	2" (circled)	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 1415
Pump Stop Time: 1540
Water-Quality Meter Type: Horiba
Total Volume Removed: 3.0 (gal)
Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1420	~~1425~~ ~~1420~~	~~1430~~ ~~1425~~	~~1435~~ ~~1430~~	~~1440~~ ~~1435~~	~~1445~~ ~~1440~~	1450	1455	1500
Volume Purged (Gal)	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8
Rate (mL/min)	140	150	150	150	150	150	150	150	150
Depth to Water (ft.)	17.93	17.95	17.95	17.95	17.95	17.95	17.95	17.95	17.95
pH	7.43	7.41	7.46	7.54	7.52	7.42	7.27	7.12	6.96
Temp. (C)	22.91	20.14	19.76	19.11	19.11	18.77	18.89	19.05	18.97
Conductivity (mS/cm)	0.725	0.727	0.758	0.878	0.982	1.12	1.16	1.19	1.23
Dissolved Oxygen (mg/L)	1.56	0.81	0.73	0.53	0.64	0.68	0.75	0.66	0.57
ORP (mV)	-148	-196	-211	-218	-206	-180	-157	-136	-119
Turbidity (NTU)	11.9	6.02	6.92	4.69	4.63	3.35	2.35	1.25	0.72
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		
1,4 Dioxane	2		↓
Color:			
Odor:			
Appearance:			
Sample ID: 4009-12	Sample Time: 1530		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID: —	Dup. Time: —		
Chain of Custody Signed By: SME			

Problems / Observations

Initial: clear, colorless, faint odor
no sheen

Final: clear, odorless, no sheen

PID: 0.0 ppm

Vestal Water Supply — **June 2017 GW Sampling**

Site — *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel:	S. Ellsworth and A. Thomas	**Well ID:**	4009-12
Client / Job Number:	NYSDEC/00266401.0000	**Date:**	6/23/17
Weather:	80s overcast, some rain	**Time In:**	1400 **Time Out:** 1545

Parameter:	1	2	3	4	5	6	7	8	9
Time	1505	1510	1515	1520	1525	1530			
Volume Purged (Gal)	2.0	2.2	2.4	2.6	2.8	SAMPLE			
Rate (mL/min)	150	150	150	150	150				
Depth to Water (ft.)	17.95	17.95	17.95	17.95	17.95				
pH	6.89	6.84	6.82	6.80	6.79				
Temp. (C)	18.77	18.62	18.44	18.36	18.32				
Conductivity (mS/cm)	1.24	1.25	1.25	1.26	1.26				
Dissolved Oxygen (mg/L)	0.60	0.62	0.50	0.52	0.46				
ORP (mV)	-108	-100	-93	-88	-85				
Turbidity (NTU)	0.61	0.57	0.75	0.57	0.64				
Notes:									

Parameter:	1	2	3	4	5	6	7	8	9
Time									
Volume Purged (Gal)									
Rate (mL/min)									
Depth to Water (ft.)									
pH									
Temp. (C)									
Conductivity (mS/cm)									
Dissolved Oxygen (mg/L)									
ORP (mV)									
Turbidity (NTU)									
Notes:									

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AMemeo **Well ID:** 4009-13

Client / Job Number: NYSDEC 00266401.0000 **Date:** 4/26/17

Weather: ~~clear~~ 80's, partly cloudy **Time In:** ~~1~~ 1400 **Time Out:** 1610

Well Information

Depth to Water: 11.34 (feet) (from MP)

Total Depth: 119.9 (feet) (from MP)

Length of Water Column: 108.56 (feet)

Volume of Water in Well: 16.88 (gal)

Intake depth for tubing: 108 (feet)

screen = 105.8 - 110.7

Well Type:	Flushmount	☑	Stick-Up	☐
Well Material:	Stainless Steel	☐	PVC	☑
Well Locked:	Yes	☐	No	☑
Measuring Point Marked:	Yes	☐	No	☑
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:
Tubing/Bailer Material:	Steel	☐	Polyethylene	☑	Teflon ☐	Other:
Sampling Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:

Pump Start Time: 1435

Pump Stop Time: 1605

Water-Quality Meter Type: Horiba

Total Volume Removed: 1.8 (gal) Did well go dry: Yes ☐ No ☑

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1440	1445	1450	1455	1500	1505	1510	1515	1520
Volume Purged (Gal)	0.08	0.2	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Rate (mL/min)	150	150	140	110	100	100	100	100	100
Depth to Water (ft.)	11.41	12.35	13.26	13.52	13.60	13.62	13.62	13.62	13.62
pH		8.41	9.48	9.44	9.41	9.40	9.35	9.26	9.22
Temp. (C)		15.84	15.74	16.13	16.82	17.02	16.83	15.96	15.76
Conductivity (mS/cm)		0.361	0.351	0.364	0.418	0.453	0.484	0.506	0.522
Dissolved Oxygen (mg/L)		1.64	0.88	0.83	0.77	0.74	0.70	0.68	0.65
ORP (mV)		26	-32	-38	-46	-50	-54	-56	-57
Turbidity (NTU)		30.6	25.1	22.3	16.2	13.6	10.3	8.52	8.44
Notes:	Horiba not used until 1445								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-13	Sample Time: 1555		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: mostly clear, slight yellow tint. odorless. no sheen

Final: clear, no sheen, odorless

PID: 0.0ppm

Vestal Water Supply — **June 2017 GW Sampling**

Site — *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel:	S. Ellsworth and A. Thomas	**Well ID:**	4009-13 continued
Client / Job Number:	NYSDEC/00266401.0000	**Date:**	6/26/17
Weather:	80's, overcast	**Time In:**	1400 **Time Out:**

Parameter:	1	2	3	4	5	6	7	8	9
Time	1525	1530	1535	1540	1545	1550	Sample		
Volume Purged (Gal)	1.1	1.2	1.3	1.4	1.5	1.6	@		
Rate (mL/min)	100	100	100	100	100	100			
Depth to Water (ft.)	13.62	13.62	13.62	13.62	13.62	13.62			
pH	9.12	9.06	8.97	8.93	8.85	8.84	1555		
Temp. (C)	16.68	16.81	17.07	17.21	17.38	17.70			
Conductivity (mS/cm)	0.539	0.554	0.580	0.599	0.615	0.620			
Dissolved Oxygen (mg/L)	0.63	0.59	0.58	0.57	0.56	0.54			
ORP (mV)	-59	-60	-61	-62	-63	-65			
Turbidity (NTU)	7.62	6.58	6.51	6.29	5.36	5.08			
Notes:									

Parameter:	1	2	3	4	5	6	7	8	9
Time									
Volume Purged (Gal)									
Rate (mL/min)									
Depth to Water (ft.)									
pH									
Temp. (C)									
Conductivity (mS/cm)									
Dissolved Oxygen (mg/L)									
ORP (mV)									
Turbidity (NTU)									
Notes:									

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: S. Ellsworth & A. Thomas
Well ID: 4009-13A
Client / Job Number: NYSDEC 00266401.0000
Date: 6/26/17
Weather: sun/clouds 70's
Time In: 1400 **Time Out:** 1530

Well Information

Depth to Water: 10.62 (feet) (from MP)
Total Depth: 30 (feet) (from MP)
Length of Water Column: 19.3 (feet)
Volume of Water in Well: 3.16 (gal)
Intake depth for tubing: 26 (feet)

Well Type:	Flushmount	☑	Stick-Up	☐
Well Material:	Stainless Steel	☐	PVC	☑
Well Locked:	Yes	☐	No	☑
Measuring Point Marked:	Yes	☑	No	☐
Well Diameter:	1"	(2")	Other:	

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:
Tubing/Bailer Material:	Steel	☐	Polyethylene	☑	Teflon ☐	Other:
Sampling Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:

Pump Start Time: 1413
Pump Stop Time: 1525
Water-Quality Meter Type:
Total Volume Removed: 3 (gal)
Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1420	1425	1430	1435	1440	1445	1450	1455	1500
Volume Purged (Gal)	0.4	0.65	0.90	1.15	1.40	1.65	1.90	2.15	2.40
Rate (mL/min)	210	210	210	210	210	210	210	210	210
Depth to Water (ft.)	10.64	10.64	10.64	10.64	10.64	10.64	10.64	10.64	10.64
pH	7.78	7.13	6.76	6.68	6.63	6.58	6.52	6.49	6.46
Temp. (C)	20.64	19.15	18.55	18.54	18.69	18.43	18.44	18.39	18.37
Conductivity (mS/cm)	1.75	1.80	1.82	1.83	1.83	1.83	1.85	1.85	1.86
Dissolved Oxygen (mg/L)	2.17	3.23	3.78	3.82	3.88	3.94	4.00	3.98	3.94
ORP (mV)	-116	-82	-23	-15	-6	8	20	23	30
Turbidity (NTU)	9.54	3.13	1.88	1.20	2.08	1.31	0.98	1.21	1.43
Notes:									

1510 — SAMPLE

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		"
1,4-Dioxane	2		"
Color: None			
Odor: None			
Appearance: No Sheen			
Sample ID: 4009-13A	Sample Time: 1510		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By: SME			

Problems / Observations

Initial: Black sediment, turbid, odorless, no sheen.

Final: Clear, colorless, odorless

PID = 0.0ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: A Thomas & S Ellsworth
Well ID: 4009-14
Client / Job Number: NYSDEC 00266401.0000
Date: 6/23/17
Weather: 70's, rainy
Time In: 1140 **Time Out:** 1315

Well Information

Depth to Water: 15.17 (feet) (from MP)
Total Depth: 136.2 (feet) (from MP)
Length of Water Column: 121.03 (feet)
Volume of Water in Well: 19.6 (gal)
Intake depth for tubing: 130.5 (feet)
screen 129-134

Well Type:	Flushmount ☐		Stick-Up	☑
Well Material:	Stainless Steel ☐		PVC	☑
Well Locked:	Yes ☑		No	☐
Measuring Point Marked:	Yes ☐		No	☐
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:
Tubing/Bailer Material:	Steel	☐	Polyethylene	☑	Teflon ☐	Other:
Sampling Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:

Pump Start Time: ~~1155~~ 1155
Pump Stop Time: 1300
Water-Quality Meter Type: Horiba
Total Volume Removed: 2.5 (gal)
Did well go dry: Yes ☐ No ☐

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L = 3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1200	1205	1210	1215	1220	1225	1230	Sample @ 1245	
Volume Purged (Gal)	0.2	0.5	0.75	1.00	1.3	1.55	2.3		
Rate (mL/min)	250	200	210	210	200	200	200		
Depth to Water (ft.)	15.93	17.04	17.76	17.88	17.99	18.20	18.29		
pH		8.12	8.23	8.26	8.28	8.30 ✓	8.34		
Temp. (C)		18.04	17.43	17.07	17.06	17.17 ✓	17.21		
Conductivity (mS/cm)		0.341	0.334	0.333	0.331	0.332 ✓	0.330		
Dissolved Oxygen (mg/L)		0.73	0.59	0.62	0.51	0.50	0.46		
ORP (mV)		-178	-217	-234	-238	-241 ✓	-246		
Turbidity (NTU)		17.0	11.9	10.4	9.47	8.58	7.21		
Notes:	Horiba not turned on until 1205								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID:		Sample Time: 1245	
MS/MSD: Yes ☐		No ☑	
Duplicate: Yes ☐		No ☑	
Duplicate ID –		Dup. Time: –	
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, black sediments
No sheen, odorless
Final: clear, no odor, no sheen
1230 =
walked over to talk to SE about dropping water levels
PID: 0.0

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Attorneys + SEIlsworm **Well ID:** 4009-15

Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/23/17

Weather: 70's, overcast **Time In:** 0900 **Time Out:** 1115

Well Information

Depth to Water: 21.25 (feet) (from MP)

Total Depth: 120.7 (feet) (from MP)

Length of Water Column: 99.47 (feet)

Volume of Water in Well: 16.2 (gal)

Intake depth for tubing: 116.5 (feet)

Well Type:	Flushmount ☐		Stick-Up	☑
Well Material:	Stainless Steel ☐		PVC	☑
Well Locked:	Yes ☑		No	☐
Measuring Point Marked:	Yes ☐		No	☑
Well Diameter:	1"	2"	Other:	

Purging Information

screen 114-119

Purging Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:
Tubing/Bailer Material:	Steel	☐	Polyethylene	☑	Teflon ☐	Other:
Sampling Method:	Bailer	☐	Peristaltic	☑	Monsoon ☐	Other:

Pump Start Time: 0925

Pump Stop Time: 1105

Water-Quality Meter Type: Horiba

Total Volume Removed: 3.5 (gal)

Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	0930	0935	0940	0945	0950	0955	1000	1005	1010
Volume Purged (Gal)	0.2	0.5	0.7	0.9	1.1	1.25	1.4	1.55	1.7
Rate (mL/min)	175	150	175	175	175	150	150	150	150
Depth to Water (ft.)	21.21	21.26	21.25	21.25	21.23	21.23	21.23	21.23	21.23
pH		6.71	8.11	8.08	8.84	8.37	8.06	7.73	7.52
Temp. (C)		17.05	16.37	16.10	15.74	15.56	15.31	15.40	15.23
Conductivity (mS/cm)		0.471	0.471	0.501	0.536	0.626	0.681	0.719	0.736
Dissolved Oxygen (mg/L)		4.28	0.94	0.84	0.78	0.61	0.63	0.62	0.53
ORP (mV)		87	34	15	1	-48	-72	-80	-88
Turbidity (NTU)		10.7	8.07	6.49	27.7	42.2	38.6	42.7	41.9
Notes:	Horiba not calibrated until 0935								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260C	3		TestAmerica
PFAs	2		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-15	Sample Time: 1055		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, black sediment (some) odorless, no sheen

Final: clear, odorless, no sheen

PID = 0.0

4009-15 continued

Vestal Water Supply — Site

June 2017 GW Sampling — Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: S. Ellsworth and A. Thomas
Well ID: 4009-15
Client / Job Number: NYSDEC/00266401.0000
Date: 6/23/17
Weather: 70's, overcast
Time In: 0900 **Time Out:** 1115

Parameter:	1	2	3	4	5	6	7	8	9
Time	1015	1020	1025	1030	1035	1040	1045	1050	Sample 1055
Volume Purged (Gal)	2.0	2.2	2.35	2.5	2.7	2.9	3.1	3.3	
Rate (mL/min)	150	150	150	150	150	150	150	150	
Depth to Water (ft.)	21.24	21.24	21.24	21.24	21.24	21.24	21.24	21.24	
pH	7.46	7.41	7.40	7.41	7.40 ✓	7.37	7.32	7.30 ✓	
Temp. (C)	15.20	15.22	15.05	14.78	14.93 ✓	15.23	15.19	15.25 ✓	
Conductivity (mS/cm)	0.753	0.771	0.781	0.780	0.775 ✓	0.787	0.791	0.795 ✓	
Dissolved Oxygen (mg/L)	0.52	0.53	0.50	0.50	0.46 ✓	0.49	0.45	0.45 ✓	
ORP (mV)	-92	-94	-94	-96	-96 ✓	-95	-93	-92 ✓	
Turbidity (NTU)	40.1	27.5	36.1	19.4	21.0	18.8	14.9	13.0 ✓	
Notes:									

Parameter:	1	2	3	4	5	6	7	8	9
Time									
Volume Purged (Gal)									
Rate (mL/min)									
Depth to Water (ft.)									
pH									
Temp. (C)									
Conductivity (mS/cm)									
Dissolved Oxygen (mg/L)									
ORP (mV)									
Turbidity (NTU)									
Notes:									

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas + SEllsworth **Well ID:** 4009-16

Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/22/17

Weather: Sun, 70°-80° **Time In:** 1045 **Time Out:** 12:30

Well Information

Depth to Water: 26.98 (feet) (from MP)

Total Depth: 149 (feet) (from MP)

Length of Water Column: 122.1 (feet)

Volume of Water in Well: 20.9 (gal)

Intake depth for tubing: 117 (feet)

Well Type:	Flushmount	☐	Stick-Up	☑	
Well Material:	Stainless Steel	☐	PVC	☑	
Well Locked:	Yes	☑	No	☐	
Measuring Point Marked:	Yes	☑	No	☐	
Well Diameter:	1"	2" (circled)	Other:		

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☒	Monsoon ☐	Other:	
Tubing/Bailer Material:	Steel	☐	Polyethylene	☒	Teflon ☐	Other:	
Sampling Method:	Bailer	☐	Peristaltic	☒	Monsoon ☐	Other:	

Pump Start Time: 1122

Pump Stop Time: 1227 Water-Quality Meter Type: Horiba

Total Volume Removed: 1.85 (gal) Did well go dry: Yes ☐ No ☒

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1130	1135	1140	1145	1150	1155	1200	1205	
Volume Purged (Gal)	0.3	0.5	0.65	0.8	0.95	1.1	1.25	1	
Rate (mL/min)	2135	110	110	100	100	100	100	100	
Depth to Water (ft.)	21.81	21.96	21.99	22.02	22.02	22.02	22.02	22	
pH	8.91	9.33	9.48	9.54	9.57	9.59	9.62	9	
Temp. (C)	18.54	17.58	17.35	17.29	17.65	17.71	17.50	17	
Conductivity (mS/cm)	0.325	0.336	0.340	0.339	0.336	0.338	0.342	Bail	
Dissolved Oxygen (mg/L)	1.79	1.55	1.41	1.30	1.21	1.17	1.14		
ORP (mV)	-53	-44	-91	-102	-109	-114	-118		
Turbidity (NTU)	27.1	22.9	20.5	19.0	20.2	19.0	20.6	1	
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
1-4 Dioxane	2		"
PFCs	2		"
Color: Clear			
Odor: None			
Appearance: No sheen			
Sample ID: 4009-16	Sample Time: 1205		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By: SME			

Problems / Observations

Initial: Trace black sediment, colorless odorless, no sheen,

Final: clear, colorless, odorless

PID: 0.0 ppm

Vestal Water Supply — Site

Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: Anthony + Spilsworth
Well ID: 4009-16A
Client / Job Number: NYSDEC 00266401.0000
Date: 6/22/17
Time In: 1045 Time Out: 1315
Weather:

Well Information

Depth to Water: 20.89 (feet) (from MP)
Total Depth: 47.92 (feet) (from MP)
Length of Water Column: 27.03 (feet)
Volume of Water in Well: 4.4 (gal)
Intake depth for tubing: 31.5 (feet)

Well Type: Flushmount ☐ Stick-Up ☑
Well Material: Stainless Steel ☐ PVC ☑
Well Locked: Yes ☑ No ☐
Measuring Point Marked: Yes ☑ No ☐
Well Diameter: 1" 2" Other:

Purging Information

Purging Method: Bailer ☐ Peristaltic ☑ Monsoon ☐ Other:
Tubing/Bailer Material: Steel ☐ Polyethylene ☑ Teflon ☐ Other:
Sampling Method: Bailer ☐ Peristaltic ☑ Monsoon ☐ Other:

Pump Start Time: 1120
Pump Stop Time: 1300
Water-Quality Meter Type: Horiba
Total Volume Removed: 4.1 (gal)
Did well go dry: Yes ☐ No ☐

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L = 3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1125	1130	1135	1140	1145	1150	1155	1200	1205
Volume Purged (Gal)	.2	.5	0.7	0.9	1.1	1.4	1.6	1.9	2.2
Rate (mL/min)	200	200	150	175	175	175	175	175	190
Depth to Water (ft.)	20.89	20.91	20.92	20.92	20.92	20.92	20.92	20.92	20.92
pH	6.95	6.65	7.43	7.41	6.76	6.59	6.51	6.45	6.42
Temp. (C)		16.98	16.45	15.78	15.13	14.67	14.63	14.61	14.60
Conductivity (mS/cm)	0.379	0.379	0.393	0.635	0.822	0.831	0.840	0.841	0.838
Dissolved Oxygen (mg/L)	0.84	0.84	0.68	0.70	2.74	3.38	3.74	3.83	3.89
ORP (mV)	117	117	44	-6	7	14	27	32	39
Turbidity (NTU)	42.01	42.0	48.9	43.8	37.6	33.4	29.7	24.5	20.5
Notes:	did not take Horiba readings at 1125								

Sampling Information

Analyses	#	n	Laboratory
VOCs 8260	3		TestAmerica
PFC	2		↓
1,4 Dioxane	2		↓
Color:			
Odor:			
Appearance:			
Sample ID: 4009-16A	Sample Time: 1245		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID: —	Dup. Time: —		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, some black sediment at first. odorless, no sheen

Final: clear, odorless, no sheen

PID: 0.0

4009-16A continued

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Attorney
Client / Job Number: NYSDEC 00266401.0000
Weather:
Well ID: 4009-16A
Date: 6/22/17
Time In: 1045 **Time Out:**

Well Information

Depth to Water:	(feet)	(from MP)
Total Depth:	(feet)	(from MP)
Length of Water Column:	(feet)	
Volume of Water in Well:	(gal)	
Intake depth for tubing:	(feet)	

Well Type:	Flushmount ☐		Stick-Up ☐	
Well Material:	Stainless Steel ☐		PVC ☐	
Well Locked:	Yes ☐		No ☐	
Measuring Point Marked:	Yes ☐		No ☐	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☐	Monsoon ☐	Other:
Tubing/Bailer Material:	Steel ☐	Polyethylene ☐	Teflon ☐	Other:
Sampling Method:	Bailer ☐	Peristaltic ☐	Monsoon ☐	Other:

Pump Start Time:
Pump Stop Time: Water-Quality Meter Type:
Total Volume Removed: (gal) Did well go dry: Yes ☐ No ☐

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1210	~~1215~~ 1215	1220	1225	1230	1235	1240	Sample	
Volume Purged (Gal)	2.3	2.5	2.7	2.9	3.1	3.6	3.9		
Rate (mL/min)	200	200	200	200	200	200	200		
Depth to Water (ft.)	20.92	20.92	20.92	20.93	20.93	20.93	20.93		
pH	6.39	6.39	6.38	6.38	6.35	6.38	6.37	Cut	
Temp. (C)	14.70	14.67	14.63	14.59	14.50	14.46	14.40		
Conductivity (mS/cm)	0.842	0.844	0.843	0.846	0.846	0.846	0.844	1245	
Dissolved Oxygen (mg/L)	4.15	4.20	4.41	4.50	~~4.52~~ 4.52	4.53	4.57		
ORP (mV)	40	48	47	54	60	57	60		
Turbidity (NTU)	17.6	17.3	15.6	~~14.0~~ 14.0	12.2	~~13.3~~ 13.3	~~12.1~~ 12.1		
Notes:									

Sampling Information

Analyses	#	n	Laboratory
			TestAmerica

Color:
Odor:
Appearance:

Sample ID:	Sample Time:
MS/MSD: Yes ☐	No ☐
Duplicate: Yes ☐	No ☐
Duplicate ID	Dup. Time:
Chain of Custody Signed By:	

Problems / Observations

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Thames + Sellsworth **Well ID:** 4009-18
Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/21/17
Weather: 70's - 80's **Time In:** 1130 **Time Out:** 1255

Well Information

Depth to Water: 29.22 (feet) (from MP)
Total Depth: 123.1 (feet) (from MP)
Length of Water Column: 93.88 (feet)
Volume of Water in Well: 15.29 (gal)
Intake depth for tubing: 120 (feet)

Well Type:	Flushmount ☐		Stick-Up ☑	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☑		No ☐	
Measuring Point Marked:	Yes ☐		No ☑	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 1140
Pump Stop Time: 1240 Water-Quality Meter Type: Horiba
Total Volume Removed: 1.5 (gal) Did well go dry: Yes ☐ No ☑

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1150	1155	1200	1205	1210	1215	1220	1225	
Volume Purged (Gal)	0.25	0.45	0.6	0.75	0.9	1.1	1.35	1.45	Sample
Rate (mL/min)	100 mL/min	110 mL/min	115 mL/min	115 mL/min	115 mL/min	115 mL/min	115 mL/min	115 mL/min	at
Depth to Water (ft.)	28.28	[illegible]	28.26	28.26	28.22	28.22	28.22	28.22	
pH	7.93	[illegible]	7.19	7.17	7.15 ✓	7.10 ✓	7.07 ✓	7.06 ✓	12:30
Temp. (C)	20.36	[illegible]	16.53	15.53	15.68	14.94	14.94	15.01 ✓	
Conductivity (mS/cm)	0.282	0.262	0.259	0.256 ✓	0.256 ✓	0.258 ✓	0.255 ✓	0.256 ✓	
Dissolved Oxygen (mg/L)	1.51	0.91	0.86	0.85 ✓	0.82 ✓	0.81 ✓	0.80 ✓	0.80 ✓	
ORP (mV)	-103	-110	-109	-109 ✓	-108 ✓	-107 ✓	-106 ✓	-106 ✓	
Turbidity (NTU)	2.75	2.08	1.49	1.49 ✓	2.01 ✓	1.18	1.71 ✓	1.41 ✓	
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOC 8260C	3		TestAmerica
PFAS UCMR6	2		
8260 1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-18	Sample Time: 1230		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID: -	Dup. Time: -		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, colorless, no sheen odorless

Final: Same as above

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: A Thomas + S Ellsworth
Well ID: 4009-19
Client / Job Number: NYSDEC 00266401.0000
Date: 6/21/17
Weather: 70's, sunny
Time In: 0900 **Time Out:**

Well Information

1.0

Depth to Water:	19.10 (feet) (from MP)
Total Depth:	104.9 (feet) (from MP)
Length of Water Column:	85.8 (feet)
Volume of Water in Well:	13.98 (gal)
Intake depth for tubing:	100 (feet)

Well Type:	Flushmount ☐		Stick-Up ☑	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☑		No ☐	
Measuring Point Marked:	Yes ☐		No ☑	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☐	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☐	Monsoon ☐	Other:		
Pump Start Time:	0920					
Pump Stop Time:	1015	Water-Quality Meter Type:	horiba			
Total Volume Removed:	2.5 (gal)	Did well go dry:	Yes ☐	No ☑		

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	0925	0930	0935	0940	0945	0950	0955	1000	1005
Volume Purged (Gal)	0.3	0.6	1.0	1.2	1.4	1.6	2.0	2.2	2.5
Rate (mL/min)	225	220	220	220	220	220	220	220	220
Depth to Water (ft.)	19.14	19.15	19.15	19.15	19.15	19.15	19.15	19.15	19.15
pH	6.49	6.85	7.03	7.12	7.21	7.27	7.40	7.38	7.39
Temp. (C)	13.59	13.11	12.99	12.86	12.71	12.65	12.65	12.72	12.75
Conductivity (mS/cm)	0.342	0.332	0.330	0.329	0.329	0.329	0.327	0.326	0.326
Dissolved Oxygen (mg/L)	5.62	3.00	2.35	2.13	1.89	1.75	1.82	1.71	1.73
ORP (mV)	-87	-87	-108	-117	-126	-130	-135	-137	-140
Turbidity (NTU)	~~17.66~~	4.4	3.28	3.06	2.49	2.14	1.67	1.82	~~2~~ 2.06
Notes:									

Sample at 1010

Sampling Information

Analyses	#	n	Laboratory
			TestAmerica
Color:			
Odor:			
Appearance:			
Sample ID: 4009-19	Sample Time: 1010		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, no sheen, odorless

Final: S.A.A

PID: 0.0

Sample at 1010

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: A Thomas + S Ellsworth **Well ID:** 4009-21

Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/21/17

Weather: 70-80's, sunny **Time In:** 1300 **Time Out:** 1580

Well Information

PDB 1.0 from bottom

Depth to Water:	18.53 (feet)	(from MP)
Total Depth:	118.8 (feet)	(from MP)
Length of Water Column:	(feet)	
Volume of Water in Well:	(gal)	
Intake depth for tubing:	(feet)	

Well Type:	Flushmount ☐		Stick-Up ☑	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☑		No ☐	
Measuring Point Marked:	Yes ☐		No ☑	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Pump Start Time: 1340

Pump Stop Time: 1545 Water-Quality Meter Type: Horiba

Total Volume Removed: 5.0 (gal) Did well go dry: Yes ☐ No ☑

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1340	1345	1350	1355	~~1400~~ 1400	1405	1410	1415	1420
Volume Purged (Gal)	0.5	0.7	0.8	0.85	0.90	1.1	1.4	1.5	1.7
Rate (mL/min)	205	160	170	150	150	150	150	155	155
Depth to Water (ft.)	19.15	19.21	19.24	19.19	19.19	19.15	19.2	19.19	19.19
pH		8.47	8.71	8.80	8.83	8.81 ✓	8.74	8.73 ✓	8.72 ✓
Temp. (C)		14.66	13.98	13.32	13.21	12.92	12.62	12.69 ✓	12.65 ✓
Conductivity (mS/cm)		0.138	0.138	0.139 ✓	0.140	0.141 ✓	0.152	0.154 ✓	0.158 ✓
Dissolved Oxygen (mg/L)		1.54	1.07	0.84	0.74	0.66	0.57	0.56 ✓	0.55 ✓
ORP (mV)		-35	-93	-117	-132	-150	-166	-167 ✓	-173 ✓
Turbidity (NTU)		9.89	12.1	14.2	19.4	16.1	24.1	44.8	44.9
Notes:	waiting for water to clear								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260C	3		TestAmerica
Color:			
Odor:			
Appearance:			
Sample ID: 4009-21	Sample Time: 1540		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: initial black sediment, cleared up quickly. Still cloudy will let it run first.

Final:

PID = 0.0 ppm

4009-21 continued. (2/3)

Vestal Water Supply
Site

Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: | **Well ID:**
Client / Job Number: NYSDEC 00266401.0000 | **Date:**
Weather: | **Time In:** **Time Out:**

Well Information

Depth to Water:	(feet)	(from MP)
Total Depth:	(feet)	(from MP)
Length of Water Column:	(feet)	
Volume of Water in Well:	(gal)	
Intake depth for tubing:	(feet)	

Well Type:	Flushmount ☐		Stick-Up ☐	
Well Material:	Stainless Steel ☐		PVC ☐	
Well Locked:	Yes ☐		No ☐	
Measuring Point Marked:	Yes ☐		No ☐	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☐	Monsoon ☐	Other:
Tubing/Bailer Material:	Steel ☐	Polyethylene ☐	Teflon ☐	Other:
Sampling Method:	Bailer ☐	Peristaltic ☐	Monsoon ☐	Other:

Pump Start Time:
Pump Stop Time: Water-Quality Meter Type:
Total Volume Removed: (gal) Did well go dry: Yes ☐ No ☐

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1425	1430	1435	1440	1445	1450	1455	1500	1505
Volume Purged (Gal)	1.9	2.05	2.2	2.5	2.65	2.8	3.0	3.3	3.4
Rate (mL/min)	150	150	165	150	140	150	150	150	150
Depth to Water (ft.)	19.19	19.19	19.19	19.19	19.17	19.19	19.19	19.19	19.19
pH	8.70	8.70	8.70	8.71	8.71	8.68	8.68	8.65	8.64
Temp. (C)	12.62	12.62	12.29	12.30	12.46	12.30	12.23	12.15	12.08
Conductivity (mS/cm)	0.162	0.164	0.165	0.166	0.169	0.170	0.172	0.174	0.175
Dissolved Oxygen (mg/L)	0.52	0.51	0.50	0.49	0.49	0.55	0.50	0.47	0.47
ORP (mV)	-182	-185	-189	-197	-200	-205	-208	-211	-214
Turbidity (NTU)	46.8	38.3	36.8	33.2	29.7	25.9	24.9	22.0	19.5
Notes:									

Sampling Information

Analyses	#	n	Laboratory
			TestAmerica

Color:
Odor:
Appearance:

Sample ID: Sample Time:
MS/MSD: Yes ☐ No ☐
Duplicate: Yes ☐ No ☐
Duplicate ID Dup. Time:
Chain of Custody Signed By:

Problems / Observations

4009-21 continued (3/3)

Vestal Water Supply
Site

Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: | **Well ID:**
Client / Job Number: NYSDEC 00266401.0000 | **Date:**
Weather: | **Time In:** | **Time Out:** 1550

Well Information

Depth to Water:	(feet)	(from MP)
Total Depth:	(feet)	(from MP)
Length of Water Column:	(feet)	
Volume of Water in Well:	(gal)	
Intake depth for tubing:	(feet)	

Well Type:	Flushmount ☐		Stick-Up ☐	
Well Material:	Stainless Steel ☐		PVC ☐	
Well Locked:	Yes ☐		No ☐	
Measuring Point Marked:	Yes ☐		No ☐	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time:
Pump Stop Time: | Water-Quality Meter Type:
Total Volume Removed: (gal) | Did well go dry: Yes ☐ No ☐

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1510	1515	1520	1525	1530	1535			
Volume Purged (Gal)	3.6	3.8	4.0	4.2	4.7	5.0	Sample at		
Rate (mL/min)	150	150	150	150	150	150		1540	
Depth to Water (ft.)	19.19	19.19	19.19	19.19	19.19	19.19			
pH	8.63	8.60	8.59	8.58	8.57	8.58			
Temp. (C)	12.11	12.10	12.04	12.11	12.11	12.14			
Conductivity (mS/cm)	0.177	0.178	0.179	0.181	0.182	0.183			
Dissolved Oxygen (mg/L)	0.46	0.45	0.44	0.45	0.44	0.43			
ORP (mV)	-217	-217	-219	-220	-222	-223			
Turbidity (NTU)	17.4	14.5	15.0	11.5	11.6	11.0			
Notes:									

Sampling Information

Analyses	#	n	Laboratory
			TestAmerica

Color:
Odor:
Appearance:

Sample ID:	Sample Time:
MS/MSD: Yes ☐	No ☐
Duplicate: Yes ☐	No ☐
Duplicate ID	Dup. Time:
Chain of Custody Signed By:	

Problems / Observations

Vestal Water Supply

Site — Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas + SEllsworth — **Well ID:** 4009-22
Client / Job Number: NYSDEC 00266401.0000 — **Date:** 6/23/17
Weather: overcast, rain, 70's — **Time In:** 1145 **Time Out:** 1350

Well Information

Depth to Water:	9.39	(feet) (from MP)
Total Depth:	127	(feet) (from MP)
Length of Water Column:		(feet) 117.61
Volume of Water in Well:		(gal) 19.17
Intake depth for tubing:	125.5	(feet)

123.3 or 131.7

Well Type:	Flushmount ☒		Stick-Up ☐	
Well Material:	Stainless Steel ☐		PVC ☒	
Well Locked:	Yes ☐		No ☒	Bolts don't thread
Measuring Point Marked:	Yes ☒		No ☐	
Well Diameter:	1"	(2")	Other:	

Purging Information

screen ~~126-131~~ 123.7-131.7

Purging Method:	Bailer ☐	Peristaltic ☒	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☒	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☒	Monsoon ☐	Other:		

Pump Start Time: 1155
Pump Stop Time: 1348 — Water-Quality Meter Type: Horiba
Total Volume Removed: 2.25 (gal) — Did well go dry: Yes ☐ No ☒

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1205	1210	1215	1220	1225	1230	1235	1240	1245
Volume Purged (Gal)	0.25	0.35	0.45	0.55	0.65	0.75	0.85	0.95	1.05
Rate (mL/min)	100	75	80	80	80	80	80	80	80
Depth to Water (ft.)	11.36	11.99	12.51	13.42	14.16	14.61	15.2	15.93	16.09
pH	11.86	11.90	11.89	11.88	11.84	11.80	11.70	11.67	11.64
Temp. (C)	15.97	17.59	18.62	18.28	18.89	18.77	19.48	19.74	19.72
Conductivity (mS/cm)	5.12	4.44	4.12	3.54	3.33	2.81	2.36	2.16	2.07
Dissolved Oxygen (mg/L)	1.76	1.34	1.24	1.13	1.07	1.05	1.01	0.98	0.96
ORP (mV)	-214	-228	-217	-216	-214	-210	-209	-208	-208
Turbidity (NTU)	21.9	17.4	20.7	33.7	37.7	31.3	34.1	35.5	24.0
Notes:	Pump rate is as low as possible, without shutting off, due to draw down. Screen may ~~be sedi~~ require development. Tubing touched bottom of well and is outside of screened interval, due to current depth to bottom.								

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
1,4-Dioxane	2		"
PFCs	2		"
Color: None			
Odor: None			
Appearance: No sheen, clear, trace sediment.			
Sample ID: 4009-22	Sample Time: 1335		
MS/MSD: Yes ☐	No ☒		
Duplicate: Yes ☐	No ☒		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By: SME			

Problems / Observations

Initial: Colorless, trace black sediment, odorless, no sheen

Final: clear, colorless, odorless, trace black sediment

PID = 0.0 ppm

Vestal Water Supply — **June 2017 GW Sampling**

Site — *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: S. Ellsworth and A. Thomas
Well ID: 4009-22
Client / Job Number: NYSDEC/00266401.0000
Date: 6/23/17
Weather: overcast, rain, 70's
Time In: 1145 **Time Out:** ~~1350~~ 1350

Parameter:	1	2	3	4	5	6	7	8	9
Time	1250	1255	1300	1305	1310	1315	1320	1325	1335
Volume Purged (Gal)	1.15	1.25	1.35	1.45	1.55	1.65	1.75	1.85	1
Rate (mL/min)	80	80	80	80	80	80	80	80	1
Depth to Water (ft.)	16.67	17.25	17.79	18.40	18.96	19.5	20.03	20.52	
pH	11.63	11.60	11.57	11.55	11.55	11.52	11.51	11.50	
Temp. (C)	19.66	19.27	19.02	18.88	19.03	19.24	19.34	19.35	Sample
Conductivity (mS/cm)	1.93	1.83	1.77	1.73	1.67	1.65	1.62	1.61	
Dissolved Oxygen (mg/L)	0.91	0.88	0.87	0.85	0.83	0.84	0.82	0.82	
ORP (mV)	-211	-209	-209	-209	-209	-207	-208	-206	
Turbidity (NTU)	25.5	26.3	25.2	27.8	22.0	21.2	23.1	22.3	1
Notes:									

Parameter:	1	2	3	4	5	6	7	8	9
Time									
Volume Purged (Gal)									
Rate (mL/min)									
Depth to Water (ft.)									
pH									
Temp. (C)									
Conductivity (mS/cm)									
Dissolved Oxygen (mg/L)									
ORP (mV)									
Turbidity (NTU)									
Notes:									

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas and SEllsworth
Well ID: 4009-26
Client / Job Number: 00266401.0000 NYSDEC
Date: 6/28/17
Weather: Sun, 70's
Time In: 0900 **Time Out:** 1020

Well Information

Depth to Water: 18.25 (feet) (from MP)
Total Depth: 58.73 (feet) (from MP)
Length of Water Column: (feet) 40.48
Volume of Water in Well: (gal) 6.6
Intake depth for tubing: 51' (feet)
screen: 46-56'

Well Type:	Flushmount ☐		Stick-Up ☑	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☐		No ☑	
Measuring Point Marked:	Yes ☑		No ☐	
Well Diameter:	1"	(2")	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 0918
Pump Stop Time: 1013
Water-Quality Meter Type: Horiba
Total Volume Removed: 2.5 (gal)
Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	0925	0930	0935	0940	0945	0950	0955		
Volume Purged (Gal)	0.4	0.7	1.0	1.3	1.6	1.9			
Rate (mL/min)	220	220	220	220	220	220			
Depth to Water (ft.)	18.27	18.27	18.27	18.27	18.27	18.27			
pH	6.06	6.24	6.29	6.32	6.35	6.37			
Temp. (C)	16.04	14.99	14.64	14.62	14.53	14.56			
Conductivity (mS/cm)	1.85	1.86	1.87	1.87	1.88	1.88			
Dissolved Oxygen (mg/L)	2.65	1.88	1.92	1.77	1.67	1.64			
ORP (mV)	176	168	166	162	160	159			
Turbidity (NTU)	2.01	2.56	1.77	2.36	1.52	1.13			
Notes:									

SAMPLE

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		"
1,4-Dioxane	2		"
Color: None			
Odor: None			
Appearance: No Sheen			
Sample ID: 4009-26	Sample Time: 0955		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☑	No ☐		
Duplicate ID DUP2	Dup. Time: —		
Chain of Custody Signed By: SME			

Problems / Observations

Initial: colorless, odorless, no sheen, trace black particulate.

Final: Clear, colorless, odorless

PID = 0.0ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas and SEllsworth
Well ID: 4009-27D
Client / Job Number: 00266401.0000 NYSDEC
Date: 6/27/17
Weather: 80's, rainy
Time In: 1245 **Time Out:** 1400

Well Information

Depth to Water:	20.81 (feet)	(from MP)
Total Depth:	28.88 (feet)	(from MP)
Length of Water Column:	(feet)	
Volume of Water in Well:	(gal)	
Intake depth for tubing:	90 (feet)	

Screen 85-95

Well Type:	Flushmount ☐		Stick-Up ☑	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☑		No ☐	
Measuring Point Marked:	Yes ☑		No ☐	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Pump Start Time:	1255					
Pump Stop Time:	1340	Water-Quality Meter Type:	Horiba			
Total Volume Removed:	1.5 (gal)	Did well go dry:	Yes ☐	No ☑		

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1255	1300	1305	1310	1315	1320	1325	Sample @ 1330	
Volume Purged (Gal)	0.1	0.3	0.5	0.7	0.9	1.1	1.3		
Rate (mL/min)	200	200	200	200	200	200	200		
Depth to Water (ft.)	20.81	20.95	20.95	20.95	20.95	20.95	20.95		
pH		6.85	6.76	6.72	6.71	6.70	6.69		
Temp. (C)		15.00	13.84	13.31	13.20	13.19	13.30		
Conductivity (mS/cm)		1.17	1.17	1.18	1.18	1.18	1.19		
Dissolved Oxygen (mg/L)		1.09	0.63	0.47	0.47	0.48	0.51		
ORP (mV)		-24	-10	-3	0	4	9		
Turbidity (NTU)		3.55	0.91	0.47	0.65	0.58	0.40		
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	3		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-27D	Sample Time: 1330		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, [redacted], no sheen
slight odor

Final: clear, odorless, no sheen

PID: 0.0 ppm

Vestal Water Supply
Site

Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: S. Ellsworth ; A. Thomas
Well ID: 4009-271
Client / Job Number: NYSDEC 00266401.0000
Date: 6/27/17
Weather: sun, clouds, 70's
Time In: 1100 **Time Out:** 1225

Well Information

Depth to Water: 20.95 (feet) (from MP)
Total Depth: 78.93 (feet) (from MP)
Length of Water Column: 57.98 (feet)
Volume of Water in Well: 9.45 (gal)
Intake depth for tubing: 70 (feet)
screen 65-75'

Well Type:	Flushmount ☐		Stick-Up ☒	
Well Material:	Stainless Steel ☐		PVC ☒	
Well Locked:	Yes ☒		No ☐	
Measuring Point Marked:	Yes ☒		No ☐	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☒	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☒	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☒	Monsoon ☐	Other:		

Pump Start Time: 1115
Pump Stop Time: 1210
Water-Quality Meter Type: Horiba
Total Volume Removed: 2.25 (gal)
Did well go dry: Yes ☐ No ☒

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L = 3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1120	1125	1130	1135	1140	1145	1150	~~1200~~ 1155	
Volume Purged (Gal)	0.25	0.5	0.75	1.0	1.25	1.50	1.75	SAMPLE	
Rate (mL/min)	180	180	180	180	180	180	180		
Depth to Water (ft.)	20.98	20.98	20.98	20.98	20.98	20.98	20.98		
pH	6.69	6.74	6.67	6.63	6.63	6.63	6.66		
Temp. (C)	18.79	15.32	15.23	14.93	14.73	14.59	14.44		
Conductivity (mS/cm)	1.07	1.11	1.09	1.09	1.09	1.09	1.10		
Dissolved Oxygen (mg/L)	2.21	1.39	1.20	1.12	1.06	1.01	1.02		
ORP (mV)	50	47	53	57	56	53	49		
Turbidity (NTU)	1.46	0.96	0.91	1.91	0.50	1.02	1.16		
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		"
1,4-Dioxane	2		"
Color: None			
Odor: Faint			
Appearance: No sheen			
Sample ID: ~~MW~~ 4009-2TI	Sample Time: 1200		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By: SME			

Problems / Observations

Initial: clear, colorless, faint odor; no sheen

Final: clear, colorless, faint odor, no sheen

PID = 0.0 ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas and SEllsworth
Well ID: 4009-27S
Client / Job Number: 00266401.0000 NYSDEC
Date: 6/27/17
Weather: overcast, rain 60s
Time In: 1230 **Time Out:** 1400

Well Information

Depth to Water: 20.97 (feet) (from MP)
Total Depth: 53.08 (feet) (from MP)
Length of Water Column: ~~32.11~~ (feet) 32.11
Volume of Water in Well: ~~5.23~~ (gal) 5.23
Intake depth for tubing: 45 (feet)
Screen 40-50'

Well Type:	Flushmount ☐		Stick-Up ☑	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☑		No ☐	
Measuring Point Marked:	Yes ☑		No ☐	
Well Diameter:	1"	(2")	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 1254
Pump Stop Time: 1345
Water-Quality Meter Type: Horiba
Total Volume Removed: 2.5 (gal)
Did well go dry: Yes ☐ No ☑

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1300	1305	1310	1315	1320	1325	1335		
Volume Purged (Gal)	0.35	0.65	0.95	1.25	1.55	1.85	|		
Rate (mL/min)	235	235	235	235	235	235	|		
Depth to Water (ft.)	21.02	21.02	21.02	21.02	21.02	21.02	|		
pH	6.64	6.54	6.45	6.45	6.43	6.43	|		
Temp. (C)	15.09	14.52	13.97	13.89	13.91	14.07	|		
Conductivity (mS/cm)	1.64	1.66	1.67	1.67	1.67	1.67	SAMPLE		
Dissolved Oxygen (mg/L)	2.81	1.96	1.73	1.67	1.59	1.60	|		
ORP (mV)	119	118	121	121	122	122	|		
Turbidity (NTU)	1.31	1.15	1.13	1.07	1.31	0.92	|		
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		"
1,4-Dioxane	2		"
Color: None			
Odor: None			
Appearance: No sheen			
Sample ID: 4009-27S	Sample Time: 1335		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By:	SME		

Problems / Observations

Initial: clear, colorless, faint odor, no sheen

Final: clear, colorless, odorless

PID: 0.0 ppm

Vestal Water Supply

Site | Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas + SGilbreath | **Well ID:** 4009-28
Client / Job Number: NYSDEC 00266401.0000 | **Date:** 6/23/17
Weather: overcast, 70's | **Time In:** 0910 **Time Out:** 1045

Well Information

Depth to Water: 16.28 (feet) (from MP)
Total Depth: 139 (feet) (from MP)
Length of Water Column: (feet) 122.72
Volume of Water in Well: 20 (gal)
Intake depth for tubing: 134 (feet)

Well Type:	Flushmount ☑	Stick-Up ☐	
Well Material:	Stainless Steel ☐	PVC ☑	
Well Locked:	Yes ☑	No ☐	
Measuring Point Marked:	Yes ☑	No ☐	
Well Diameter:	1"	2"	Other:

Purging Information

Screen = 129-139

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 0926
Pump Stop Time: 1039
Total Volume Removed: 2.3 (gal)
Water-Quality Meter Type: Horiba
Did well go dry: Yes ☐ No ☑

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	0935	0940	0945	0950	0955	1000	1005	1010	1015
Volume Purged (Gal)	0.3	0.5	0.7	0.9	1.1	1.3	1.5	1.7	1.9
Rate (mL/min)	140	140	140	140	140	140	140	140	140
Depth to Water (ft.)	16.28	16.28	16.28	16.28	16.27	16.27	16.27	16.27	~~15.70~~ 16.27
pH	6.45	6.64	6.70	6.71	6.74	6.76	6.79	6.80	6.81
Temp. (C)	17.74	16.34	16.06	16.09	16.01	15.81	15.88	15.74	15.70
Conductivity (mS/cm)	1.03	1.08	1.09	1.10	1.11	1.11	1.10	1.10	1.10
Dissolved Oxygen (mg/L)	1.98	1.63	1.49	1.37	1.32	1.23	1.15	1.11	1.07
ORP (mV)	-117	-107	-93	-82	-72	-67	-62	-59	-56
Turbidity (NTU)	8.39	4.72	4.62	3.18	1.75	2.59	1.35	2.29	0.93
Notes:									

1025 — SAMPLE

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
1-4, Dioxane	2		"
PFCs	2		"

Color: None
Odor: None
Appearance: Clear
Sample ID: 4009-28 Sample Time: 1025
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID: Dup. Time:
Chain of Custody Signed By: SME

Problems / Observations

Initial: clear, colorless, odor, no sheen.

Final: clear, colorless, odorless, no sheen

PID = 0.0 ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas + SEllsworth
Well ID: 4009-29D
Client / Job Number: NYSDEC 00266401.0000
Date: ~~0900~~ 6/27/17
Weather: 70s, cloudy
Time In: 0900 **Time Out:** 1030

Well Information

Depth to Water: 21.07 (feet) (from MP)
Total Depth: 90.61 (feet) (from MP)
Length of Water Column: 69.54 (feet)
Volume of Water in Well: 11.33 (gal)
Intake depth for tubing: 89 (feet)

Well Type:	Flushmount ☑		Stick-Up ☐	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☑		No ☐	
Measuring Point Marked:	Yes ☑		No ☐	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 0930
Pump Stop Time: 1020
Water-Quality Meter Type: Horiba
Total Volume Removed: 1.15 (gal)
Did well go dry: Yes ☐ No ☐

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	0930	0935	0940	0945	0950	0955	1000	1005	Sample @ 1010
Volume Purged (Gal)	0.1	0.25	0.35	0.5	0.6	0.8	0.90	1.05	
Rate (mL/min)	185	175	150	150	150	150	150	150	
Depth to Water (ft.)	21.07	21.07	21.08	21.08	21.08	21.09	21.10	21.10	
pH		6.43	6.64	6.77	6.84	6.87	6.90	6.90	
Temp. (C)		13.10	12.90	12.82	12.81	12.81	13.09	13.19	
Conductivity (mS/cm)		0.942	0.931	0.924	0.922	0.920	0.924	0.925	
Dissolved Oxygen (mg/L)		2.11	1.37	0.97	0.83	0.79	0.75	0.72	
ORP (mV)		-7	-33	-61	-79	-90	-98	-100	
Turbidity (NTU)		3.12	2.76	2.55	1.25	1.09	1.00	0.77	
Notes:	Horiba plugged in @ 0935								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-29D	Sample Time: 1010		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: mostly clear with some black sediment, no sheen

Final: clear, no sheen, odorless

PID: 0.0

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas and SEllsworth
Client / Job Number: 00266401.0000 NYSDEC
Weather: 80's, cloudy

Well ID: 4009 - 29I
Date: 6/27/17
Time In: 1100 **Time Out:** ~~1230~~ 1230

Well Information

Depth to Water:	21.09 (feet)	(from MP)
Total Depth:	70.61 (feet)	(from MP)
Length of Water Column:	49.52 (feet)	
Volume of Water in Well:	8.07 (gal)	
Intake depth for tubing:	65 (feet)	

Well Type:	Flushmount	☑	Stick-Up	☐	
Well Material:	Stainless Steel	☐	PVC	☑	
Well Locked:	Yes	☑	No	☐	
Measuring Point Marked:	Yes	☑	No	☐	
Well Diameter:	1"	2"	Other:		

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☑	Monsoon	☐	Other:
Tubing/Bailer Material:	Steel	☐	Polyethylene	☑	Teflon	☐	Other:
Sampling Method:	Bailer	☐	Peristaltic	☑	Monsoon	☐	Other:

Pump Start Time: 1120
Pump Stop Time: 1210
Water-Quality Meter Type: Horiba
Total Volume Removed: (gal)
Did well go dry: Yes ☐ No ☑

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1120	1125	1130	1135	1140	1145	1150	1155	Sample @ 1200
Volume Purged (Gal)	0.08	0.1	0.3	0.5	0.7	0.9	1.1	1.3	
Rate (mL/min)	170	160	160	160	160	160	160	166	
Depth to Water (ft.)	21.09	21.09	21.09	21.09	21.09	21.09	21.09	21.09	
pH		6.63	6.53	6.49	6.46	6.44	6.43	6.41	
Temp. (C)		14.00	13.53	13.23	13.16	12.97	12.96	12.84	
Conductivity (mS/cm)		1.24	1.25	1.27	1.27	1.28	1.28	1.29	
Dissolved Oxygen (mg/L)		1.74	1.06	0.81	0.71	0.65	0.64	0.63	
ORP (mV)		-5	19	37	47	54	59	64	
Turbidity (NTU)		1.66	0.68	0.13	0.45	0.40	0.34	0.42	
Notes:	Horiba utilized at 1125								

Sampling Information

Analyses	#	n	Laboratory
VOC 8260	3		TestAmerica
PFC	2		↓
1,4 Dioxane	2		↓
Color:			
Odor:			
Appearance:			
Sample ID: 4009 - 29I	Sample Time: 1200		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, no sheen, odorless

Final: S.A.A

PID: 0.0ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: S. Ellsworth, A. Thomas
Well ID: 4009-295
Client / Job Number: NYSDEC 00266401.0000
Date: 6/27/17
Weather: overcast, rain 60s
Time In: 0900 **Time Out:** 1040

Well Information

Depth to Water: 20.83 (feet) (from MP)
Total Depth: 49.86 (feet) (from MP)
Length of Water Column: 29.03 (feet)
Volume of Water in Well: 4.73 (gal)
Intake depth for tubing: 45 (feet)

Well Type:	Flushmount	☒	Stick-Up	☐
Well Material:	Stainless Steel	☐	PVC	☒
Well Locked:	Yes	☒	No	☐
Measuring Point Marked:	Yes	☒	No	☐
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☒	Monsoon ☐	Other:
Tubing/Bailer Material:	Steel	☐	Polyethylene	☒	Teflon ☐	Other:
Sampling Method:	Bailer	☐	Peristaltic	☒	Monsoon ☐	Other:

Pump Start Time: 0927
Pump Stop Time: 1033
Water-Quality Meter Type: Horiba
Total Volume Removed: 3 (gal)
Did well go dry: Yes ☐ No ☒

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	0935	0940	0945	0950	0955	1000	1005	1010	1015
Volume Purged (Gal)	0.5	0.75	1.0	1.25	1.50	1.75	2.0	2.25	2.5
Rate (mL/min)	250	200	200	200	200	200	200	200	200
Depth to Water (ft.)	20.84	20.84	20.84	20.84	20.84	20.84	20.84	20.84	20.84
pH	4.09	~~4.09~~ 6.12	6.17	6.20	6.23	6.24	6.25	6.26	6.27
Temp. (C)	17.06	~~17.06~~ 13.12	13.10	13.12	13.24	13.45	13.63	13.77	13.90
Conductivity (mS/cm)	0.019	~~0.019~~ 1.66	1.66	1.66	1.66	1.65	1.66	1.66	1.66
Dissolved Oxygen (mg/L)	9.79	1.78	1.71	1.61	1.52	1.44	1.33	1.30	1.25
ORP (mV)	257	-41	-42	-44	-45	-45	-46	-47	-47
Turbidity (NTU)	3.66	1.93	2.20	1.41	1.58	2.04	4.14	1.63	2.71
Notes:									

1025 — SAMPLE

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		
1,4-Dioxane	2		
Color: None			
Odor: None			
Appearance: No sheen			
Sample ID: 4009-295	Sample Time: 1025		
MS/MSD: Yes ☐	No ☒		
Duplicate: Yes ☐	No ☒		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By: SME			

Problems / Observations

Initial: clear, colorless, odorless, no sheen

Final: clear, colorless, odorless, no sheen

PID: 0.0ppm

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Thomas + Selbovan **Well ID:** 4009-30
Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/22/17
Weather: Sun, 70s - 80s **Time In:** 1330 **Time Out:** 1615

Well Information

Depth to Water: 21.6 (feet) (from MP)
Total Depth: 118 (feet) (from MP)
Length of Water Column: 96.4 (feet)
Volume of Water in Well: 15.7 (gal)
Intake depth for tubing: 115 (feet)

Well Type:	Flushmount ☐		Stick-Up	☑
Well Material:	Stainless Steel ☐		PVC	☑
Well Locked:	Yes ☑		No	☐
Measuring Point Marked:	Yes ☐		No	☑
Well Diameter:	1"	(2")	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☒	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☒	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☒	Monsoon ☐	Other:		

Pump Start Time: 1412
Pump Stop Time: 1615 Water-Quality Meter Type: Honda
Total Volume Removed: 3.6 (gal) Did well go dry: Yes ☐ No ☒

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1420	1425	1430	1435	1440	1445	1450	1455	1500
Volume Purged (Gal)	~~0.4~~	0.55	0.70	0.85	1.0	1.2	1.35	1.5	1.65
Rate (mL/min)	185	125	110	110	110	145	110	110	110
Depth to Water (ft.)	22.42	22.42	22.38	22.42	22.42	22.49	22.42	22.42	22.42
pH	8.28	8.03	7.93	7.92	7.92	7.90	7.75	7.64	7.60
Temp. (C)	17.11	16.25	16.41	15.66	15.86	15.58	15.32	15.64	15.61
Conductivity (mS/cm)	0.571	0.584	0.583	0.584	0.583	0.633	0.672	0.681	0.684
Dissolved Oxygen (mg/L)	1.97	1.54	1.43	1.35	1.27	1.23	1.20	1.16	1.14
ORP (mV)	-219	-229	-233	-241	-242	-241	-218	-205	-198
Turbidity (NTU)	23.3	5.69	5.01	4.65	3.05	26.4	47.8	45.4	39.3
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
1,4-Dioxane	2		"
PFCs	2		"
Color: None			
Odor: None			
Appearance: No sheen			
Sample ID: 4009-30	Sample Time: 1610		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID: -	Dup. Time: -		
Chain of Custody Signed By: SME			

Problems / Observations

Initial: Trace black sediment, no color, no odor, no sheen.

Final: clear, colorless, odorless, no sheen

PID: 0.0

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas & SEllsworth **Well ID:** 4009-30

Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/22/17

Weather: SUN 70s-80s **Time In:** 1330 **Time Out:** 1615

Well Information

Depth to Water:	(feet)	(from MP)
Total Depth:	(feet)	(from MP)
Length of Water Column:	(feet)	see pg 1
Volume of Water in Well:	(gal)	
Intake depth for tubing:	(feet)	

Well Type:	Flushmount	☐	Stick-Up	☒	
Well Material:	Stainless Steel	☐	PVC	☒	
Well Locked:	Yes	☒	No	☐	
Measuring Point Marked:	Yes	☐	No	☒	
Well Diameter:	1"	(2")	Other:		

Purging Information

Purging Method:	Bailer	☐	Peristaltic	☒	Monsoon ☐	Other:	
Tubing/Bailer Material:	Steel	☐	Polyethylene	☒	Teflon ☐	Other:	
Sampling Method:	Bailer	☐	Peristaltic	☒	Monsoon ☐	Other:	
Pump Start Time:							
Pump Stop Time:	see page 1		Water-Quality Meter Type:		Horiba		
Total Volume Removed:	(gal)		Did well go dry:	Yes ☐	No ☒		

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1505	1510	1515	1520	1525	1530	1535	1540	1545
Volume Purged (Gal)	1.8	1.95	2.1	2.25	2.4	2.55	2.7	2.85	3
Rate (mL/min)	110	110	110	110	110	110	110	110	110
Depth to Water (ft.)	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42	22.42
pH	7.57	7.57	7.51	7.48	7.47	7.46	7.46	7.45	7.45
Temp. (C)	15.72	16.06	15.52	16.04	15.30	15.73	15.87	15.27	14.79
Conductivity (mS/cm)	0.686	0.689	0.707	0.705	0.717	0.715	0.714	0.720	0.720
Dissolved Oxygen (mg/L)	1.09	1.07	1.08	1.03	1.06	1.02	1.01	1.03	1.01
ORP (mV)	-192	-191	-184	-179	-174	-172	-171	-169	-166
Turbidity (NTU)	48.2	40.7	27.8	20.9	16.1	15.5	12.2	11.2	9.34
Notes:									

Sampling Information

Analyses	#	n	Laboratory
			TestAmerica

see page 1

Color:	
Odor:	
Appearance:	
Sample ID: 4009-30	Sample Time: 1610
MS/MSD: Yes ☐	No ☑
Duplicate: Yes ☐	No ☑
Duplicate ID —	Dup. Time: —
Chain of Custody Signed By: SME	

Problems / Observations

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas & SEllsworth **Well ID:** 4009-30

Client / Job Number: NYSDEC 00266401.0000 **Date:** 6/22/17

Weather: SUN 70s-80s **Time In:** 1330 **Time Out:** 1615

Well Information

Depth to Water:	(feet)	(from MP)
Total Depth:	(feet)	(from MP)
Length of Water Column:	(feet)	See Pg 1
Volume of Water in Well:	(gal)	
Intake depth for tubing:	(feet)	

Well Type:	Flushmount ☐		Stick-Up ☒	
Well Material:	Stainless Steel ☐		PVC ☒	
Well Locked:	Yes ☒		No ☐	
Measuring Point Marked:	Yes ☐		No ☒	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☒	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☒	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☒	Monsoon ☐	Other:		
Pump Start Time:						
Pump Stop Time:	See Pg 1		Water-Quality Meter Type:	Horiba		
Total Volume Removed:	(gal)		Did well go dry:	Yes ☐	No ☒	

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
Time	1550	1555	1600	1605	1610				
Volume Purged (Gal)	3.15	3.3	3.45	3.6	Sample				
Rate (mL/min)	110	110	110	110					
Depth to Water (ft.)	22.42	22.42	22.42	22.42					
pH	7.44	7.43	7.42	7.41					
Temp. (C)	14.53	14.95	15.21	15.44					
Conductivity (mS/cm)	0.723	0.725	0.727	0.729					
Dissolved Oxygen (mg/L)	0.99	0.98	0.98	0.98					
ORP (mV)	-165	-164	-163	-161					
Turbidity (NTU)	7.44	5.26	4.76	4.96					
Notes:									

Sampling Information

Analyses	#	n	Laboratory
			TestAmerica

Color:	See Pg 1
Odor:	
Appearance:	
Sample ID: 4009-30	Sample Time: 1610
MS/MSD: Yes ☐	No ☒
Duplicate: Yes ☐	No ☒
Duplicate ID –	Dup. Time: –
Chain of Custody Signed By:	SME

Problems / Observations

Vestal Water Supply

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Thomas + Sellsworth
Client / Job Number: NYSDEC 00266401.0000
Weather:

Well ID: 4009-30A
Date: 6/22/17
Time In: 1330 **Time Out:** 1530

Well Information

Depth to Water: 20.95 (feet) (from MP)
Total Depth: 36.00 (feet) (from MP)
Length of Water Column: 15.05 (feet)
Volume of Water in Well: 2.43 (gal)
Intake depth for tubing: ~~33.5~~ 32.5 (feet)

Well Type:	Flushmount ☐		Stick-Up ☑	
Well Material:	Stainless Steel ☐		PVC ☑	
Well Locked:	Yes ☑		No ☐	
Measuring Point Marked:	Yes ☐		No ☑	
Well Diameter:	1"	2"	Other:	

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		

Pump Start Time: 1410
Pump Stop Time: 1515
Total Volume Removed: 3.4 (gal)
Water-Quality Meter Type: Horiba
Did well go dry: Yes ☐ No ☐

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L = 3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO / Turb	Cond. /Temp	ORP
∀ 0.1	∀ 10%	∀ 3.0%	∀ 10 mV

Parameter:	1	2 1420	3	4	5	6	7	8	9	10
Time	1415	~~1415~~	1425	1430	1435	1440	1445	1450	1455	1500
Volume Purged (Gal)	0.2	0.4	0.9	1.4	1.7	2.0	2.3	2.5	2.7	3.0
Rate (mL/min)	220	200	220	220	200	200	200	200	200	200
Depth to Water (ft.)	21.03	21.03	21.05	21.05	21.05	21.05	21.05	21.05	21.05	21.05
pH		6.74	6.54	6.38	6.29	6.26	6.16	6.12	6.10	6.0
Temp. (C)		18.94	16.57	15.52	15.00	14.80	14.75	14.61	14.57	14.
Conductivity (mS/cm)		0.821	0.845	0.865	0.870	0.878	0.888	0.888	0.887	0.89
Dissolved Oxygen (mg/L)		2.21	3.44	3.91	5.36	5.65	5.81	6.10	6.37	6.38
ORP (mV)		-34	4	29	46	55	58	62	64	65
Turbidity (NTU)	~~[illegible]~~	7.97	7.72	6.98	6.02	4.63	3.51	3.21	3.09	2.93
Notes:	No Horiba reading								Sample at 150	

Sampling Information

Analyses	#	n	Laboratory
VOC 8260C	3		TestAmerica
PFC	2		
1,4 Dioxane	2		
Color:			
Odor:			
Appearance:			
Sample ID: 4009-30A	Sample Time: 1505		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID: –	Dup. Time: –		
Chain of Custody Signed By:			

Problems / Observations

Initial: clear, some black sediment that cleared up quickly. No sheen. Odorless

Final: clear, odorless, no sheen

PID: 0.0

Sample at 1505

APPENDIX B

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: 480-119849-1
Client Project/Site: NYSDEC-Standby VESTAL

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

Attn: Jeremy Wyckoff

Judy Stone

Authorized for release by:
7/5/2017 11:39:35 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
J	Indicates an estimated value.
*	Duplicate RPD exceeds control limits
E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
*	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: 480-119849-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-119849-1

Receipt
The samples were received on 6/21/2017 1:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.6º C and 0.7º C.

GC/MS VOA
Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 4009-8 (480-119849-2), WELL 1-1 (480-119849-3), 4009-11 (480-119849-6), 4009-12 (480-119849-7), 4009-27S (480-119849-18), 4009-29S (480-119849-22), 4009-29I (480-119849-23), DUP1 (480-119849-28), DUP2 (480-119849-29) and 4009-26 (480-119849-31). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-364888 recovered above the upper control limit for cis-1,3-Dichloropropene, Dichlorobromomethane, trans-1,3-Dichloropropene, Chlorodibromomethane, and 1,2,3-Trimethylbenzene. The sample associated with this CCV was non-detect for the affected analytes; therefore, the data have been reported. The following sample is impacted: DUP1 (480-119849-28).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-364888 recovered outside control limits for the following analytes: cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,2,3-Trimethylbenzene, Chlorodibromomethane, Dichlorodifluoromethane, and Bromoform. These analytes were biased high in the LCS and were not detected in the associated sample; therefore, the data have been reported. The following sample is impacted: DUP1 (480-119849-28)

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

Detection Summary

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-7 — Lab Sample ID: 480-119849-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.59	J	1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.38	J	1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	4.7	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	41		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	1.2		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	4.6		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-8 — Lab Sample ID: 480-119849-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	490		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	45		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	80		10	2.9	ug/L	10		8260C	Total/NA
Chloroethane	3.7	J	10	3.2	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	190		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	160		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	15		10	9.0	ug/L	10		8260C	Total/NA

Client Sample ID: WELL 1-1 — Lab Sample ID: 480-119849-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	360		5.0	4.1	ug/L	5		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	7.1		5.0	1.6	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	32		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	57		5.0	1.5	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene	96		5.0	4.1	ug/L	5		8260C	Total/NA
Trichloroethene	89		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: 4009-9 — Lab Sample ID: 480-119849-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.1	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.81	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-10 — Lab Sample ID: 480-119849-5

No Detections.

Client Sample ID: 4009-11 — Lab Sample ID: 480-119849-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	170	E	1.0	0.82	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	43		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	27		1.0	0.29	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.21	J	1.0	0.21	ug/L	1		8260C	Total/NA
Acetone	3.6	J	10	3.0	ug/L	1		8260C	Total/NA
Chloroethane	1.8		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	35		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	1.1		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	37		1.0	0.90	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-11 (Continued) — Lab Sample ID: 480-119849-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane - DL	170		4.0	3.3	ug/L	4		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	3.5	J	4.0	1.2	ug/L	4		8260C	Total/NA
1,1-Dichloroethane - DL	46		4.0	1.5	ug/L	4		8260C	Total/NA
1,1-Dichloroethene - DL	31		4.0	1.2	ug/L	4		8260C	Total/NA
Chloroethane - DL	1.3	J	4.0	1.3	ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene - DL	37		4.0	3.2	ug/L	4		8260C	Total/NA
Methylene Chloride - DL	3.4	J	4.0	1.8	ug/L	4		8260C	Total/NA
Vinyl chloride - DL	38		4.0	3.6	ug/L	4		8260C	Total/NA

Client Sample ID: 4009-12 — Lab Sample ID: 480-119849-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	45		2.0	1.6	ug/L	2		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	J	2.0	0.62	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	9.2		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	7.7		2.0	0.58	ug/L	2		8260C	Total/NA
Benzene	2.8		2.0	0.82	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	8.7		2.0	1.6	ug/L	2		8260C	Total/NA
Methylene Chloride	1.0	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	10		2.0	0.92	ug/L	2		8260C	Total/NA
Vinyl chloride	22		2.0	1.8	ug/L	2		8260C	Total/NA

Client Sample ID: 4009-13 — Lab Sample ID: 480-119849-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.2	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-13A — Lab Sample ID: 480-119849-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.1	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-14 — Lab Sample ID: 480-119849-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	9.2		1.0	0.41	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-15 — Lab Sample ID: 480-119849-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.5	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	12		1.0	0.41	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-16 — Lab Sample ID: 480-119849-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.2	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	18		1.0	0.41	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-16A — Lab Sample ID: 480-119849-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.8	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-18 — Lab Sample ID: 480-119849-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.1	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-19 — Lab Sample ID: 480-119849-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-21 — Lab Sample ID: 480-119849-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.5	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	25		1.0	0.41	ug/L	1		8260C	Total/NA
Methylene Chloride	0.44	J	1.0	0.44	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-22 — Lab Sample ID: 480-119849-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.2	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	1.1		1.0	0.41	ug/L	1		8260C	Total/NA
Methylene Chloride	0.69	J	1.0	0.44	ug/L	1		8260C	Total/NA
Toluene	0.88	J	1.0	0.51	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-27S — Lab Sample ID: 480-119849-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	46		2.0	1.6	ug/L	2		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	2.4		2.0	0.62	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	2.1		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	9.1		2.0	0.58	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	17		2.0	1.6	ug/L	2		8260C	Total/NA
Methylene Chloride	1.2	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	24		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 4009-27I — Lab Sample ID: 480-119849-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	J	1.0	0.31	ug/L	1		8260C	Total/NA
Acetone	3.3	J	10	3.0	ug/L	1		8260C	Total/NA
Trichloroethene	1.7		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-27D — Lab Sample ID: 480-119849-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.5	J	10	3.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-28 — Lab Sample ID: 480-119849-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.4	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	1.6		1.0	0.41	ug/L	1		8260C	Total/NA
Carbon disulfide	0.20	J	1.0	0.19	ug/L	1		8260C	Total/NA
Toluene	2.2		1.0	0.51	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-29S — Lab Sample ID: 480-119849-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	440		10	8.2	ug/L	10		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	5.5	J	10	3.1	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	52		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	67		10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	210		10	8.1	ug/L	10		8260C	Total/NA
Methylene Chloride	7.1	J	10	4.4	ug/L	10		8260C	Total/NA
Trichloroethene	27		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	68		10	9.0	ug/L	10		8260C	Total/NA

Client Sample ID: 4009-29I — Lab Sample ID: 480-119849-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1200		20	16	ug/L	20		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	14	J	20	6.2	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	82		20	7.6	ug/L	20		8260C	Total/NA
1,1-Dichloroethene	190		20	5.8	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	360		20	16	ug/L	20		8260C	Total/NA
Methylene Chloride	15	J	20	8.8	ug/L	20		8260C	Total/NA
Trichloroethene	390		20	9.2	ug/L	20		8260C	Total/NA
Vinyl chloride	110		20	18	ug/L	20		8260C	Total/NA

Client Sample ID: 4009-29D — Lab Sample ID: 480-119849-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	31		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	8.1		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	2.0		1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	3.5	J	10	3.0	ug/L	1		8260C	Total/NA
Chloroethane	2.2		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	7.2		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	11		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-30 — Lab Sample ID: 480-119849-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.79	J	1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	5.3	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	1.1		1.0	0.41	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-30A — Lab Sample ID: 480-119849-26

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-30A (Continued) — Lab Sample ID: 480-119849-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.6	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-11A — Lab Sample ID: 480-119849-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.4	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: DUP1 — Lab Sample ID: 480-119849-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	160	E	1.0	0.82	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	2.8		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	20		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	8.0		1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	3.3	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	2.1		1.0	0.41	ug/L	1		8260C	Total/NA
Chloroethane	1.2		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	29		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	30		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	56		1.0	0.90	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane - DL	220		4.0	3.3	ug/L	4		8260C	Total/NA
1,1-Dichloroethane - DL	26		4.0	1.5	ug/L	4		8260C	Total/NA
1,1-Dichloroethene - DL	11		4.0	1.2	ug/L	4		8260C	Total/NA
Benzene - DL	2.1	J	4.0	1.6	ug/L	4		8260C	Total/NA
Chloroethane - DL	2.2	J	4.0	1.3	ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene - DL	41		4.0	3.2	ug/L	4		8260C	Total/NA
Trichloroethene - DL	44		4.0	1.8	ug/L	4		8260C	Total/NA
Vinyl chloride - DL	68		4.0	3.6	ug/L	4		8260C	Total/NA

Client Sample ID: DUP2 — Lab Sample ID: 480-119849-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1100	E	10	8.2	ug/L	10		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	11		10	3.1	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	76		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	180		10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	340		10	8.1	ug/L	10		8260C	Total/NA
Methylene Chloride	6.8	J	10	4.4	ug/L	10		8260C	Total/NA
Trichloroethene	360		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	100		10	9.0	ug/L	10		8260C	Total/NA
1,1,1-Trichloroethane - DL	1200		20	16	ug/L	20		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	17	J	20	6.2	ug/L	20		8260C	Total/NA
1,1-Dichloroethane - DL	88		20	7.6	ug/L	20		8260C	Total/NA
1,1-Dichloroethene - DL	84		20	5.8	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene - DL	400		20	16	ug/L	20		8260C	Total/NA
Trichloroethene - DL	410		20	9.2	ug/L	20		8260C	Total/NA
Vinyl chloride - DL	140		20	18	ug/L	20		8260C	Total/NA

Client Sample ID: FIELD BLANK — Lab Sample ID: 480-119849-30

This Detection Summary does not include radiochemical test results.

Client Sample ID: FIELD BLANK (Continued)

Lab Sample ID: 480-119849-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.9	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-26

Lab Sample ID: 480-119849-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	330	E	2.0	1.6	ug/L	2		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	5.7		2.0	0.62	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	43		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	34		2.0	0.58	ug/L	2		8260C	Total/NA
Benzene	0.87	J	2.0	0.82	ug/L	2		8260C	Total/NA
Chloroethane	3.1		2.0	0.64	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	130		2.0	1.6	ug/L	2		8260C	Total/NA
Methylene Chloride	1.8	J	2.0	0.88	ug/L	2		8260C	Total/NA
Tetrachloroethene	1.1	J	2.0	0.72	ug/L	2		8260C	Total/NA
Trichloroethene	63		2.0	0.92	ug/L	2		8260C	Total/NA
Vinyl chloride	11		2.0	1.8	ug/L	2		8260C	Total/NA
1,1,1-Trichloroethane - DL	350		8.0	6.6	ug/L	8		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	6.1	J	8.0	2.5	ug/L	8		8260C	Total/NA
1,1-Dichloroethane - DL	50		8.0	3.0	ug/L	8		8260C	Total/NA
1,1-Dichloroethene - DL	9.1		8.0	2.3	ug/L	8		8260C	Total/NA
Chloroethane - DL	4.2	J	8.0	2.6	ug/L	8		8260C	Total/NA
cis-1,2-Dichloroethene - DL	160		8.0	6.5	ug/L	8		8260C	Total/NA
Trichloroethene - DL	76		8.0	3.7	ug/L	8		8260C	Total/NA
Vinyl chloride - DL	13		8.0	7.2	ug/L	8		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: 480-119849-1

Client Sample ID: 4009-7
Date Collected: 06/20/17 14:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-1
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	0.82	ug/L			06/28/17 23:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/28/17 23:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/28/17 23:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/28/17 23:38	1
1,1-Dichloroethane	**0.59**	**J**	1.0	0.38	ug/L			06/28/17 23:38	1
1,1-Dichloroethene	**0.38**	**J**	1.0	0.29	ug/L			06/28/17 23:38	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/28/17 23:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/28/17 23:38	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/28/17 23:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/28/17 23:38	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/28/17 23:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/28/17 23:38	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/28/17 23:38	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/28/17 23:38	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/28/17 23:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/28/17 23:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/28/17 23:38	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/28/17 23:38	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/28/17 23:38	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/28/17 23:38	1
Acetone	**4.7**	**J**	10	3.0	ug/L			06/28/17 23:38	1
Benzene	1.0	U	1.0	0.41	ug/L			06/28/17 23:38	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/28/17 23:38	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/28/17 23:38	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/28/17 23:38	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/28/17 23:38	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/28/17 23:38	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/28/17 23:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/28/17 23:38	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/28/17 23:38	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/28/17 23:38	1
cis-1,2-Dichloroethene	**41**		1.0	0.81	ug/L			06/28/17 23:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/28/17 23:38	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/28/17 23:38	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/28/17 23:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/28/17 23:38	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/28/17 23:38	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/28/17 23:38	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/28/17 23:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/28/17 23:38	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/28/17 23:38	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/28/17 23:38	1
Styrene	1.0	U	1.0	0.73	ug/L			06/28/17 23:38	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/28/17 23:38	1
Toluene	1.0	U	1.0	0.51	ug/L			06/28/17 23:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/28/17 23:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/28/17 23:38	1
Trichloroethene	**1.2**		1.0	0.46	ug/L			06/28/17 23:38	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/28/17 23:38	1

Client Sample ID: 4009-7

Date Collected: 06/20/17 14:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**4.6**		1.0	0.90	ug/L			06/28/17 23:38	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/28/17 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/28/17 23:38*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/28/17 23:38*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*06/28/17 23:38*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/28/17 23:38*	*1*

Client Sample ID: 4009-8

Date Collected: 06/20/17 14:15
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-2

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	**490**		10	8.2	ug/L			06/29/17 00:01	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			06/29/17 00:01	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	3.1	ug/L			06/29/17 00:01	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			06/29/17 00:01	10
1,1-Dichloroethane	**45**		10	3.8	ug/L			06/29/17 00:01	10
1,1-Dichloroethene	**80**		10	2.9	ug/L			06/29/17 00:01	10
1,2,3-Trimethylbenzene	10	U	10	2.6	ug/L			06/29/17 00:01	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			06/29/17 00:01	10
1,2,4-Trimethylbenzene	10	U	10	7.5	ug/L			06/29/17 00:01	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			06/29/17 00:01	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			06/29/17 00:01	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			06/29/17 00:01	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			06/29/17 00:01	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			06/29/17 00:01	10
1,3,5-Trimethylbenzene	10	U	10	7.7	ug/L			06/29/17 00:01	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			06/29/17 00:01	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			06/29/17 00:01	10
2-Butanone (MEK)	100	U	100	13	ug/L			06/29/17 00:01	10
2-Hexanone	50	U	50	12	ug/L			06/29/17 00:01	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			06/29/17 00:01	10
Acetone	100	U	100	30	ug/L			06/29/17 00:01	10
Benzene	10	U	10	4.1	ug/L			06/29/17 00:01	10
Bromodichloromethane	10	U	10	3.9	ug/L			06/29/17 00:01	10
Bromoform	10	U	10	2.6	ug/L			06/29/17 00:01	10
Bromomethane	10	U	10	6.9	ug/L			06/29/17 00:01	10
Carbon disulfide	10	U	10	1.9	ug/L			06/29/17 00:01	10
Carbon tetrachloride	10	U	10	2.7	ug/L			06/29/17 00:01	10
Chlorobenzene	10	U	10	7.5	ug/L			06/29/17 00:01	10
Chloroethane	**3.7**	**J**	10	3.2	ug/L			06/29/17 00:01	10
Chloroform	10	U	10	3.4	ug/L			06/29/17 00:01	10
Chloromethane	10	U	10	3.5	ug/L			06/29/17 00:01	10
cis-1,2-Dichloroethene	**190**		10	8.1	ug/L			06/29/17 00:01	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			06/29/17 00:01	10
Cyclohexane	10	U	10	1.8	ug/L			06/29/17 00:01	10
Dibromochloromethane	10	U	10	3.2	ug/L			06/29/17 00:01	10

Client Sample ID: 4009-8
Date Collected: 06/20/17 14:15
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	10	U	10	6.8	ug/L			06/29/17 00:01	10
Ethylbenzene	10	U	10	7.4	ug/L			06/29/17 00:01	10
Isopropylbenzene	10	U	10	7.9	ug/L			06/29/17 00:01	10
Methyl acetate	25	U	25	13	ug/L			06/29/17 00:01	10
Methyl tert-butyl ether	10	U	10	1.6	ug/L			06/29/17 00:01	10
Methylcyclohexane	10	U	10	1.6	ug/L			06/29/17 00:01	10
Methylene Chloride	10	U	10	4.4	ug/L			06/29/17 00:01	10
Styrene	10	U	10	7.3	ug/L			06/29/17 00:01	10
Tetrachloroethene	10	U	10	3.6	ug/L			06/29/17 00:01	10
Toluene	10	U	10	5.1	ug/L			06/29/17 00:01	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			06/29/17 00:01	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			06/29/17 00:01	10
Trichloroethene	**160**		10	4.6	ug/L			06/29/17 00:01	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			06/29/17 00:01	10
Vinyl chloride	**15**		10	9.0	ug/L			06/29/17 00:01	10
Xylenes, Total	20	U	20	6.6	ug/L			06/29/17 00:01	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 00:01*	*10*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 00:01*	*10*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/29/17 00:01*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/29/17 00:01*	*10*

Client Sample ID: WELL 1-1
Date Collected: 06/20/17 08:30
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-3
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	**360**		5.0	4.1	ug/L			06/29/17 00:24	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.1	ug/L			06/29/17 00:24	5
1,1,2-Trichloro-1,2,2-trifluoroethane	**7.1**		5.0	1.6	ug/L			06/29/17 00:24	5
1,1,2-Trichloroethane	5.0	U	5.0	1.2	ug/L			06/29/17 00:24	5
1,1-Dichloroethane	**32**		5.0	1.9	ug/L			06/29/17 00:24	5
1,1-Dichloroethene	**57**		5.0	1.5	ug/L			06/29/17 00:24	5
1,2,3-Trimethylbenzene	5.0	U	5.0	1.3	ug/L			06/29/17 00:24	5
1,2,4-Trichlorobenzene	5.0	U	5.0	2.1	ug/L			06/29/17 00:24	5
1,2,4-Trimethylbenzene	5.0	U	5.0	3.8	ug/L			06/29/17 00:24	5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	2.0	ug/L			06/29/17 00:24	5
1,2-Dibromoethane	5.0	U	5.0	3.7	ug/L			06/29/17 00:24	5
1,2-Dichlorobenzene	5.0	U	5.0	4.0	ug/L			06/29/17 00:24	5
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/L			06/29/17 00:24	5
1,2-Dichloropropane	5.0	U	5.0	3.6	ug/L			06/29/17 00:24	5
1,3,5-Trimethylbenzene	5.0	U	5.0	3.9	ug/L			06/29/17 00:24	5
1,3-Dichlorobenzene	5.0	U	5.0	3.9	ug/L			06/29/17 00:24	5
1,4-Dichlorobenzene	5.0	U	5.0	4.2	ug/L			06/29/17 00:24	5
2-Butanone (MEK)	50	U	50	6.6	ug/L			06/29/17 00:24	5
2-Hexanone	25	U	25	6.2	ug/L			06/29/17 00:24	5
4-Methyl-2-pentanone (MIBK)	25	U	25	11	ug/L			06/29/17 00:24	5

Client Sample ID: WELL 1-1
Date Collected: 06/20/17 08:30
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	50	U	50	15	ug/L			06/29/17 00:24	5
Benzene	5.0	U	5.0	2.1	ug/L			06/29/17 00:24	5
Bromodichloromethane	5.0	U	5.0	2.0	ug/L			06/29/17 00:24	5
Bromoform	5.0	U	5.0	1.3	ug/L			06/29/17 00:24	5
Bromomethane	5.0	U	5.0	3.5	ug/L			06/29/17 00:24	5
Carbon disulfide	5.0	U	5.0	0.95	ug/L			06/29/17 00:24	5
Carbon tetrachloride	5.0	U	5.0	1.4	ug/L			06/29/17 00:24	5
Chlorobenzene	5.0	U	5.0	3.8	ug/L			06/29/17 00:24	5
Chloroethane	5.0	U	5.0	1.6	ug/L			06/29/17 00:24	5
Chloroform	5.0	U	5.0	1.7	ug/L			06/29/17 00:24	5
Chloromethane	5.0	U	5.0	1.8	ug/L			06/29/17 00:24	5
cis-1,2-Dichloroethene	**96**		5.0	4.1	ug/L			06/29/17 00:24	5
cis-1,3-Dichloropropene	5.0	U	5.0	1.8	ug/L			06/29/17 00:24	5
Cyclohexane	5.0	U	5.0	0.90	ug/L			06/29/17 00:24	5
Dibromochloromethane	5.0	U	5.0	1.6	ug/L			06/29/17 00:24	5
Dichlorodifluoromethane	5.0	U	5.0	3.4	ug/L			06/29/17 00:24	5
Ethylbenzene	5.0	U	5.0	3.7	ug/L			06/29/17 00:24	5
Isopropylbenzene	5.0	U	5.0	4.0	ug/L			06/29/17 00:24	5
Methyl acetate	13	U	13	6.5	ug/L			06/29/17 00:24	5
Methyl tert-butyl ether	5.0	U	5.0	0.80	ug/L			06/29/17 00:24	5
Methylcyclohexane	5.0	U	5.0	0.80	ug/L			06/29/17 00:24	5
Methylene Chloride	5.0	U	5.0	2.2	ug/L			06/29/17 00:24	5
Styrene	5.0	U	5.0	3.7	ug/L			06/29/17 00:24	5
Tetrachloroethene	5.0	U	5.0	1.8	ug/L			06/29/17 00:24	5
Toluene	5.0	U	5.0	2.6	ug/L			06/29/17 00:24	5
trans-1,2-Dichloroethene	5.0	U	5.0	4.5	ug/L			06/29/17 00:24	5
trans-1,3-Dichloropropene	5.0	U	5.0	1.9	ug/L			06/29/17 00:24	5
Trichloroethene	**89**		5.0	2.3	ug/L			06/29/17 00:24	5
Trichlorofluoromethane	5.0	U	5.0	4.4	ug/L			06/29/17 00:24	5
Vinyl chloride	5.0	U	5.0	4.5	ug/L			06/29/17 00:24	5
Xylenes, Total	10	U	10	3.3	ug/L			06/29/17 00:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/29/17 00:24*	*5*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/29/17 00:24*	*5*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/29/17 00:24*	*5*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/29/17 00:24*	*5*

Client Sample ID: 4009-9
Date Collected: 06/20/17 13:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-4
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	0.82	ug/L			06/29/17 00:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 00:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 00:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 00:48	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 00:48	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 00:48	1

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-9
Date Collected: 06/20/17 13:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-4
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	0.26	ug/L			06/29/17 00:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 00:48	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 00:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 00:48	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 00:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 00:48	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 00:48	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 00:48	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 00:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 00:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 00:48	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 00:48	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 00:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 00:48	1
Acetone	**3.1**	**J**	10	3.0	ug/L			06/29/17 00:48	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 00:48	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 00:48	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 00:48	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 00:48	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 00:48	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 00:48	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 00:48	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 00:48	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 00:48	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 00:48	1
cis-1,2-Dichloroethene	**10**		1.0	0.81	ug/L			06/29/17 00:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 00:48	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 00:48	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 00:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 00:48	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 00:48	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 00:48	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 00:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 00:48	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 00:48	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 00:48	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 00:48	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 00:48	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 00:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 00:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 00:48	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 00:48	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 00:48	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 00:48	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*06/29/17 00:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 00:48*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*06/29/17 00:48*	*1*

Client Sample ID: 4009-9
Date Collected: 06/20/17 13:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/29/17 00:48*	*1*

Client Sample ID: 4009-10
Date Collected: 06/20/17 14:00
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-5
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	1.0	U	1.0	0.82	ug/L			06/29/17 01:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 01:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 01:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 01:11	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 01:11	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 01:11	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 01:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 01:11	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 01:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 01:11	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 01:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 01:11	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 01:11	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 01:11	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 01:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 01:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 01:11	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 01:11	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 01:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 01:11	1
Acetone	10	U	10	3.0	ug/L			06/29/17 01:11	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 01:11	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 01:11	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 01:11	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 01:11	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 01:11	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 01:11	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 01:11	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 01:11	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 01:11	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 01:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 01:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 01:11	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 01:11	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 01:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 01:11	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 01:11	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 01:11	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 01:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 01:11	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 01:11	1

Client Sample ID: 4009-10
Date Collected: 06/20/17 14:00
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-5
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	0.44	ug/L			06/29/17 01:11	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 01:11	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 01:11	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 01:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 01:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 01:11	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 01:11	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 01:11	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 01:11	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*06/29/17 01:11*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/29/17 01:11*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*06/29/17 01:11*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/29/17 01:11*	*1*

Client Sample ID: 4009-11
Date Collected: 06/20/17 14:05
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-6
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	**170**	**E**	1.0	0.82	ug/L			06/29/17 01:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 01:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.9**		1.0	0.31	ug/L			06/29/17 01:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 01:34	1
1,1-Dichloroethane	**43**		1.0	0.38	ug/L			06/29/17 01:34	1
1,1-Dichloroethene	**27**		1.0	0.29	ug/L			06/29/17 01:34	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 01:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 01:34	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 01:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 01:34	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 01:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 01:34	1
1,2-Dichloroethane	**0.21**	**J**	1.0	0.21	ug/L			06/29/17 01:34	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 01:34	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 01:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 01:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 01:34	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 01:34	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 01:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 01:34	1
Acetone	**3.6**	**J**	10	3.0	ug/L			06/29/17 01:34	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 01:34	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 01:34	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 01:34	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 01:34	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 01:34	1

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-11
Date Collected: 06/20/17 14:05
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 01:34	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 01:34	1
Chloroethane	**1.8**		1.0	0.32	ug/L			06/29/17 01:34	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 01:34	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 01:34	1
cis-1,2-Dichloroethene	**35**		1.0	0.81	ug/L			06/29/17 01:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 01:34	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 01:34	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 01:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 01:34	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 01:34	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 01:34	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 01:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 01:34	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 01:34	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 01:34	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 01:34	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 01:34	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 01:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 01:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 01:34	1
Trichloroethene	**1.1**		1.0	0.46	ug/L			06/29/17 01:34	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 01:34	1
Vinyl chloride	**37**		1.0	0.90	ug/L			06/29/17 01:34	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*06/29/17 01:34*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/29/17 01:34*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/29/17 01:34*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*06/29/17 01:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**170**		4.0	3.3	ug/L			06/29/17 11:02	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.84	ug/L			06/29/17 11:02	4
1,1,2-Trichloro-1,2,2-trifluoroethane	**3.5**	**J**	4.0	1.2	ug/L			06/29/17 11:02	4
1,1,2-Trichloroethane	4.0	U	4.0	0.92	ug/L			06/29/17 11:02	4
1,1-Dichloroethane	**46**		4.0	1.5	ug/L			06/29/17 11:02	4
1,1-Dichloroethene	**31**		4.0	1.2	ug/L			06/29/17 11:02	4
1,2,3-Trimethylbenzene	4.0	U	4.0	1.0	ug/L			06/29/17 11:02	4
1,2,4-Trichlorobenzene	4.0	U	4.0	1.6	ug/L			06/29/17 11:02	4
1,2,4-Trimethylbenzene	4.0	U	4.0	3.0	ug/L			06/29/17 11:02	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			06/29/17 11:02	4
1,2-Dibromoethane	4.0	U	4.0	2.9	ug/L			06/29/17 11:02	4
1,2-Dichlorobenzene	4.0	U	4.0	3.2	ug/L			06/29/17 11:02	4
1,2-Dichloroethane	4.0	U	4.0	0.84	ug/L			06/29/17 11:02	4
1,2-Dichloropropane	4.0	U	4.0	2.9	ug/L			06/29/17 11:02	4
1,3,5-Trimethylbenzene	4.0	U	4.0	3.1	ug/L			06/29/17 11:02	4

Client Sample ID: 4009-11
Date Collected: 06/20/17 14:05
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	4.0	U	4.0	3.1	ug/L			06/29/17 11:02	4
1,4-Dichlorobenzene	4.0	U	4.0	3.4	ug/L			06/29/17 11:02	4
2-Butanone (MEK)	40	U	40	5.3	ug/L			06/29/17 11:02	4
2-Hexanone	20	U	20	5.0	ug/L			06/29/17 11:02	4
4-Methyl-2-pentanone (MIBK)	20	U	20	8.4	ug/L			06/29/17 11:02	4
Acetone	40	U	40	12	ug/L			06/29/17 11:02	4
Benzene	4.0	U	4.0	1.6	ug/L			06/29/17 11:02	4
Bromodichloromethane	4.0	U	4.0	1.6	ug/L			06/29/17 11:02	4
Bromoform	4.0	U	4.0	1.0	ug/L			06/29/17 11:02	4
Bromomethane	4.0	U	4.0	2.8	ug/L			06/29/17 11:02	4
Carbon disulfide	4.0	U	4.0	0.76	ug/L			06/29/17 11:02	4
Carbon tetrachloride	4.0	U	4.0	1.1	ug/L			06/29/17 11:02	4
Chlorobenzene	4.0	U	4.0	3.0	ug/L			06/29/17 11:02	4
Chloroethane	**1.3**	**J**	4.0	1.3	ug/L			06/29/17 11:02	4
Chloroform	4.0	U	4.0	1.4	ug/L			06/29/17 11:02	4
Chloromethane	4.0	U	4.0	1.4	ug/L			06/29/17 11:02	4
cis-1,2-Dichloroethene	**37**		4.0	3.2	ug/L			06/29/17 11:02	4
cis-1,3-Dichloropropene	4.0	U	4.0	1.4	ug/L			06/29/17 11:02	4
Cyclohexane	4.0	U	4.0	0.72	ug/L			06/29/17 11:02	4
Dibromochloromethane	4.0	U	4.0	1.3	ug/L			06/29/17 11:02	4
Dichlorodifluoromethane	4.0	U	4.0	2.7	ug/L			06/29/17 11:02	4
Ethylbenzene	4.0	U	4.0	3.0	ug/L			06/29/17 11:02	4
Isopropylbenzene	4.0	U	4.0	3.2	ug/L			06/29/17 11:02	4
Methyl acetate	10	U	10	5.2	ug/L			06/29/17 11:02	4
Methyl tert-butyl ether	4.0	U	4.0	0.64	ug/L			06/29/17 11:02	4
Methylcyclohexane	4.0	U	4.0	0.64	ug/L			06/29/17 11:02	4
Methylene Chloride	**3.4**	**J**	4.0	1.8	ug/L			06/29/17 11:02	4
Styrene	4.0	U	4.0	2.9	ug/L			06/29/17 11:02	4
Tetrachloroethene	4.0	U	4.0	1.4	ug/L			06/29/17 11:02	4
Toluene	4.0	U	4.0	2.0	ug/L			06/29/17 11:02	4
trans-1,2-Dichloroethene	4.0	U	4.0	3.6	ug/L			06/29/17 11:02	4
trans-1,3-Dichloropropene	4.0	U	4.0	1.5	ug/L			06/29/17 11:02	4
Trichloroethene	4.0	U	4.0	1.8	ug/L			06/29/17 11:02	4
Trichlorofluoromethane	4.0	U	4.0	3.5	ug/L			06/29/17 11:02	4
Vinyl chloride	**38**		4.0	3.6	ug/L			06/29/17 11:02	4
Xylenes, Total	8.0	U	8.0	2.6	ug/L			06/29/17 11:02	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*06/29/17 11:02*	*4*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 11:02*	*4*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*06/29/17 11:02*	*4*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/29/17 11:02*	*4*

Client Sample ID: 4009-12
Date Collected: 06/20/17 12:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-7
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	**45**		2.0	1.6	ug/L			06/29/17 01:57	2

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-12
Date Collected: 06/20/17 12:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.42	ug/L			06/29/17 01:57	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.0**	**J**	2.0	0.62	ug/L			06/29/17 01:57	2
1,1,2-Trichloroethane	2.0	U	2.0	0.46	ug/L			06/29/17 01:57	2
1,1-Dichloroethane	**9.2**		2.0	0.76	ug/L			06/29/17 01:57	2
1,1-Dichloroethene	**7.7**		2.0	0.58	ug/L			06/29/17 01:57	2
1,2,3-Trimethylbenzene	2.0	U	2.0	0.52	ug/L			06/29/17 01:57	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.82	ug/L			06/29/17 01:57	2
1,2,4-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 01:57	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.78	ug/L			06/29/17 01:57	2
1,2-Dibromoethane	2.0	U	2.0	1.5	ug/L			06/29/17 01:57	2
1,2-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			06/29/17 01:57	2
1,2-Dichloroethane	2.0	U	2.0	0.42	ug/L			06/29/17 01:57	2
1,2-Dichloropropane	2.0	U	2.0	1.4	ug/L			06/29/17 01:57	2
1,3,5-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 01:57	2
1,3-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			06/29/17 01:57	2
1,4-Dichlorobenzene	2.0	U	2.0	1.7	ug/L			06/29/17 01:57	2
2-Butanone (MEK)	20	U	20	2.6	ug/L			06/29/17 01:57	2
2-Hexanone	10	U	10	2.5	ug/L			06/29/17 01:57	2
4-Methyl-2-pentanone (MIBK)	10	U	10	4.2	ug/L			06/29/17 01:57	2
Acetone	20	U	20	6.0	ug/L			06/29/17 01:57	2
Benzene	**2.8**		2.0	0.82	ug/L			06/29/17 01:57	2
Bromodichloromethane	2.0	U	2.0	0.78	ug/L			06/29/17 01:57	2
Bromoform	2.0	U	2.0	0.52	ug/L			06/29/17 01:57	2
Bromomethane	2.0	U	2.0	1.4	ug/L			06/29/17 01:57	2
Carbon disulfide	2.0	U	2.0	0.38	ug/L			06/29/17 01:57	2
Carbon tetrachloride	2.0	U	2.0	0.54	ug/L			06/29/17 01:57	2
Chlorobenzene	2.0	U	2.0	1.5	ug/L			06/29/17 01:57	2
Chloroethane	2.0	U	2.0	0.64	ug/L			06/29/17 01:57	2
Chloroform	2.0	U	2.0	0.68	ug/L			06/29/17 01:57	2
Chloromethane	2.0	U	2.0	0.70	ug/L			06/29/17 01:57	2
cis-1,2-Dichloroethene	**8.7**		2.0	1.6	ug/L			06/29/17 01:57	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.72	ug/L			06/29/17 01:57	2
Cyclohexane	2.0	U	2.0	0.36	ug/L			06/29/17 01:57	2
Dibromochloromethane	2.0	U	2.0	0.64	ug/L			06/29/17 01:57	2
Dichlorodifluoromethane	2.0	U	2.0	1.4	ug/L			06/29/17 01:57	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 01:57	2
Isopropylbenzene	2.0	U	2.0	1.6	ug/L			06/29/17 01:57	2
Methyl acetate	5.0	U	5.0	2.6	ug/L			06/29/17 01:57	2
Methyl tert-butyl ether	2.0	U	2.0	0.32	ug/L			06/29/17 01:57	2
Methylcyclohexane	2.0	U	2.0	0.32	ug/L			06/29/17 01:57	2
Methylene Chloride	**1.0**	**J**	2.0	0.88	ug/L			06/29/17 01:57	2
Styrene	2.0	U	2.0	1.5	ug/L			06/29/17 01:57	2
Tetrachloroethene	2.0	U	2.0	0.72	ug/L			06/29/17 01:57	2
Toluene	2.0	U	2.0	1.0	ug/L			06/29/17 01:57	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.8	ug/L			06/29/17 01:57	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.74	ug/L			06/29/17 01:57	2
Trichloroethene	**10**		2.0	0.92	ug/L			06/29/17 01:57	2
Trichlorofluoromethane	2.0	U	2.0	1.8	ug/L			06/29/17 01:57	2
Vinyl chloride	**22**		2.0	1.8	ug/L			06/29/17 01:57	2

Client Sample ID: 4009-12 — **Lab Sample ID: 480-119849-7**
Date Collected: 06/20/17 12:25 — **Matrix: Water**
Date Received: 06/21/17 01:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	4.0	U	4.0	1.3	ug/L			06/29/17 01:57	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/29/17 01:57*	*2*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 01:57*	*2*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*06/29/17 01:57*	*2*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/29/17 01:57*	*2*

Client Sample ID: 4009-13 — **Lab Sample ID: 480-119849-8**
Date Collected: 06/20/17 13:25 — **Matrix: Water**
Date Received: 06/21/17 01:45

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	0.82	ug/L			06/29/17 02:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 02:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 02:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 02:19	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 02:19	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 02:19	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 02:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 02:19	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 02:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 02:19	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 02:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 02:19	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 02:19	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 02:19	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 02:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 02:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 02:19	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 02:19	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 02:19	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 02:19	1
Acetone	**4.2**	**J**	10	3.0	ug/L			06/29/17 02:19	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 02:19	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 02:19	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 02:19	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 02:19	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 02:19	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 02:19	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 02:19	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 02:19	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 02:19	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 02:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 02:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 02:19	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 02:19	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 02:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 02:19	1

Client Sample ID: 4009-13

Date Collected: 06/20/17 13:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-8

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	0.74	ug/L			06/29/17 02:19	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 02:19	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 02:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 02:19	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 02:19	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 02:19	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 02:19	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 02:19	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 02:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 02:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 02:19	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 02:19	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 02:19	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 02:19	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*06/29/17 02:19*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 02:19*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*06/29/17 02:19*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/29/17 02:19*	*1*

Client Sample ID: 4009-13A

Date Collected: 06/20/17 13:30
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-9

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	0.82	ug/L			06/29/17 02:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 02:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 02:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 02:42	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 02:42	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 02:42	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 02:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 02:42	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 02:42	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 02:42	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 02:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 02:42	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 02:42	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 02:42	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 02:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 02:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 02:42	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 02:42	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 02:42	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 02:42	1
Acetone	**4.1**	**J**	10	3.0	ug/L			06/29/17 02:42	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 02:42	1

Client Sample ID: 4009-13A
Date Collected: 06/20/17 13:30
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 02:42	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 02:42	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 02:42	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 02:42	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 02:42	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 02:42	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 02:42	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 02:42	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 02:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 02:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 02:42	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 02:42	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 02:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 02:42	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 02:42	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 02:42	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 02:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 02:42	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 02:42	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 02:42	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 02:42	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 02:42	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 02:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 02:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 02:42	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 02:42	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 02:42	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 02:42	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 02:42*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*06/29/17 02:42*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*06/29/17 02:42*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/29/17 02:42*	*1*

Client Sample ID: 4009-14
Date Collected: 06/20/17 09:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-10
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	0.82	ug/L			06/29/17 03:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 03:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 03:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 03:05	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 03:05	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 03:05	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 03:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 03:05	1

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-14
Date Collected: 06/20/17 09:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-10
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-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 03:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 03:05	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 03:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 03:05	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 03:05	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 03:05	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 03:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 03:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 03:05	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 03:05	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 03:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 03:05	1
Acetone	**3.4**	**J**	10	3.0	ug/L			06/29/17 03:05	1
Benzene	**9.2**		1.0	0.41	ug/L			06/29/17 03:05	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 03:05	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 03:05	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 03:05	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 03:05	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 03:05	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 03:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 03:05	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 03:05	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 03:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 03:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 03:05	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 03:05	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 03:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 03:05	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 03:05	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 03:05	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 03:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 03:05	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 03:05	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 03:05	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 03:05	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 03:05	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 03:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 03:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 03:05	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 03:05	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 03:05	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 03:05	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/29/17 03:05*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/29/17 03:05*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*06/29/17 03:05*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/29/17 03:05*	*1*

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-15
Date Collected: 06/20/17 12:15
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-11
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	0.82	ug/L			06/29/17 03:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 03:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 03:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 03:28	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 03:28	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 03:28	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 03:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 03:28	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 03:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 03:28	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 03:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 03:28	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 03:28	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 03:28	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 03:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 03:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 03:28	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 03:28	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 03:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 03:28	1
Acetone	**9.5**	**J**	10	3.0	ug/L			06/29/17 03:28	1
Benzene	**12**		1.0	0.41	ug/L			06/29/17 03:28	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 03:28	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 03:28	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 03:28	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 03:28	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 03:28	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 03:28	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 03:28	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 03:28	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 03:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 03:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 03:28	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 03:28	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 03:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 03:28	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 03:28	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 03:28	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 03:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 03:28	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 03:28	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 03:28	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 03:28	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 03:28	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 03:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 03:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 03:28	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 03:28	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 03:28	1

Client Sample ID: 4009-15 — **Lab Sample ID: 480-119849-11**
Date Collected: 06/20/17 12:15 — **Matrix: Water**
Date Received: 06/21/17 01:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 03:28	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*06/29/17 03:28*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/29/17 03:28*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/29/17 03:28*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/29/17 03:28*	*1*

Client Sample ID: 4009-16 — **Lab Sample ID: 480-119849-12**
Date Collected: 06/20/17 11:20 — **Matrix: Water**
Date Received: 06/21/17 01:45

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	0.82	ug/L			06/29/17 03:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 03:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 03:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 03:51	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 03:51	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 03:51	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 03:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 03:51	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 03:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 03:51	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 03:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 03:51	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 03:51	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 03:51	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 03:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 03:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 03:51	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 03:51	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 03:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 03:51	1
Acetone	**4.2**	**J**	10	3.0	ug/L			06/29/17 03:51	1
Benzene	**18**		1.0	0.41	ug/L			06/29/17 03:51	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 03:51	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 03:51	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 03:51	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 03:51	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 03:51	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 03:51	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 03:51	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 03:51	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 03:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 03:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 03:51	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 03:51	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 03:51	1

Client Sample ID: 4009-16

Date Collected: 06/20/17 11:20
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 03:51	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 03:51	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 03:51	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 03:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 03:51	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 03:51	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 03:51	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 03:51	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 03:51	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 03:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 03:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 03:51	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 03:51	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 03:51	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 03:51	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 03:51*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 03:51*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*06/29/17 03:51*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/29/17 03:51*	*1*

Client Sample ID: 4009-16A

Date Collected: 06/20/17 11:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-13

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	0.82	ug/L			06/29/17 04:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 04:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 04:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 04:13	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 04:13	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 04:13	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 04:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 04:13	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 04:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 04:13	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 04:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 04:13	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 04:13	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 04:13	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 04:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 04:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 04:13	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 04:13	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 04:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 04:13	1
Acetone	**3.8**	**J**	10	3.0	ug/L			06/29/17 04:13	1

Client Sample ID: 4009-16A
Date Collected: 06/20/17 11:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-13
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	0.41	ug/L			06/29/17 04:13	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 04:13	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 04:13	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 04:13	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 04:13	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 04:13	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 04:13	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 04:13	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 04:13	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 04:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 04:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 04:13	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 04:13	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 04:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 04:13	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 04:13	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 04:13	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 04:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 04:13	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 04:13	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 04:13	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 04:13	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 04:13	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 04:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 04:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 04:13	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 04:13	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 04:13	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 04:13	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 04:13*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 04:13*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*06/29/17 04:13*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/29/17 04:13*	*1*

Client Sample ID: 4009-18
Date Collected: 06/20/17 10:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-14
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	1.0	U	1.0	0.82	ug/L			06/29/17 04:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 04:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 04:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 04:36	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 04:36	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 04:36	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 04:36	1

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-18
Date Collected: 06/20/17 10:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-14
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	0.41	ug/L			06/29/17 04:36	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 04:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 04:36	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 04:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 04:36	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 04:36	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 04:36	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 04:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 04:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 04:36	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 04:36	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 04:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 04:36	1
Acetone	**4.1**	**J**	10	3.0	ug/L			06/29/17 04:36	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 04:36	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 04:36	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 04:36	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 04:36	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 04:36	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 04:36	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 04:36	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 04:36	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 04:36	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 04:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 04:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 04:36	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 04:36	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 04:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 04:36	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 04:36	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 04:36	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 04:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 04:36	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 04:36	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 04:36	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 04:36	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 04:36	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 04:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 04:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 04:36	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 04:36	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 04:36	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 04:36	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*06/29/17 04:36*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/29/17 04:36*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/29/17 04:36*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/29/17 04:36*	*1*

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-19
Date Collected: 06/20/17 10:55
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-15
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	0.82	ug/L			06/29/17 05:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 05:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 05:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 05:00	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 05:00	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 05:00	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 05:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 05:00	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 05:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 05:00	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 05:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 05:00	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 05:00	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 05:00	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 05:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 05:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 05:00	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 05:00	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 05:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 05:00	1
Acetone	**3.4**	**J**	10	3.0	ug/L			06/29/17 05:00	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 05:00	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 05:00	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 05:00	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 05:00	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 05:00	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 05:00	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 05:00	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 05:00	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 05:00	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 05:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 05:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 05:00	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 05:00	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 05:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 05:00	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 05:00	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 05:00	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 05:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 05:00	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 05:00	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 05:00	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 05:00	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 05:00	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 05:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 05:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 05:00	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 05:00	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 05:00	1

Client Sample ID: 4009-19

Date Collected: 06/20/17 10:55
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 05:00	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 05:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*06/29/17 05:00*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 05:00*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*06/29/17 05:00*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/29/17 05:00*	*1*

Client Sample ID: 4009-21

Date Collected: 06/20/17 10:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-16

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	0.82	ug/L			06/29/17 05:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 05:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 05:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 05:23	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 05:23	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 05:23	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 05:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 05:23	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 05:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 05:23	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 05:23	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 05:23	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 05:23	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 05:23	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 05:23	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 05:23	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 05:23	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 05:23	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 05:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 05:23	1
Acetone	**4.5**	**J**	10	3.0	ug/L			06/29/17 05:23	1
Benzene	**25**		1.0	0.41	ug/L			06/29/17 05:23	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 05:23	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 05:23	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 05:23	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 05:23	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 05:23	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 05:23	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 05:23	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 05:23	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 05:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 05:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 05:23	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 05:23	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 05:23	1

Client Sample ID: 4009-21
Date Collected: 06/20/17 10:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 05:23	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 05:23	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 05:23	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 05:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 05:23	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 05:23	1
Methylene Chloride	**0.44**	**J**	1.0	0.44	ug/L			06/29/17 05:23	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 05:23	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 05:23	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 05:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 05:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 05:23	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 05:23	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 05:23	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 05:23	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 05:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*06/29/17 05:23*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/29/17 05:23*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*06/29/17 05:23*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*06/29/17 05:23*	*1*

Client Sample ID: 4009-22
Date Collected: 06/20/17 09:40
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-17
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	0.82	ug/L			06/29/17 05:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 05:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 05:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 05:46	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 05:46	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 05:46	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 05:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 05:46	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 05:46	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 05:46	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 05:46	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 05:46	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 05:46	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 05:46	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 05:46	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 05:46	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 05:46	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 05:46	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 05:46	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 05:46	1
Acetone	**4.2**	**J**	10	3.0	ug/L			06/29/17 05:46	1

Client Sample ID: 4009-22
Date Collected: 06/20/17 09:40
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.1**		1.0	0.41	ug/L			06/29/17 05:46	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 05:46	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 05:46	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 05:46	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 05:46	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 05:46	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 05:46	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 05:46	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 05:46	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 05:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 05:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 05:46	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 05:46	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 05:46	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 05:46	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 05:46	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 05:46	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 05:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 05:46	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 05:46	1
Methylene Chloride	**0.69**	**J**	1.0	0.44	ug/L			06/29/17 05:46	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 05:46	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 05:46	1
Toluene	**0.88**	**J**	1.0	0.51	ug/L			06/29/17 05:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 05:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 05:46	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 05:46	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 05:46	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 05:46	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 05:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/29/17 05:46*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/29/17 05:46*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*06/29/17 05:46*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/29/17 05:46*	*1*

Client Sample ID: 4009-27S
Date Collected: 06/20/17 13:05
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-18
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	**46**		2.0	1.6	ug/L			06/29/17 06:09	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.42	ug/L			06/29/17 06:09	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.4**		2.0	0.62	ug/L			06/29/17 06:09	2
1,1,2-Trichloroethane	2.0	U	2.0	0.46	ug/L			06/29/17 06:09	2
1,1-Dichloroethane	**2.1**		2.0	0.76	ug/L			06/29/17 06:09	2
1,1-Dichloroethene	**9.1**		2.0	0.58	ug/L			06/29/17 06:09	2

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-27S
Date Collected: 06/20/17 13:05
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-18
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	2.0	U	2.0	0.52	ug/L			06/29/17 06:09	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.82	ug/L			06/29/17 06:09	2
1,2,4-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 06:09	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.78	ug/L			06/29/17 06:09	2
1,2-Dibromoethane	2.0	U	2.0	1.5	ug/L			06/29/17 06:09	2
1,2-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			06/29/17 06:09	2
1,2-Dichloroethane	2.0	U	2.0	0.42	ug/L			06/29/17 06:09	2
1,2-Dichloropropane	2.0	U	2.0	1.4	ug/L			06/29/17 06:09	2
1,3,5-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 06:09	2
1,3-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			06/29/17 06:09	2
1,4-Dichlorobenzene	2.0	U	2.0	1.7	ug/L			06/29/17 06:09	2
2-Butanone (MEK)	20	U	20	2.6	ug/L			06/29/17 06:09	2
2-Hexanone	10	U	10	2.5	ug/L			06/29/17 06:09	2
4-Methyl-2-pentanone (MIBK)	10	U	10	4.2	ug/L			06/29/17 06:09	2
Acetone	20	U	20	6.0	ug/L			06/29/17 06:09	2
Benzene	2.0	U	2.0	0.82	ug/L			06/29/17 06:09	2
Bromodichloromethane	2.0	U	2.0	0.78	ug/L			06/29/17 06:09	2
Bromoform	2.0	U	2.0	0.52	ug/L			06/29/17 06:09	2
Bromomethane	2.0	U	2.0	1.4	ug/L			06/29/17 06:09	2
Carbon disulfide	2.0	U	2.0	0.38	ug/L			06/29/17 06:09	2
Carbon tetrachloride	2.0	U	2.0	0.54	ug/L			06/29/17 06:09	2
Chlorobenzene	2.0	U	2.0	1.5	ug/L			06/29/17 06:09	2
Chloroethane	2.0	U	2.0	0.64	ug/L			06/29/17 06:09	2
Chloroform	2.0	U	2.0	0.68	ug/L			06/29/17 06:09	2
Chloromethane	2.0	U	2.0	0.70	ug/L			06/29/17 06:09	2
cis-1,2-Dichloroethene	**17**		2.0	1.6	ug/L			06/29/17 06:09	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.72	ug/L			06/29/17 06:09	2
Cyclohexane	2.0	U	2.0	0.36	ug/L			06/29/17 06:09	2
Dibromochloromethane	2.0	U	2.0	0.64	ug/L			06/29/17 06:09	2
Dichlorodifluoromethane	2.0	U	2.0	1.4	ug/L			06/29/17 06:09	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 06:09	2
Isopropylbenzene	2.0	U	2.0	1.6	ug/L			06/29/17 06:09	2
Methyl acetate	5.0	U	5.0	2.6	ug/L			06/29/17 06:09	2
Methyl tert-butyl ether	2.0	U	2.0	0.32	ug/L			06/29/17 06:09	2
Methylcyclohexane	2.0	U	2.0	0.32	ug/L			06/29/17 06:09	2
Methylene Chloride	**1.2**	**J**	2.0	0.88	ug/L			06/29/17 06:09	2
Styrene	2.0	U	2.0	1.5	ug/L			06/29/17 06:09	2
Tetrachloroethene	2.0	U	2.0	0.72	ug/L			06/29/17 06:09	2
Toluene	2.0	U	2.0	1.0	ug/L			06/29/17 06:09	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.8	ug/L			06/29/17 06:09	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.74	ug/L			06/29/17 06:09	2
Trichloroethene	**24**		2.0	0.92	ug/L			06/29/17 06:09	2
Trichlorofluoromethane	2.0	U	2.0	1.8	ug/L			06/29/17 06:09	2
Vinyl chloride	2.0	U	2.0	1.8	ug/L			06/29/17 06:09	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			06/29/17 06:09	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/29/17 06:09*	*2*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*06/29/17 06:09*	*2*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*06/29/17 06:09*	*2*

Client Sample ID: 4009-27S
Date Collected: 06/20/17 13:05
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-18
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/29/17 06:09*	*2*

Client Sample ID: 4009-27I
Date Collected: 06/20/17 13:10
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-19
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	1.0	U	1.0	0.82	ug/L			06/29/17 11:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 11:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.40**	**J**	1.0	0.31	ug/L			06/29/17 11:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 11:25	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 11:25	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 11:25	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 11:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 11:25	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 11:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 11:25	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 11:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 11:25	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 11:25	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 11:25	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 11:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 11:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 11:25	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 11:25	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 11:25	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 11:25	1
Acetone	**3.3**	**J**	10	3.0	ug/L			06/29/17 11:25	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 11:25	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 11:25	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 11:25	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 11:25	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 11:25	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 11:25	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 11:25	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 11:25	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 11:25	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 11:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 11:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 11:25	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 11:25	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 11:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 11:25	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 11:25	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 11:25	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 11:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 11:25	1

Client Sample ID: 4009-27I
Date Collected: 06/20/17 13:10
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 11:25	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 11:25	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 11:25	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 11:25	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 11:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 11:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 11:25	1
Trichloroethene	**1.7**		1.0	0.46	ug/L			06/29/17 11:25	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 11:25	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 11:25	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 11:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*06/29/17 11:25*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/29/17 11:25*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*06/29/17 11:25*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/29/17 11:25*	*1*

Client Sample ID: 4009-27D
Date Collected: 06/20/17 13:15
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-20
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	0.82	ug/L			06/29/17 11:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 11:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 11:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 11:48	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 11:48	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 11:48	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 11:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 11:48	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 11:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 11:48	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 11:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 11:48	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 11:48	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 11:48	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 11:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 11:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 11:48	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 11:48	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 11:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 11:48	1
Acetone	**3.5**	**J**	10	3.0	ug/L			06/29/17 11:48	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 11:48	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 11:48	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 11:48	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 11:48	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 11:48	1

Client Sample ID: 4009-27D
Date Collected: 06/20/17 13:15
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 11:48	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 11:48	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 11:48	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 11:48	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 11:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 11:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 11:48	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 11:48	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 11:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 11:48	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 11:48	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 11:48	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 11:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 11:48	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 11:48	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 11:48	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 11:48	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 11:48	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 11:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 11:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 11:48	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 11:48	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 11:48	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 11:48	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 11:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 11:48*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*06/29/17 11:48*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*06/29/17 11:48*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/29/17 11:48*	*1*

Client Sample ID: 4009-28
Date Collected: 06/20/17 09:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-21
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	1.0	U	1.0	0.82	ug/L			06/29/17 12:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 12:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 12:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 12:11	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 12:11	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 12:11	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 12:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 12:11	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 12:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 12:11	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 12:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 12:11	1

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-28
Date Collected: 06/20/17 09:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-21
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	0.21	ug/L			06/29/17 12:11	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 12:11	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 12:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 12:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 12:11	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 12:11	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 12:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 12:11	1
Acetone	**4.4**	**J**	10	3.0	ug/L			06/29/17 12:11	1
Benzene	**1.6**		1.0	0.41	ug/L			06/29/17 12:11	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 12:11	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 12:11	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 12:11	1
Carbon disulfide	**0.20**	**J**	1.0	0.19	ug/L			06/29/17 12:11	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 12:11	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 12:11	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 12:11	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 12:11	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 12:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 12:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 12:11	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 12:11	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 12:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 12:11	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 12:11	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 12:11	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 12:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 12:11	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 12:11	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 12:11	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 12:11	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 12:11	1
Toluene	**2.2**		1.0	0.51	ug/L			06/29/17 12:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 12:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 12:11	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 12:11	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 12:11	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 12:11	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*06/29/17 12:11*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/29/17 12:11*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/29/17 12:11*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*06/29/17 12:11*	*1*

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-29S
Date Collected: 06/20/17 12:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-22
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	**440**		10	8.2	ug/L			06/29/17 12:34	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			06/29/17 12:34	10
1,1,2-Trichloro-1,2,2-trifluoroethane	**5.5**	**J**	10	3.1	ug/L			06/29/17 12:34	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			06/29/17 12:34	10
1,1-Dichloroethane	**52**		10	3.8	ug/L			06/29/17 12:34	10
1,1-Dichloroethene	**67**		10	2.9	ug/L			06/29/17 12:34	10
1,2,3-Trimethylbenzene	10	U	10	2.6	ug/L			06/29/17 12:34	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			06/29/17 12:34	10
1,2,4-Trimethylbenzene	10	U	10	7.5	ug/L			06/29/17 12:34	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			06/29/17 12:34	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			06/29/17 12:34	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			06/29/17 12:34	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			06/29/17 12:34	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			06/29/17 12:34	10
1,3,5-Trimethylbenzene	10	U	10	7.7	ug/L			06/29/17 12:34	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			06/29/17 12:34	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			06/29/17 12:34	10
2-Butanone (MEK)	100	U	100	13	ug/L			06/29/17 12:34	10
2-Hexanone	50	U	50	12	ug/L			06/29/17 12:34	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			06/29/17 12:34	10
Acetone	100	U	100	30	ug/L			06/29/17 12:34	10
Benzene	10	U	10	4.1	ug/L			06/29/17 12:34	10
Bromodichloromethane	10	U	10	3.9	ug/L			06/29/17 12:34	10
Bromoform	10	U	10	2.6	ug/L			06/29/17 12:34	10
Bromomethane	10	U	10	6.9	ug/L			06/29/17 12:34	10
Carbon disulfide	10	U	10	1.9	ug/L			06/29/17 12:34	10
Carbon tetrachloride	10	U	10	2.7	ug/L			06/29/17 12:34	10
Chlorobenzene	10	U	10	7.5	ug/L			06/29/17 12:34	10
Chloroethane	10	U	10	3.2	ug/L			06/29/17 12:34	10
Chloroform	10	U	10	3.4	ug/L			06/29/17 12:34	10
Chloromethane	10	U	10	3.5	ug/L			06/29/17 12:34	10
cis-1,2-Dichloroethene	**210**		10	8.1	ug/L			06/29/17 12:34	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			06/29/17 12:34	10
Cyclohexane	10	U	10	1.8	ug/L			06/29/17 12:34	10
Dibromochloromethane	10	U	10	3.2	ug/L			06/29/17 12:34	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			06/29/17 12:34	10
Ethylbenzene	10	U	10	7.4	ug/L			06/29/17 12:34	10
Isopropylbenzene	10	U	10	7.9	ug/L			06/29/17 12:34	10
Methyl acetate	25	U	25	13	ug/L			06/29/17 12:34	10
Methyl tert-butyl ether	10	U	10	1.6	ug/L			06/29/17 12:34	10
Methylcyclohexane	10	U	10	1.6	ug/L			06/29/17 12:34	10
Methylene Chloride	**7.1**	**J**	10	4.4	ug/L			06/29/17 12:34	10
Styrene	10	U	10	7.3	ug/L			06/29/17 12:34	10
Tetrachloroethene	10	U	10	3.6	ug/L			06/29/17 12:34	10
Toluene	10	U	10	5.1	ug/L			06/29/17 12:34	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			06/29/17 12:34	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			06/29/17 12:34	10
Trichloroethene	**27**		10	4.6	ug/L			06/29/17 12:34	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			06/29/17 12:34	10

Client Sample ID: 4009-29S — **Lab Sample ID: 480-119849-22**
Date Collected: 06/20/17 12:45 — **Matrix: Water**
Date Received: 06/21/17 01:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**68**		10	9.0	ug/L			06/29/17 12:34	10
Xylenes, Total	20	U	20	6.6	ug/L			06/29/17 12:34	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/29/17 12:34*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/29/17 12:34*	*10*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*06/29/17 12:34*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/29/17 12:34*	*10*

Client Sample ID: 4009-29I — **Lab Sample ID: 480-119849-23**
Date Collected: 06/20/17 12:50 — **Matrix: Water**
Date Received: 06/21/17 01:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1200**		20	16	ug/L			06/29/17 12:57	20
1,1,2,2-Tetrachloroethane	20	U	20	4.2	ug/L			06/29/17 12:57	20
1,1,2-Trichloro-1,2,2-trifluoroethane	**14**	**J**	20	6.2	ug/L			06/29/17 12:57	20
1,1,2-Trichloroethane	20	U	20	4.6	ug/L			06/29/17 12:57	20
1,1-Dichloroethane	**82**		20	7.6	ug/L			06/29/17 12:57	20
1,1-Dichloroethene	**190**		20	5.8	ug/L			06/29/17 12:57	20
1,2,3-Trimethylbenzene	20	U	20	5.2	ug/L			06/29/17 12:57	20
1,2,4-Trichlorobenzene	20	U	20	8.2	ug/L			06/29/17 12:57	20
1,2,4-Trimethylbenzene	20	U	20	15	ug/L			06/29/17 12:57	20
1,2-Dibromo-3-Chloropropane	20	U	20	7.8	ug/L			06/29/17 12:57	20
1,2-Dibromoethane	20	U	20	15	ug/L			06/29/17 12:57	20
1,2-Dichlorobenzene	20	U	20	16	ug/L			06/29/17 12:57	20
1,2-Dichloroethane	20	U	20	4.2	ug/L			06/29/17 12:57	20
1,2-Dichloropropane	20	U	20	14	ug/L			06/29/17 12:57	20
1,3,5-Trimethylbenzene	20	U	20	15	ug/L			06/29/17 12:57	20
1,3-Dichlorobenzene	20	U	20	16	ug/L			06/29/17 12:57	20
1,4-Dichlorobenzene	20	U	20	17	ug/L			06/29/17 12:57	20
2-Butanone (MEK)	200	U	200	26	ug/L			06/29/17 12:57	20
2-Hexanone	100	U	100	25	ug/L			06/29/17 12:57	20
4-Methyl-2-pentanone (MIBK)	100	U	100	42	ug/L			06/29/17 12:57	20
Acetone	200	U	200	60	ug/L			06/29/17 12:57	20
Benzene	20	U	20	8.2	ug/L			06/29/17 12:57	20
Bromodichloromethane	20	U	20	7.8	ug/L			06/29/17 12:57	20
Bromoform	20	U	20	5.2	ug/L			06/29/17 12:57	20
Bromomethane	20	U	20	14	ug/L			06/29/17 12:57	20
Carbon disulfide	20	U	20	3.8	ug/L			06/29/17 12:57	20
Carbon tetrachloride	20	U	20	5.4	ug/L			06/29/17 12:57	20
Chlorobenzene	20	U	20	15	ug/L			06/29/17 12:57	20
Chloroethane	20	U	20	6.4	ug/L			06/29/17 12:57	20
Chloroform	20	U	20	6.8	ug/L			06/29/17 12:57	20
Chloromethane	20	U	20	7.0	ug/L			06/29/17 12:57	20
cis-1,2-Dichloroethene	**360**		20	16	ug/L			06/29/17 12:57	20
cis-1,3-Dichloropropene	20	U	20	7.2	ug/L			06/29/17 12:57	20
Cyclohexane	20	U	20	3.6	ug/L			06/29/17 12:57	20

Client Sample ID: 4009-29I — **Lab Sample ID: 480-119849-23**
Date Collected: 06/20/17 12:50 — **Matrix: Water**
Date Received: 06/21/17 01:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	20	U	20	6.4	ug/L			06/29/17 12:57	20
Dichlorodifluoromethane	20	U	20	14	ug/L			06/29/17 12:57	20
Ethylbenzene	20	U	20	15	ug/L			06/29/17 12:57	20
Isopropylbenzene	20	U	20	16	ug/L			06/29/17 12:57	20
Methyl acetate	50	U	50	26	ug/L			06/29/17 12:57	20
Methyl tert-butyl ether	20	U	20	3.2	ug/L			06/29/17 12:57	20
Methylcyclohexane	20	U	20	3.2	ug/L			06/29/17 12:57	20
Methylene Chloride	**15**	**J**	20	8.8	ug/L			06/29/17 12:57	20
Styrene	20	U	20	15	ug/L			06/29/17 12:57	20
Tetrachloroethene	20	U	20	7.2	ug/L			06/29/17 12:57	20
Toluene	20	U	20	10	ug/L			06/29/17 12:57	20
trans-1,2-Dichloroethene	20	U	20	18	ug/L			06/29/17 12:57	20
trans-1,3-Dichloropropene	20	U	20	7.4	ug/L			06/29/17 12:57	20
Trichloroethene	**390**		20	9.2	ug/L			06/29/17 12:57	20
Trichlorofluoromethane	20	U	20	18	ug/L			06/29/17 12:57	20
Vinyl chloride	**110**		20	18	ug/L			06/29/17 12:57	20
Xylenes, Total	40	U	40	13	ug/L			06/29/17 12:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 12:57*	*20*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/29/17 12:57*	*20*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/29/17 12:57*	*20*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/29/17 12:57*	*20*

Client Sample ID: 4009-29D — **Lab Sample ID: 480-119849-24**
Date Collected: 06/20/17 12:55 — **Matrix: Water**
Date Received: 06/21/17 01:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**31**		1.0	0.82	ug/L			06/29/17 23:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 23:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 23:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 23:58	1
1,1-Dichloroethane	**8.1**		1.0	0.38	ug/L			06/29/17 23:58	1
1,1-Dichloroethene	**2.0**		1.0	0.29	ug/L			06/29/17 23:58	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 23:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 23:58	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 23:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 23:58	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 23:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 23:58	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 23:58	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 23:58	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 23:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 23:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 23:58	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 23:58	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 23:58	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 23:58	1

Client Sample ID: 4009-29D
Date Collected: 06/20/17 12:55
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-24
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.5**	**J**	10	3.0	ug/L			06/29/17 23:58	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 23:58	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 23:58	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 23:58	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 23:58	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 23:58	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 23:58	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 23:58	1
Chloroethane	**2.2**		1.0	0.32	ug/L			06/29/17 23:58	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 23:58	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 23:58	1
cis-1,2-Dichloroethene	**10**		1.0	0.81	ug/L			06/29/17 23:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 23:58	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 23:58	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 23:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 23:58	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 23:58	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 23:58	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 23:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 23:58	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 23:58	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 23:58	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 23:58	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 23:58	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 23:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 23:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 23:58	1
Trichloroethene	**7.2**		1.0	0.46	ug/L			06/29/17 23:58	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 23:58	1
Vinyl chloride	**11**		1.0	0.90	ug/L			06/29/17 23:58	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*06/29/17 23:58*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*06/29/17 23:58*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/29/17 23:58*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*06/29/17 23:58*	*1*

Client Sample ID: 4009-30
Date Collected: 06/20/17 11:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-25
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	0.82	ug/L			06/29/17 13:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 13:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 13:43	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 13:43	1
1,1-Dichloroethane	**0.79**	**J**	1.0	0.38	ug/L			06/29/17 13:43	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 13:43	1

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-30
Date Collected: 06/20/17 11:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-25
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	0.26	ug/L			06/29/17 13:43	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 13:43	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 13:43	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 13:43	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 13:43	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 13:43	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 13:43	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 13:43	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 13:43	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 13:43	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 13:43	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 13:43	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 13:43	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 13:43	1
Acetone	**5.3**	**J**	10	3.0	ug/L			06/29/17 13:43	1
Benzene	**1.1**		1.0	0.41	ug/L			06/29/17 13:43	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 13:43	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 13:43	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 13:43	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 13:43	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 13:43	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 13:43	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 13:43	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 13:43	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 13:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 13:43	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 13:43	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 13:43	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 13:43	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 13:43	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 13:43	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 13:43	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 13:43	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 13:43	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 13:43	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 13:43	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 13:43	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 13:43	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 13:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 13:43	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 13:43	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 13:43	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 13:43	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 13:43	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 13:43*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*06/29/17 13:43*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/29/17 13:43*	*1*

Client Sample ID: 4009-30
Date Collected: 06/20/17 11:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-25
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*		*06/29/17 13:43*	*1*

Client Sample ID: 4009-30A
Date Collected: 06/20/17 11:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-26
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	0.82	ug/L			06/29/17 14:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 14:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 14:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 14:06	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 14:06	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 14:06	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 14:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 14:06	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 14:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 14:06	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 14:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 14:06	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 14:06	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 14:06	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 14:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 14:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 14:06	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 14:06	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 14:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 14:06	1
Acetone	**3.6**	**J**	10	3.0	ug/L			06/29/17 14:06	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 14:06	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 14:06	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 14:06	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 14:06	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 14:06	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 14:06	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 14:06	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 14:06	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 14:06	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 14:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 14:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 14:06	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 14:06	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 14:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 14:06	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 14:06	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 14:06	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 14:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 14:06	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 14:06	1

Client Sample ID: 4009-30A

Lab Sample ID: 480-119849-26

Date Collected: 06/20/17 11:45

Matrix: Water

Date Received: 06/21/17 01:45

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	0.44	ug/L			06/29/17 14:06	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 14:06	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 14:06	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 14:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 14:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 14:06	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 14:06	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 14:06	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 14:06	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*06/29/17 14:06*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*06/29/17 14:06*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*06/29/17 14:06*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/29/17 14:06*	*1*

Client Sample ID: 4009-11A

Lab Sample ID: 480-119849-27

Date Collected: 06/20/17 14:10

Matrix: Water

Date Received: 06/21/17 01:45

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	0.82	ug/L			06/29/17 14:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 14:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 14:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 14:29	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 14:29	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 14:29	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 14:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 14:29	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 14:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 14:29	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 14:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 14:29	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 14:29	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 14:29	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 14:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 14:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 14:29	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 14:29	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 14:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 14:29	1
Acetone	**5.4**	**J**	10	3.0	ug/L			06/29/17 14:29	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 14:29	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 14:29	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 14:29	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 14:29	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 14:29	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 14:29	1

Client Sample ID: 4009-11A
Date Collected: 06/20/17 14:10
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-27
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	0.75	ug/L			06/29/17 14:29	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 14:29	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 14:29	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 14:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 14:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 14:29	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 14:29	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 14:29	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 14:29	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 14:29	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 14:29	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 14:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 14:29	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 14:29	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 14:29	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 14:29	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 14:29	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 14:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 14:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 14:29	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 14:29	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 14:29	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 14:29	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*06/29/17 14:29*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/29/17 14:29*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*06/29/17 14:29*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/29/17 14:29*	*1*

Client Sample ID: DUP1
Date Collected: 06/20/17 00:00
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-28
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	**160**	**E**	1.0	0.82	ug/L			06/30/17 00:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 00:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.8**		1.0	0.31	ug/L			06/30/17 00:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 00:21	1
1,1-Dichloroethane	**20**		1.0	0.38	ug/L			06/30/17 00:21	1
1,1-Dichloroethene	**8.0**		1.0	0.29	ug/L			06/30/17 00:21	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 00:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 00:21	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 00:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 00:21	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 00:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 00:21	1

Client Sample ID: DUP1
Date Collected: 06/20/17 00:00
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-28
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	0.21	ug/L			06/30/17 00:21	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 00:21	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 00:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 00:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 00:21	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 00:21	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 00:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 00:21	1
Acetone	**3.3**	**J**	10	3.0	ug/L			06/30/17 00:21	1
Benzene	**2.1**		1.0	0.41	ug/L			06/30/17 00:21	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 00:21	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 00:21	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 00:21	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 00:21	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 00:21	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 00:21	1
Chloroethane	**1.2**		1.0	0.32	ug/L			06/30/17 00:21	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 00:21	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 00:21	1
cis-1,2-Dichloroethene	**29**		1.0	0.81	ug/L			06/30/17 00:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 00:21	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 00:21	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 00:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 00:21	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 00:21	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 00:21	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 00:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 00:21	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 00:21	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 00:21	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 00:21	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 00:21	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 00:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 00:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 00:21	1
Trichloroethene	**30**		1.0	0.46	ug/L			06/30/17 00:21	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 00:21	1
Vinyl chloride	**56**		1.0	0.90	ug/L			06/30/17 00:21	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*06/30/17 00:21*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/30/17 00:21*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/30/17 00:21*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*06/30/17 00:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**220**		4.0	3.3	ug/L			06/30/17 18:15	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.84	ug/L			06/30/17 18:15	4

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: DUP1
Date Collected: 06/20/17 00:00
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-28
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0	1.2	ug/L			06/30/17 18:15	4
1,1,2-Trichloroethane	4.0	U	4.0	0.92	ug/L			06/30/17 18:15	4
1,1-Dichloroethane	**26**		4.0	1.5	ug/L			06/30/17 18:15	4
1,1-Dichloroethene	**11**		4.0	1.2	ug/L			06/30/17 18:15	4
1,2,3-Trimethylbenzene	4.0	U *	4.0	1.0	ug/L			06/30/17 18:15	4
1,2,4-Trichlorobenzene	4.0	U	4.0	1.6	ug/L			06/30/17 18:15	4
1,2,4-Trimethylbenzene	4.0	U	4.0	3.0	ug/L			06/30/17 18:15	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			06/30/17 18:15	4
1,2-Dibromoethane	4.0	U	4.0	2.9	ug/L			06/30/17 18:15	4
1,2-Dichlorobenzene	4.0	U	4.0	3.2	ug/L			06/30/17 18:15	4
1,2-Dichloroethane	4.0	U	4.0	0.84	ug/L			06/30/17 18:15	4
1,2-Dichloropropane	4.0	U	4.0	2.9	ug/L			06/30/17 18:15	4
1,3,5-Trimethylbenzene	4.0	U	4.0	3.1	ug/L			06/30/17 18:15	4
1,3-Dichlorobenzene	4.0	U	4.0	3.1	ug/L			06/30/17 18:15	4
1,4-Dichlorobenzene	4.0	U	4.0	3.4	ug/L			06/30/17 18:15	4
2-Butanone (MEK)	40	U	40	5.3	ug/L			06/30/17 18:15	4
2-Hexanone	20	U	20	5.0	ug/L			06/30/17 18:15	4
4-Methyl-2-pentanone (MIBK)	20	U	20	8.4	ug/L			06/30/17 18:15	4
Acetone	40	U	40	12	ug/L			06/30/17 18:15	4
Benzene	**2.1**	**J**	4.0	1.6	ug/L			06/30/17 18:15	4
Bromodichloromethane	4.0	U	4.0	1.6	ug/L			06/30/17 18:15	4
Bromoform	4.0	U *	4.0	1.0	ug/L			06/30/17 18:15	4
Bromomethane	4.0	U	4.0	2.8	ug/L			06/30/17 18:15	4
Carbon disulfide	4.0	U	4.0	0.76	ug/L			06/30/17 18:15	4
Carbon tetrachloride	4.0	U	4.0	1.1	ug/L			06/30/17 18:15	4
Chlorobenzene	4.0	U	4.0	3.0	ug/L			06/30/17 18:15	4
Chloroethane	**2.2**	**J**	4.0	1.3	ug/L			06/30/17 18:15	4
Chloroform	4.0	U	4.0	1.4	ug/L			06/30/17 18:15	4
Chloromethane	4.0	U	4.0	1.4	ug/L			06/30/17 18:15	4
cis-1,2-Dichloroethene	**41**		4.0	3.2	ug/L			06/30/17 18:15	4
cis-1,3-Dichloropropene	4.0	U *	4.0	1.4	ug/L			06/30/17 18:15	4
Cyclohexane	4.0	U	4.0	0.72	ug/L			06/30/17 18:15	4
Dibromochloromethane	4.0	U *	4.0	1.3	ug/L			06/30/17 18:15	4
Dichlorodifluoromethane	4.0	U *	4.0	2.7	ug/L			06/30/17 18:15	4
Ethylbenzene	4.0	U	4.0	3.0	ug/L			06/30/17 18:15	4
Isopropylbenzene	4.0	U	4.0	3.2	ug/L			06/30/17 18:15	4
Methyl acetate	10	U	10	5.2	ug/L			06/30/17 18:15	4
Methyl tert-butyl ether	4.0	U	4.0	0.64	ug/L			06/30/17 18:15	4
Methylcyclohexane	4.0	U	4.0	0.64	ug/L			06/30/17 18:15	4
Methylene Chloride	4.0	U	4.0	1.8	ug/L			06/30/17 18:15	4
Styrene	4.0	U	4.0	2.9	ug/L			06/30/17 18:15	4
Tetrachloroethene	4.0	U	4.0	1.4	ug/L			06/30/17 18:15	4
Toluene	4.0	U	4.0	2.0	ug/L			06/30/17 18:15	4
trans-1,2-Dichloroethene	4.0	U	4.0	3.6	ug/L			06/30/17 18:15	4
trans-1,3-Dichloropropene	4.0	U *	4.0	1.5	ug/L			06/30/17 18:15	4
Trichloroethene	**44**		4.0	1.8	ug/L			06/30/17 18:15	4
Trichlorofluoromethane	4.0	U	4.0	3.5	ug/L			06/30/17 18:15	4
Vinyl chloride	**68**		4.0	3.6	ug/L			06/30/17 18:15	4
Xylenes, Total	8.0	U	8.0	2.6	ug/L			06/30/17 18:15	4

Client Sample ID: DUP1 — **Lab Sample ID: 480-119849-28**
Date Collected: 06/20/17 00:00 — **Matrix: Water**
Date Received: 06/21/17 01:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		77 - 120		06/30/17 18:15	4
4-Bromofluorobenzene (Surr)	114		73 - 120		06/30/17 18:15	4
Dibromofluoromethane (Surr)	123		75 - 123		06/30/17 18:15	4
Toluene-d8 (Surr)	114		80 - 120		06/30/17 18:15	4

Client Sample ID: DUP2 — **Lab Sample ID: 480-119849-29**
Date Collected: 06/20/17 00:00 — **Matrix: Water**
Date Received: 06/21/17 01:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1100**	**E**	10	8.2	ug/L			06/29/17 15:16	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			06/29/17 15:16	10
1,1,2-Trichloro-1,2,2-trifluoroethane	**11**		10	3.1	ug/L			06/29/17 15:16	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			06/29/17 15:16	10
1,1-Dichloroethane	**76**		10	3.8	ug/L			06/29/17 15:16	10
1,1-Dichloroethene	**180**		10	2.9	ug/L			06/29/17 15:16	10
1,2,3-Trimethylbenzene	10	U	10	2.6	ug/L			06/29/17 15:16	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			06/29/17 15:16	10
1,2,4-Trimethylbenzene	10	U	10	7.5	ug/L			06/29/17 15:16	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			06/29/17 15:16	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			06/29/17 15:16	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			06/29/17 15:16	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			06/29/17 15:16	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			06/29/17 15:16	10
1,3,5-Trimethylbenzene	10	U	10	7.7	ug/L			06/29/17 15:16	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			06/29/17 15:16	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			06/29/17 15:16	10
2-Butanone (MEK)	100	U	100	13	ug/L			06/29/17 15:16	10
2-Hexanone	50	U	50	12	ug/L			06/29/17 15:16	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			06/29/17 15:16	10
Acetone	100	U	100	30	ug/L			06/29/17 15:16	10
Benzene	10	U	10	4.1	ug/L			06/29/17 15:16	10
Bromodichloromethane	10	U	10	3.9	ug/L			06/29/17 15:16	10
Bromoform	10	U	10	2.6	ug/L			06/29/17 15:16	10
Bromomethane	10	U	10	6.9	ug/L			06/29/17 15:16	10
Carbon disulfide	10	U	10	1.9	ug/L			06/29/17 15:16	10
Carbon tetrachloride	10	U	10	2.7	ug/L			06/29/17 15:16	10
Chlorobenzene	10	U	10	7.5	ug/L			06/29/17 15:16	10
Chloroethane	10	U	10	3.2	ug/L			06/29/17 15:16	10
Chloroform	10	U	10	3.4	ug/L			06/29/17 15:16	10
Chloromethane	10	U	10	3.5	ug/L			06/29/17 15:16	10
cis-1,2-Dichloroethene	**340**		10	8.1	ug/L			06/29/17 15:16	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			06/29/17 15:16	10
Cyclohexane	10	U	10	1.8	ug/L			06/29/17 15:16	10
Dibromochloromethane	10	U	10	3.2	ug/L			06/29/17 15:16	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			06/29/17 15:16	10
Ethylbenzene	10	U	10	7.4	ug/L			06/29/17 15:16	10
Isopropylbenzene	10	U	10	7.9	ug/L			06/29/17 15:16	10

Client Sample ID: DUP2
Date Collected: 06/20/17 00:00
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-29
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	25	U	25	13	ug/L			06/29/17 15:16	10
Methyl tert-butyl ether	10	U	10	1.6	ug/L			06/29/17 15:16	10
Methylcyclohexane	10	U	10	1.6	ug/L			06/29/17 15:16	10
Methylene Chloride	**6.8**	**J**	10	4.4	ug/L			06/29/17 15:16	10
Styrene	10	U	10	7.3	ug/L			06/29/17 15:16	10
Tetrachloroethene	10	U	10	3.6	ug/L			06/29/17 15:16	10
Toluene	10	U	10	5.1	ug/L			06/29/17 15:16	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			06/29/17 15:16	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			06/29/17 15:16	10
Trichloroethene	**360**		10	4.6	ug/L			06/29/17 15:16	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			06/29/17 15:16	10
Vinyl chloride	**100**		10	9.0	ug/L			06/29/17 15:16	10
Xylenes, Total	20	U	20	6.6	ug/L			06/29/17 15:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*06/29/17 15:16*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*06/29/17 15:16*	*10*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*06/29/17 15:16*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*06/29/17 15:16*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1200**		20	16	ug/L			06/30/17 00:45	20
1,1,2,2-Tetrachloroethane	20	U	20	4.2	ug/L			06/30/17 00:45	20
1,1,2-Trichloro-1,2,2-trifluoroethane	**17**	**J**	20	6.2	ug/L			06/30/17 00:45	20
1,1,2-Trichloroethane	20	U	20	4.6	ug/L			06/30/17 00:45	20
1,1-Dichloroethane	**88**		20	7.6	ug/L			06/30/17 00:45	20
1,1-Dichloroethene	**84**		20	5.8	ug/L			06/30/17 00:45	20
1,2,3-Trimethylbenzene	20	U	20	5.2	ug/L			06/30/17 00:45	20
1,2,4-Trichlorobenzene	20	U	20	8.2	ug/L			06/30/17 00:45	20
1,2,4-Trimethylbenzene	20	U	20	15	ug/L			06/30/17 00:45	20
1,2-Dibromo-3-Chloropropane	20	U	20	7.8	ug/L			06/30/17 00:45	20
1,2-Dibromoethane	20	U	20	15	ug/L			06/30/17 00:45	20
1,2-Dichlorobenzene	20	U	20	16	ug/L			06/30/17 00:45	20
1,2-Dichloroethane	20	U	20	4.2	ug/L			06/30/17 00:45	20
1,2-Dichloropropane	20	U	20	14	ug/L			06/30/17 00:45	20
1,3,5-Trimethylbenzene	20	U	20	15	ug/L			06/30/17 00:45	20
1,3-Dichlorobenzene	20	U	20	16	ug/L			06/30/17 00:45	20
1,4-Dichlorobenzene	20	U	20	17	ug/L			06/30/17 00:45	20
2-Butanone (MEK)	200	U	200	26	ug/L			06/30/17 00:45	20
2-Hexanone	100	U	100	25	ug/L			06/30/17 00:45	20
4-Methyl-2-pentanone (MIBK)	100	U	100	42	ug/L			06/30/17 00:45	20
Acetone	200	U	200	60	ug/L			06/30/17 00:45	20
Benzene	20	U	20	8.2	ug/L			06/30/17 00:45	20
Bromodichloromethane	20	U	20	7.8	ug/L			06/30/17 00:45	20
Bromoform	20	U	20	5.2	ug/L			06/30/17 00:45	20
Bromomethane	20	U	20	14	ug/L			06/30/17 00:45	20
Carbon disulfide	20	U	20	3.8	ug/L			06/30/17 00:45	20
Carbon tetrachloride	20	U	20	5.4	ug/L			06/30/17 00:45	20

Client Sample ID: DUP2

Lab Sample ID: 480-119849-29

Date Collected: 06/20/17 00:00

Matrix: Water

Date Received: 06/21/17 01:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	20	U	20	15	ug/L			06/30/17 00:45	20
Chloroethane	20	U	20	6.4	ug/L			06/30/17 00:45	20
Chloroform	20	U	20	6.8	ug/L			06/30/17 00:45	20
Chloromethane	20	U	20	7.0	ug/L			06/30/17 00:45	20
cis-1,2-Dichloroethene	**400**		20	16	ug/L			06/30/17 00:45	20
cis-1,3-Dichloropropene	20	U	20	7.2	ug/L			06/30/17 00:45	20
Cyclohexane	20	U	20	3.6	ug/L			06/30/17 00:45	20
Dibromochloromethane	20	U	20	6.4	ug/L			06/30/17 00:45	20
Dichlorodifluoromethane	20	U	20	14	ug/L			06/30/17 00:45	20
Ethylbenzene	20	U	20	15	ug/L			06/30/17 00:45	20
Isopropylbenzene	20	U	20	16	ug/L			06/30/17 00:45	20
Methyl acetate	50	U	50	26	ug/L			06/30/17 00:45	20
Methyl tert-butyl ether	20	U	20	3.2	ug/L			06/30/17 00:45	20
Methylcyclohexane	20	U	20	3.2	ug/L			06/30/17 00:45	20
Methylene Chloride	20	U	20	8.8	ug/L			06/30/17 00:45	20
Styrene	20	U	20	15	ug/L			06/30/17 00:45	20
Tetrachloroethene	20	U	20	7.2	ug/L			06/30/17 00:45	20
Toluene	20	U	20	10	ug/L			06/30/17 00:45	20
trans-1,2-Dichloroethene	20	U	20	18	ug/L			06/30/17 00:45	20
trans-1,3-Dichloropropene	20	U	20	7.4	ug/L			06/30/17 00:45	20
Trichloroethene	**410**		20	9.2	ug/L			06/30/17 00:45	20
Trichlorofluoromethane	20	U	20	18	ug/L			06/30/17 00:45	20
Vinyl chloride	**140**		20	18	ug/L			06/30/17 00:45	20
Xylenes, Total	40	U	40	13	ug/L			06/30/17 00:45	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*06/30/17 00:45*	*20*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/30/17 00:45*	*20*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*06/30/17 00:45*	*20*
Toluene-d8 (Surr)	*105*		*80 - 120*		*06/30/17 00:45*	*20*

Client Sample ID: FIELD BLANK

Lab Sample ID: 480-119849-30

Date Collected: 06/20/17 08:35

Matrix: Water

Date Received: 06/21/17 01:45

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	0.82	ug/L			06/29/17 15:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 15:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 15:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 15:39	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 15:39	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 15:39	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 15:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 15:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 15:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 15:39	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 15:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 15:39	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 15:39	1

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: FIELD BLANK
Date Collected: 06/20/17 08:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-30
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	1.0	U	1.0	0.72	ug/L			06/29/17 15:39	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 15:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 15:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 15:39	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 15:39	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 15:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 15:39	1
Acetone	**4.9**	**J**	10	3.0	ug/L			06/29/17 15:39	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 15:39	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 15:39	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 15:39	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 15:39	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 15:39	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 15:39	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 15:39	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 15:39	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 15:39	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 15:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 15:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 15:39	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 15:39	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 15:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 15:39	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 15:39	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 15:39	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 15:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 15:39	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 15:39	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 15:39	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 15:39	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 15:39	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 15:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 15:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 15:39	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 15:39	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 15:39	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 15:39	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/29/17 15:39*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*06/29/17 15:39*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/29/17 15:39*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/29/17 15:39*	*1*

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-26
Date Collected: 06/20/17 14:20
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-31
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	**330**	**E**	2.0	1.6	ug/L			06/29/17 16:02	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.42	ug/L			06/29/17 16:02	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**5.7**		2.0	0.62	ug/L			06/29/17 16:02	2
1,1,2-Trichloroethane	2.0	U	2.0	0.46	ug/L			06/29/17 16:02	2
1,1-Dichloroethane	**43**		2.0	0.76	ug/L			06/29/17 16:02	2
1,1-Dichloroethene	**34**		2.0	0.58	ug/L			06/29/17 16:02	2
1,2,3-Trimethylbenzene	2.0	U	2.0	0.52	ug/L			06/29/17 16:02	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.82	ug/L			06/29/17 16:02	2
1,2,4-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 16:02	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.78	ug/L			06/29/17 16:02	2
1,2-Dibromoethane	2.0	U	2.0	1.5	ug/L			06/29/17 16:02	2
1,2-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			06/29/17 16:02	2
1,2-Dichloroethane	2.0	U	2.0	0.42	ug/L			06/29/17 16:02	2
1,2-Dichloropropane	2.0	U	2.0	1.4	ug/L			06/29/17 16:02	2
1,3,5-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 16:02	2
1,3-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			06/29/17 16:02	2
1,4-Dichlorobenzene	2.0	U	2.0	1.7	ug/L			06/29/17 16:02	2
2-Butanone (MEK)	20	U	20	2.6	ug/L			06/29/17 16:02	2
2-Hexanone	10	U	10	2.5	ug/L			06/29/17 16:02	2
4-Methyl-2-pentanone (MIBK)	10	U	10	4.2	ug/L			06/29/17 16:02	2
Acetone	20	U	20	6.0	ug/L			06/29/17 16:02	2
Benzene	**0.87**	**J**	2.0	0.82	ug/L			06/29/17 16:02	2
Bromodichloromethane	2.0	U	2.0	0.78	ug/L			06/29/17 16:02	2
Bromoform	2.0	U	2.0	0.52	ug/L			06/29/17 16:02	2
Bromomethane	2.0	U	2.0	1.4	ug/L			06/29/17 16:02	2
Carbon disulfide	2.0	U	2.0	0.38	ug/L			06/29/17 16:02	2
Carbon tetrachloride	2.0	U	2.0	0.54	ug/L			06/29/17 16:02	2
Chlorobenzene	2.0	U	2.0	1.5	ug/L			06/29/17 16:02	2
Chloroethane	**3.1**		2.0	0.64	ug/L			06/29/17 16:02	2
Chloroform	2.0	U	2.0	0.68	ug/L			06/29/17 16:02	2
Chloromethane	2.0	U	2.0	0.70	ug/L			06/29/17 16:02	2
cis-1,2-Dichloroethene	**130**		2.0	1.6	ug/L			06/29/17 16:02	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.72	ug/L			06/29/17 16:02	2
Cyclohexane	2.0	U	2.0	0.36	ug/L			06/29/17 16:02	2
Dibromochloromethane	2.0	U	2.0	0.64	ug/L			06/29/17 16:02	2
Dichlorodifluoromethane	2.0	U	2.0	1.4	ug/L			06/29/17 16:02	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			06/29/17 16:02	2
Isopropylbenzene	2.0	U	2.0	1.6	ug/L			06/29/17 16:02	2
Methyl acetate	5.0	U	5.0	2.6	ug/L			06/29/17 16:02	2
Methyl tert-butyl ether	2.0	U	2.0	0.32	ug/L			06/29/17 16:02	2
Methylcyclohexane	2.0	U	2.0	0.32	ug/L			06/29/17 16:02	2
Methylene Chloride	**1.8**	**J**	2.0	0.88	ug/L			06/29/17 16:02	2
Styrene	2.0	U	2.0	1.5	ug/L			06/29/17 16:02	2
Tetrachloroethene	**1.1**	**J**	2.0	0.72	ug/L			06/29/17 16:02	2
Toluene	2.0	U	2.0	1.0	ug/L			06/29/17 16:02	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.8	ug/L			06/29/17 16:02	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.74	ug/L			06/29/17 16:02	2
Trichloroethene	**63**		2.0	0.92	ug/L			06/29/17 16:02	2
Trichlorofluoromethane	2.0	U	2.0	1.8	ug/L			06/29/17 16:02	2

Client Sample ID: 4009-26
Date Collected: 06/20/17 14:20
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-31
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**11**		2.0	1.8	ug/L			06/29/17 16:02	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			06/29/17 16:02	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/29/17 16:02*	*2*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/29/17 16:02*	*2*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/29/17 16:02*	*2*
Toluene-d8 (Surr)	*101*		*80 - 120*		*06/29/17 16:02*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**350**		8.0	6.6	ug/L			06/30/17 01:08	8
1,1,2,2-Tetrachloroethane	8.0	U	8.0	1.7	ug/L			06/30/17 01:08	8
1,1,2-Trichloro-1,2,2-trifluoroethane	**6.1**	**J**	8.0	2.5	ug/L			06/30/17 01:08	8
1,1,2-Trichloroethane	8.0	U	8.0	1.8	ug/L			06/30/17 01:08	8
1,1-Dichloroethane	**50**		8.0	3.0	ug/L			06/30/17 01:08	8
1,1-Dichloroethene	**9.1**		8.0	2.3	ug/L			06/30/17 01:08	8
1,2,3-Trimethylbenzene	8.0	U	8.0	2.1	ug/L			06/30/17 01:08	8
1,2,4-Trichlorobenzene	8.0	U	8.0	3.3	ug/L			06/30/17 01:08	8
1,2,4-Trimethylbenzene	8.0	U	8.0	6.0	ug/L			06/30/17 01:08	8
1,2-Dibromo-3-Chloropropane	8.0	U	8.0	3.1	ug/L			06/30/17 01:08	8
1,2-Dibromoethane	8.0	U	8.0	5.8	ug/L			06/30/17 01:08	8
1,2-Dichlorobenzene	8.0	U	8.0	6.3	ug/L			06/30/17 01:08	8
1,2-Dichloroethane	8.0	U	8.0	1.7	ug/L			06/30/17 01:08	8
1,2-Dichloropropane	8.0	U	8.0	5.8	ug/L			06/30/17 01:08	8
1,3,5-Trimethylbenzene	8.0	U	8.0	6.2	ug/L			06/30/17 01:08	8
1,3-Dichlorobenzene	8.0	U	8.0	6.2	ug/L			06/30/17 01:08	8
1,4-Dichlorobenzene	8.0	U	8.0	6.7	ug/L			06/30/17 01:08	8
2-Butanone (MEK)	80	U	80	11	ug/L			06/30/17 01:08	8
2-Hexanone	40	U	40	9.9	ug/L			06/30/17 01:08	8
4-Methyl-2-pentanone (MIBK)	40	U	40	17	ug/L			06/30/17 01:08	8
Acetone	80	U	80	24	ug/L			06/30/17 01:08	8
Benzene	8.0	U	8.0	3.3	ug/L			06/30/17 01:08	8
Bromodichloromethane	8.0	U	8.0	3.1	ug/L			06/30/17 01:08	8
Bromoform	8.0	U	8.0	2.1	ug/L			06/30/17 01:08	8
Bromomethane	8.0	U	8.0	5.5	ug/L			06/30/17 01:08	8
Carbon disulfide	8.0	U	8.0	1.5	ug/L			06/30/17 01:08	8
Carbon tetrachloride	8.0	U	8.0	2.2	ug/L			06/30/17 01:08	8
Chlorobenzene	8.0	U	8.0	6.0	ug/L			06/30/17 01:08	8
Chloroethane	**4.2**	**J**	8.0	2.6	ug/L			06/30/17 01:08	8
Chloroform	8.0	U	8.0	2.7	ug/L			06/30/17 01:08	8
Chloromethane	8.0	U	8.0	2.8	ug/L			06/30/17 01:08	8
cis-1,2-Dichloroethene	**160**		8.0	6.5	ug/L			06/30/17 01:08	8
cis-1,3-Dichloropropene	8.0	U	8.0	2.9	ug/L			06/30/17 01:08	8
Cyclohexane	8.0	U	8.0	1.4	ug/L			06/30/17 01:08	8
Dibromochloromethane	8.0	U	8.0	2.6	ug/L			06/30/17 01:08	8
Dichlorodifluoromethane	8.0	U	8.0	5.4	ug/L			06/30/17 01:08	8
Ethylbenzene	8.0	U	8.0	5.9	ug/L			06/30/17 01:08	8
Isopropylbenzene	8.0	U	8.0	6.3	ug/L			06/30/17 01:08	8

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-26
Date Collected: 06/20/17 14:20
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-31
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	20	U	20	10	ug/L			06/30/17 01:08	8
Methyl tert-butyl ether	8.0	U	8.0	1.3	ug/L			06/30/17 01:08	8
Methylcyclohexane	8.0	U	8.0	1.3	ug/L			06/30/17 01:08	8
Methylene Chloride	8.0	U	8.0	3.5	ug/L			06/30/17 01:08	8
Styrene	8.0	U	8.0	5.8	ug/L			06/30/17 01:08	8
Tetrachloroethene	8.0	U	8.0	2.9	ug/L			06/30/17 01:08	8
Toluene	8.0	U	8.0	4.1	ug/L			06/30/17 01:08	8
trans-1,2-Dichloroethene	8.0	U	8.0	7.2	ug/L			06/30/17 01:08	8
trans-1,3-Dichloropropene	8.0	U	8.0	3.0	ug/L			06/30/17 01:08	8
Trichloroethene	**76**		8.0	3.7	ug/L			06/30/17 01:08	8
Trichlorofluoromethane	8.0	U	8.0	7.0	ug/L			06/30/17 01:08	8
Vinyl chloride	**13**		8.0	7.2	ug/L			06/30/17 01:08	8
Xylenes, Total	16	U	16	5.3	ug/L			06/30/17 01:08	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/30/17 01:08*	*8*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*06/30/17 01:08*	*8*
Dibromofluoromethane (Surr)	*114*		*75 - 123*		*06/30/17 01:08*	*8*
Toluene-d8 (Surr)	*108*		*80 - 120*		*06/30/17 01:08*	*8*

Surrogate Summary

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

TestAmerica Job ID: 480-119849-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-119849-1	4009-7	103	96	104	99
480-119849-2	4009-8	102	95	103	98
480-119849-3	WELL 1-1	105	96	107	98
480-119849-4	4009-9	107	95	104	97
480-119849-5	4009-10	101	97	101	99
480-119849-6	4009-11	104	101	103	100
480-119849-6 - DL	4009-11	109	95	104	99
480-119849-7	4009-12	103	95	106	96
480-119849-8	4009-13	104	95	105	97
480-119849-9	4009-13A	102	94	99	97
480-119849-10	4009-14	105	98	100	99
480-119849-10 MS	4009-14	106	96	101	98
480-119849-10 MSD	4009-14	109	101	104	98
480-119849-11	4009-15	108	96	103	98
480-119849-12	4009-16	102	95	99	98
480-119849-13	4009-16A	102	95	96	99
480-119849-14	4009-18	109	96	103	99
480-119849-15	4009-19	109	95	102	96
480-119849-16	4009-21	106	98	101	101
480-119849-17	4009-22	103	97	106	98
480-119849-18	4009-27S	105	96	99	98
480-119849-19	4009-27I	100	97	100	99
480-119849-19 MS	4009-27I	105	101	100	100
480-119849-19 MSD	4009-27I	106	100	101	100
480-119849-20	4009-27D	102	94	99	97
480-119849-21	4009-28	111	95	103	100
480-119849-22	4009-29S	105	97	102	98
480-119849-23	4009-29I	102	98	103	96
480-119849-24	4009-29D	98	107	107	104
480-119849-25	4009-30	102	93	103	95
480-119849-26	4009-30A	107	94	104	97
480-119849-27	4009-11A	106	97	102	99
480-119849-28	DUP1	99	101	107	103
480-119849-28 - DL	DUP1	111	114	123	114
480-119849-29	DUP2	100	97	102	100
480-119849-29 - DL	DUP2	99	103	109	105
480-119849-30	FIELD BLANK	105	93	107	95
480-119849-31	4009-26	103	102	103	101
480-119849-31 - DL	4009-26	103	108	114	108
LCS 480-364593/4	Lab Control Sample	111	97	104	98
LCS 480-364647/4	Lab Control Sample	108	99	104	98
LCS 480-364815/5	Lab Control Sample	92	103	101	102
LCS 480-364888/28	Lab Control Sample	105	115	111	112
MB 480-364593/6	Method Blank	106	100	101	99
MB 480-364647/6	Method Blank	102	100	98	98
MB 480-364815/7	Method Blank	102	104	107	102
MB 480-364888/7	Method Blank	106	112	114	112

Surrogate Legend

Surrogate Summary

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

TestAmerica Job ID: 480-119849-1

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 480-364593/6
Matrix: Water
Analysis Batch: 364593

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	0.82	ug/L			06/28/17 22:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/28/17 22:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/28/17 22:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/28/17 22:52	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/28/17 22:52	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/28/17 22:52	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/28/17 22:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/28/17 22:52	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/28/17 22:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/28/17 22:52	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/28/17 22:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/28/17 22:52	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/28/17 22:52	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/28/17 22:52	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/28/17 22:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/28/17 22:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/28/17 22:52	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/28/17 22:52	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/28/17 22:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/28/17 22:52	1
Acetone	10	U	10	3.0	ug/L			06/28/17 22:52	1
Benzene	1.0	U	1.0	0.41	ug/L			06/28/17 22:52	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/28/17 22:52	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/28/17 22:52	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/28/17 22:52	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/28/17 22:52	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/28/17 22:52	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/28/17 22:52	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/28/17 22:52	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/28/17 22:52	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/28/17 22:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/28/17 22:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/28/17 22:52	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/28/17 22:52	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/28/17 22:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/28/17 22:52	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/28/17 22:52	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/28/17 22:52	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/28/17 22:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/28/17 22:52	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/28/17 22:52	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/28/17 22:52	1
Styrene	1.0	U	1.0	0.73	ug/L			06/28/17 22:52	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/28/17 22:52	1
Toluene	1.0	U	1.0	0.51	ug/L			06/28/17 22:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/28/17 22:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/28/17 22:52	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/28/17 22:52	1

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

Lab Sample ID: MB 480-364593/6
Matrix: Water
Analysis Batch: 364593

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/28/17 22:52	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/28/17 22:52	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/28/17 22:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*06/28/17 22:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/28/17 22:52*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*06/28/17 22:52*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/28/17 22:52*	*1*

Lab Sample ID: LCS 480-364593/4
Matrix: Water
Analysis Batch: 364593

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	25.0	25.2		ug/L		101	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	24.6		ug/L		98	61 - 148
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	25.0		ug/L		100	66 - 127
1,2,3-Trimethylbenzene	25.0	26.4		ug/L		106	78 - 120
1,2,4-Trichlorobenzene	25.0	27.6		ug/L		110	79 - 122
1,2,4-Trimethylbenzene	25.0	26.8		ug/L		107	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	56 - 134
1,2-Dibromoethane	25.0	24.7		ug/L		99	77 - 120
1,2-Dichlorobenzene	25.0	26.7		ug/L		107	80 - 124
1,2-Dichloroethane	25.0	25.3		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	26.0		ug/L		104	76 - 120
1,3,5-Trimethylbenzene	25.0	26.7		ug/L		107	77 - 121
1,3-Dichlorobenzene	25.0	25.9		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 120
2-Butanone (MEK)	125	134		ug/L		107	57 - 140
2-Hexanone	125	132		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125
Acetone	125	140		ug/L		112	56 - 142
Benzene	25.0	24.7		ug/L		99	71 - 124
Bromodichloromethane	25.0	26.6		ug/L		106	80 - 122
Bromoform	25.0	25.4		ug/L		101	61 - 132
Bromomethane	25.0	20.0		ug/L		80	55 - 144
Carbon disulfide	25.0	23.5		ug/L		94	59 - 134
Carbon tetrachloride	25.0	24.4		ug/L		98	72 - 134
Chlorobenzene	25.0	24.2		ug/L		97	80 - 120
Chloroethane	25.0	24.1		ug/L		97	69 - 136
Chloroform	25.0	25.0		ug/L		100	73 - 127
Chloromethane	25.0	24.1		ug/L		96	68 - 124
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	74 - 124

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

Lab Sample ID: LCS 480-364593/4
Matrix: Water
Analysis Batch: 364593

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	28.6		ug/L		114	74 - 124
Cyclohexane	25.0	24.8		ug/L		99	59 - 135
Dibromochloromethane	25.0	26.3		ug/L		105	75 - 125
Dichlorodifluoromethane	25.0	19.1		ug/L		76	59 - 135
Ethylbenzene	25.0	24.8		ug/L		99	77 - 123
Isopropylbenzene	25.0	26.1		ug/L		105	77 - 122
Methyl acetate	125	137		ug/L		109	74 - 133
Methyl tert-butyl ether	25.0	26.0		ug/L		104	77 - 120
Methylcyclohexane	25.0	24.9		ug/L		100	68 - 134
Methylene Chloride	25.0	22.9		ug/L		91	75 - 124
Styrene	25.0	24.9		ug/L		100	80 - 120
Tetrachloroethene	25.0	28.4		ug/L		114	74 - 122
Toluene	25.0	25.0		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	23.8		ug/L		95	73 - 127
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	23.9		ug/L		96	62 - 150
Vinyl chloride	25.0	23.7		ug/L		95	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 480-119849-10 MS
Matrix: Water
Analysis Batch: 364593

Client Sample ID: 4009-14
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	25.0	23.8		ug/L		95	73 - 126
1,1,2,2-Tetrachloroethane	1.0	U	25.0	26.3		ug/L		105	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	25.0	20.7		ug/L		83	61 - 148
1,1,2-Trichloroethane	1.0	U	25.0	24.1		ug/L		96	76 - 122
1,1-Dichloroethane	1.0	U	25.0	24.3		ug/L		97	77 - 120
1,1-Dichloroethene	1.0	U	25.0	23.0		ug/L		92	66 - 127
1,2,3-Trimethylbenzene	1.0	U	25.0	27.1		ug/L		108	78 - 120
1,2,4-Trichlorobenzene	1.0	U	25.0	26.7		ug/L		107	79 - 122
1,2,4-Trimethylbenzene	1.0	U	25.0	26.7		ug/L		107	76 - 121
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	26.8		ug/L		107	56 - 134
1,2-Dibromoethane	1.0	U	25.0	25.1		ug/L		101	77 - 120
1,2-Dichlorobenzene	1.0	U	25.0	26.3		ug/L		105	80 - 124
1,2-Dichloroethane	1.0	U	25.0	24.7		ug/L		99	75 - 120
1,2-Dichloropropane	1.0	U	25.0	24.8		ug/L		99	76 - 120
1,3,5-Trimethylbenzene	1.0	U	25.0	26.4		ug/L		106	77 - 121
1,3-Dichlorobenzene	1.0	U	25.0	25.9		ug/L		103	77 - 120
1,4-Dichlorobenzene	1.0	U	25.0	24.9		ug/L		100	78 - 124

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

Lab Sample ID: 480-119849-10 MS
Matrix: Water
Analysis Batch: 364593

Client Sample ID: 4009-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	10	U	125	115		ug/L		92	57 - 140
2-Hexanone	5.0	U	125	127		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	5.0	U	125	137		ug/L		109	71 - 125
Acetone	3.4	J	125	118		ug/L		92	56 - 142
Benzene	9.2		25.0	31.4		ug/L		89	71 - 124
Bromodichloromethane	1.0	U	25.0	25.5		ug/L		102	80 - 122
Bromoform	1.0	U	25.0	25.3		ug/L		101	61 - 132
Bromomethane	1.0	U	25.0	17.9		ug/L		71	55 - 144
Carbon disulfide	1.0	U	25.0	20.4		ug/L		81	59 - 134
Carbon tetrachloride	1.0	U	25.0	22.9		ug/L		91	72 - 134
Chlorobenzene	1.0	U	25.0	24.1		ug/L		96	80 - 120
Chloroethane	1.0	U	25.0	21.7		ug/L		87	69 - 136
Chloroform	1.0	U	25.0	24.4		ug/L		98	73 - 127
Chloromethane	1.0	U	25.0	22.3		ug/L		89	68 - 124
cis-1,2-Dichloroethene	1.0	U	25.0	23.5		ug/L		94	74 - 124
cis-1,3-Dichloropropene	1.0	U	25.0	26.2		ug/L		105	74 - 124
Cyclohexane	1.0	U	25.0	22.4		ug/L		90	59 - 135
Dibromochloromethane	1.0	U	25.0	26.5		ug/L		106	75 - 125
Dichlorodifluoromethane	1.0	U	25.0	19.9		ug/L		79	59 - 135
Ethylbenzene	1.0	U	25.0	24.3		ug/L		97	77 - 123
Isopropylbenzene	1.0	U	25.0	25.1		ug/L		101	77 - 122
Methyl acetate	2.5	U	125	126		ug/L		101	74 - 133
Methyl tert-butyl ether	1.0	U	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	1.0	U	25.0	23.2		ug/L		93	68 - 134
Methylene Chloride	1.0	U	25.0	23.5		ug/L		94	75 - 124
Styrene	1.0	U	25.0	25.2		ug/L		101	80 - 120
Tetrachloroethene	1.0	U	25.0	23.5		ug/L		94	74 - 122
Toluene	1.0	U	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	1.0	U	25.0	22.4		ug/L		90	73 - 127
trans-1,3-Dichloropropene	1.0	U	25.0	25.5		ug/L		102	80 - 120
Trichloroethene	1.0	U	25.0	23.8		ug/L		95	74 - 123
Trichlorofluoromethane	1.0	U	25.0	22.1		ug/L		89	62 - 150
Vinyl chloride	1.0	U	25.0	21.6		ug/L		86	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 480-119849-10 MSD
Matrix: Water
Analysis Batch: 364593

Client Sample ID: 4009-14
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	25.0	25.1		ug/L		100	73 - 126	5	15
1,1,2,2-Tetrachloroethane	1.0	U	25.0	25.7		ug/L		103	76 - 120	2	15

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

Lab Sample ID: 480-119849-10 MSD
Matrix: Water
Analysis Batch: 364593

Client Sample ID: 4009-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	25.0	22.0		ug/L		88	61 - 148	6	20
1,1,2-Trichloroethane	1.0	U	25.0	25.3		ug/L		101	76 - 122	5	15
1,1-Dichloroethane	1.0	U	25.0	23.3		ug/L		93	77 - 120	4	20
1,1-Dichloroethene	1.0	U	25.0	22.8		ug/L		91	66 - 127	1	16
1,2,3-Trimethylbenzene	1.0	U	25.0	26.2		ug/L		105	78 - 120	3	20
1,2,4-Trichlorobenzene	1.0	U	25.0	27.1		ug/L		108	79 - 122	1	20
1,2,4-Trimethylbenzene	1.0	U	25.0	26.0		ug/L		104	76 - 121	3	20
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	26.3		ug/L		105	56 - 134	2	15
1,2-Dibromoethane	1.0	U	25.0	25.5		ug/L		102	77 - 120	1	15
1,2-Dichlorobenzene	1.0	U	25.0	25.7		ug/L		103	80 - 124	2	20
1,2-Dichloroethane	1.0	U	25.0	25.4		ug/L		102	75 - 120	3	20
1,2-Dichloropropane	1.0	U	25.0	25.5		ug/L		102	76 - 120	3	20
1,3,5-Trimethylbenzene	1.0	U	25.0	25.2		ug/L		101	77 - 121	4	20
1,3-Dichlorobenzene	1.0	U	25.0	25.0		ug/L		100	77 - 120	3	20
1,4-Dichlorobenzene	1.0	U	25.0	24.5		ug/L		98	78 - 124	1	20
2-Butanone (MEK)	10	U	125	119		ug/L		95	57 - 140	3	20
2-Hexanone	5.0	U	125	127		ug/L		101	65 - 127	0	15
4-Methyl-2-pentanone (MIBK)	5.0	U	125	138		ug/L		110	71 - 125	1	35
Acetone	3.4	J	125	118		ug/L		92	56 - 142	0	15
Benzene	9.2		25.0	31.5		ug/L		89	71 - 124	0	13
Bromodichloromethane	1.0	U	25.0	25.7		ug/L		103	80 - 122	1	15
Bromoform	1.0	U	25.0	25.0		ug/L		100	61 - 132	1	15
Bromomethane	1.0	U	25.0	21.0	*	ug/L		84	55 - 144	16	15
Carbon disulfide	1.0	U	25.0	20.5		ug/L		82	59 - 134	1	15
Carbon tetrachloride	1.0	U	25.0	24.0		ug/L		96	72 - 134	5	15
Chlorobenzene	1.0	U	25.0	23.7		ug/L		95	80 - 120	2	25
Chloroethane	1.0	U	25.0	23.9		ug/L		96	69 - 136	10	15
Chloroform	1.0	U	25.0	24.6		ug/L		99	73 - 127	1	20
Chloromethane	1.0	U	25.0	20.8		ug/L		83	68 - 124	7	15
cis-1,2-Dichloroethene	1.0	U	25.0	24.6		ug/L		98	74 - 124	5	15
cis-1,3-Dichloropropene	1.0	U	25.0	27.6		ug/L		110	74 - 124	5	15
Cyclohexane	1.0	U	25.0	21.8		ug/L		87	59 - 135	3	20
Dibromochloromethane	1.0	U	25.0	27.2		ug/L		109	75 - 125	3	15
Dichlorodifluoromethane	1.0	U	25.0	18.4		ug/L		73	59 - 135	8	20
Ethylbenzene	1.0	U	25.0	24.2		ug/L		97	77 - 123	0	15
Isopropylbenzene	1.0	U	25.0	24.9		ug/L		100	77 - 122	1	20
Methyl acetate	2.5	U	125	129		ug/L		104	74 - 133	3	20
Methyl tert-butyl ether	1.0	U	25.0	25.4		ug/L		101	77 - 120	2	37
Methylcyclohexane	1.0	U	25.0	22.2		ug/L		89	68 - 134	4	20
Methylene Chloride	1.0	U	25.0	24.9		ug/L		100	75 - 124	6	15
Styrene	1.0	U	25.0	24.7		ug/L		99	80 - 120	2	20
Tetrachloroethene	1.0	U	25.0	23.4		ug/L		94	74 - 122	0	20
Toluene	1.0	U	25.0	24.5		ug/L		98	80 - 122	1	15
trans-1,2-Dichloroethene	1.0	U	25.0	24.2		ug/L		97	73 - 127	8	20
trans-1,3-Dichloropropene	1.0	U	25.0	25.8		ug/L		103	80 - 120	1	15
Trichloroethene	1.0	U	25.0	24.3		ug/L		97	74 - 123	2	16
Trichlorofluoromethane	1.0	U	25.0	21.2		ug/L		85	62 - 150	4	20

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

Lab Sample ID: 480-119849-10 MSD
Matrix: Water
Analysis Batch: 364593

Client Sample ID: 4009-14
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	1.0	U	25.0	21.3		ug/L		85	65 - 133	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 480-364647/6
Matrix: Water
Analysis Batch: 364647

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	0.82	ug/L			06/29/17 10:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 10:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 10:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 10:28	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 10:28	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 10:28	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 10:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 10:28	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 10:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 10:28	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 10:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 10:28	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 10:28	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 10:28	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 10:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 10:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 10:28	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 10:28	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 10:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 10:28	1
Acetone	10	U	10	3.0	ug/L			06/29/17 10:28	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 10:28	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 10:28	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 10:28	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 10:28	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 10:28	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 10:28	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 10:28	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 10:28	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 10:28	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 10:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 10:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 10:28	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 10:28	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 10:28	1

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

Lab Sample ID: MB 480-364647/6
Matrix: Water
Analysis Batch: 364647

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	0.68	ug/L			06/29/17 10:28	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 10:28	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 10:28	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 10:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 10:28	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 10:28	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 10:28	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 10:28	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 10:28	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 10:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 10:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 10:28	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 10:28	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 10:28	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 10:28	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 10:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 10:28*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/29/17 10:28*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*06/29/17 10:28*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/29/17 10:28*	*1*

Lab Sample ID: LCS 480-364647/4
Matrix: Water
Analysis Batch: 364647

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	25.0	20.7		ug/L		83	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	18.3		ug/L		73	61 - 148
1,1,2-Trichloroethane	25.0	23.2		ug/L		93	76 - 122
1,1-Dichloroethane	25.0	21.3		ug/L		85	77 - 120
1,1-Dichloroethene	25.0	17.7		ug/L		71	66 - 127
1,2,3-Trimethylbenzene	25.0	26.3		ug/L		105	78 - 120
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	79 - 122
1,2,4-Trimethylbenzene	25.0	23.6		ug/L		94	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	22.0		ug/L		88	56 - 134
1,2-Dibromoethane	25.0	23.3		ug/L		93	77 - 120
1,2-Dichlorobenzene	25.0	24.1		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	22.6		ug/L		90	75 - 120
1,2-Dichloropropane	25.0	22.9		ug/L		91	76 - 120
1,3,5-Trimethylbenzene	25.0	23.0		ug/L		92	77 - 121
1,3-Dichlorobenzene	25.0	22.7		ug/L		91	77 - 120
1,4-Dichlorobenzene	25.0	23.4		ug/L		94	80 - 120
2-Butanone (MEK)	125	114		ug/L		91	57 - 140
2-Hexanone	125	120		ug/L		96	65 - 127

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

Lab Sample ID: LCS 480-364647/4
Matrix: Water
Analysis Batch: 364647

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	125	124		ug/L		99	71 - 125
Acetone	125	132		ug/L		106	56 - 142
Benzene	25.0	21.1		ug/L		84	71 - 124
Bromodichloromethane	25.0	23.4		ug/L		94	80 - 122
Bromoform	25.0	23.7		ug/L		95	61 - 132
Bromomethane	25.0	19.8		ug/L		79	55 - 144
Carbon disulfide	25.0	17.5		ug/L		70	59 - 134
Carbon tetrachloride	25.0	18.7		ug/L		75	72 - 134
Chlorobenzene	25.0	22.1		ug/L		88	80 - 120
Chloroethane	25.0	21.6		ug/L		86	69 - 136
Chloroform	25.0	22.3		ug/L		89	73 - 127
Chloromethane	25.0	19.7		ug/L		79	68 - 124
cis-1,2-Dichloroethene	25.0	21.7		ug/L		87	74 - 124
cis-1,3-Dichloropropene	25.0	25.1		ug/L		101	74 - 124
Cyclohexane	25.0	18.4		ug/L		73	59 - 135
Dibromochloromethane	25.0	24.0		ug/L		96	75 - 125
Dichlorodifluoromethane	25.0	17.7		ug/L		71	59 - 135
Ethylbenzene	25.0	21.5		ug/L		86	77 - 123
Isopropylbenzene	25.0	22.0		ug/L		88	77 - 122
Methyl acetate	125	121		ug/L		97	74 - 133
Methyl tert-butyl ether	25.0	22.8		ug/L		91	77 - 120
Methylcyclohexane	25.0	19.5		ug/L		78	68 - 134
Methylene Chloride	25.0	20.4		ug/L		81	75 - 124
Styrene	25.0	22.6		ug/L		90	80 - 120
Tetrachloroethene	25.0	23.1		ug/L		92	74 - 122
Toluene	25.0	21.7		ug/L		87	80 - 122
trans-1,2-Dichloroethene	25.0	19.5		ug/L		78	73 - 127
trans-1,3-Dichloropropene	25.0	24.0		ug/L		96	80 - 120
Trichloroethene	25.0	21.2		ug/L		85	74 - 123
Trichlorofluoromethane	25.0	21.2		ug/L		85	62 - 150
Vinyl chloride	25.0	20.4		ug/L		82	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 480-119849-19 MS
Matrix: Water
Analysis Batch: 364647

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	1.0	U	25.0	28.3		ug/L		113	73 - 126
1,1,2,2-Tetrachloroethane	1.0	U	25.0	26.8		ug/L		107	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	J	25.0	23.8		ug/L		93	61 - 148
1,1,2-Trichloroethane	1.0	U	25.0	26.7		ug/L		107	76 - 122

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

Lab Sample ID: 480-119849-19 MS
Matrix: Water
Analysis Batch: 364647

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-Dichloroethane	1.0	U	25.0	26.8		ug/L		107	77 - 120
1,1-Dichloroethene	1.0	U	25.0	25.2		ug/L		101	66 - 127
1,2,3-Trimethylbenzene	1.0	U	25.0	28.4		ug/L		114	78 - 120
1,2,4-Trichlorobenzene	1.0	U	25.0	27.2		ug/L		109	79 - 122
1,2,4-Trimethylbenzene	1.0	U	25.0	26.5		ug/L		106	76 - 121
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	28.5		ug/L		114	56 - 134
1,2-Dibromoethane	1.0	U	25.0	26.4		ug/L		106	77 - 120
1,2-Dichlorobenzene	1.0	U	25.0	26.0		ug/L		104	80 - 124
1,2-Dichloroethane	1.0	U	25.0	26.0		ug/L		104	75 - 120
1,2-Dichloropropane	1.0	U	25.0	26.9		ug/L		108	76 - 120
1,3,5-Trimethylbenzene	1.0	U	25.0	26.9		ug/L		108	77 - 121
1,3-Dichlorobenzene	1.0	U	25.0	25.3		ug/L		101	77 - 120
1,4-Dichlorobenzene	1.0	U	25.0	25.2		ug/L		101	78 - 124
2-Butanone (MEK)	10	U	125	124		ug/L		100	57 - 140
2-Hexanone	5.0	U	125	137		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	5.0	U	125	145		ug/L		116	71 - 125
Acetone	3.3	J	125	125		ug/L		97	56 - 142
Benzene	1.0	U	25.0	26.0		ug/L		104	71 - 124
Bromodichloromethane	1.0	U	25.0	27.9		ug/L		112	80 - 122
Bromoform	1.0	U	25.0	25.2		ug/L		101	61 - 132
Bromomethane	1.0	U	25.0	24.0		ug/L		96	55 - 144
Carbon disulfide	1.0	U	25.0	22.2		ug/L		89	59 - 134
Carbon tetrachloride	1.0	U	25.0	26.8		ug/L		107	72 - 134
Chlorobenzene	1.0	U	25.0	25.0		ug/L		100	80 - 120
Chloroethane	1.0	U	25.0	29.1		ug/L		116	69 - 136
Chloroform	1.0	U	25.0	26.7		ug/L		107	73 - 127
Chloromethane	1.0	U	25.0	24.4		ug/L		98	68 - 124
cis-1,2-Dichloroethene	1.0	U	25.0	26.8		ug/L		107	74 - 124
cis-1,3-Dichloropropene	1.0	U	25.0	28.7		ug/L		115	74 - 124
Cyclohexane	1.0	U	25.0	23.7		ug/L		95	59 - 135
Dibromochloromethane	1.0	U	25.0	27.5		ug/L		110	75 - 125
Dichlorodifluoromethane	1.0	U	25.0	20.3		ug/L		81	59 - 135
Ethylbenzene	1.0	U	25.0	25.3		ug/L		101	77 - 123
Isopropylbenzene	1.0	U	25.0	25.8		ug/L		103	77 - 122
Methyl acetate	2.5	U	125	138		ug/L		110	74 - 133
Methyl tert-butyl ether	1.0	U	25.0	26.0		ug/L		104	77 - 120
Methylcyclohexane	1.0	U	25.0	24.7		ug/L		99	68 - 134
Methylene Chloride	1.0	U	25.0	24.5		ug/L		98	75 - 124
Styrene	1.0	U	25.0	26.2		ug/L		105	80 - 120
Tetrachloroethene	1.0	U	25.0	24.6		ug/L		99	74 - 122
Toluene	1.0	U	25.0	26.4		ug/L		106	80 - 122
trans-1,2-Dichloroethene	1.0	U	25.0	25.7		ug/L		103	73 - 127
trans-1,3-Dichloropropene	1.0	U	25.0	26.3		ug/L		105	80 - 120
Trichloroethene	1.7		25.0	27.5		ug/L		103	74 - 123
Trichlorofluoromethane	1.0	U	25.0	25.9		ug/L		104	62 - 150
Vinyl chloride	1.0	U	25.0	26.3		ug/L		105	65 - 133

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

Lab Sample ID: 480-119849-19 MS
Matrix: Water
Analysis Batch: 364647

Client Sample ID: 4009-27I
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 480-119849-19 MSD
Matrix: Water
Analysis Batch: 364647

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	1.0	U	25.0	28.8		ug/L		115	73 - 126	2	15
1,1,2,2-Tetrachloroethane	1.0	U	25.0	27.0		ug/L		108	76 - 120	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	J	25.0	26.6		ug/L		105	61 - 148	11	20
1,1,2-Trichloroethane	1.0	U	25.0	27.2		ug/L		109	76 - 122	2	15
1,1-Dichloroethane	1.0	U	25.0	26.8		ug/L		107	77 - 120	0	20
1,1-Dichloroethene	1.0	U	25.0	25.6		ug/L		102	66 - 127	1	16
1,2,3-Trimethylbenzene	1.0	U	25.0	29.2		ug/L		117	78 - 120	3	20
1,2,4-Trichlorobenzene	1.0	U	25.0	27.8		ug/L		111	79 - 122	2	20
1,2,4-Trimethylbenzene	1.0	U	25.0	27.7		ug/L		111	76 - 121	4	20
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	27.4		ug/L		110	56 - 134	4	15
1,2-Dibromoethane	1.0	U	25.0	27.1		ug/L		109	77 - 120	3	15
1,2-Dichlorobenzene	1.0	U	25.0	26.9		ug/L		108	80 - 124	3	20
1,2-Dichloroethane	1.0	U	25.0	26.1		ug/L		104	75 - 120	0	20
1,2-Dichloropropane	1.0	U	25.0	26.9		ug/L		108	76 - 120	0	20
1,3,5-Trimethylbenzene	1.0	U	25.0	27.7		ug/L		111	77 - 121	3	20
1,3-Dichlorobenzene	1.0	U	25.0	26.1		ug/L		105	77 - 120	3	20
1,4-Dichlorobenzene	1.0	U	25.0	25.6		ug/L		102	78 - 124	2	20
2-Butanone (MEK)	10	U	125	125		ug/L		100	57 - 140	1	20
2-Hexanone	5.0	U	125	139		ug/L		111	65 - 127	2	15
4-Methyl-2-pentanone (MIBK)	5.0	U	125	146		ug/L		117	71 - 125	1	35
Acetone	3.3	J	125	125		ug/L		98	56 - 142	0	15
Benzene	1.0	U	25.0	26.9		ug/L		108	71 - 124	3	13
Bromodichloromethane	1.0	U	25.0	27.7		ug/L		111	80 - 122	1	15
Bromoform	1.0	U	25.0	26.2		ug/L		105	61 - 132	4	15
Bromomethane	1.0	U	25.0	25.1		ug/L		100	55 - 144	4	15
Carbon disulfide	1.0	U	25.0	23.7		ug/L		95	59 - 134	6	15
Carbon tetrachloride	1.0	U	25.0	27.8		ug/L		111	72 - 134	4	15
Chlorobenzene	1.0	U	25.0	25.9		ug/L		104	80 - 120	3	25
Chloroethane	1.0	U	25.0	28.5		ug/L		114	69 - 136	2	15
Chloroform	1.0	U	25.0	27.1		ug/L		109	73 - 127	2	20
Chloromethane	1.0	U	25.0	25.7		ug/L		103	68 - 124	5	15
cis-1,2-Dichloroethene	1.0	U	25.0	26.0		ug/L		104	74 - 124	3	15
cis-1,3-Dichloropropene	1.0	U	25.0	29.4		ug/L		118	74 - 124	2	15
Cyclohexane	1.0	U	25.0	25.6		ug/L		103	59 - 135	8	20
Dibromochloromethane	1.0	U	25.0	27.7		ug/L		111	75 - 125	1	15
Dichlorodifluoromethane	1.0	U	25.0	21.6		ug/L		86	59 - 135	6	20
Ethylbenzene	1.0	U	25.0	26.8		ug/L		107	77 - 123	5	15

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

Lab Sample ID: 480-119849-19 MSD
Matrix: Water
Analysis Batch: 364647

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
Isopropylbenzene	1.0	U	25.0	26.9		ug/L		108	77 - 122	4	20
Methyl acetate	2.5	U	125	132		ug/L		105	74 - 133	4	20
Methyl tert-butyl ether	1.0	U	25.0	26.3		ug/L		105	77 - 120	1	37
Methylcyclohexane	1.0	U	25.0	26.1		ug/L		104	68 - 134	5	20
Methylene Chloride	1.0	U	25.0	25.2		ug/L		101	75 - 124	3	15
Styrene	1.0	U	25.0	27.4		ug/L		110	80 - 120	5	20
Tetrachloroethene	1.0	U	25.0	25.9		ug/L		104	74 - 122	5	20
Toluene	1.0	U	25.0	27.3		ug/L		109	80 - 122	3	15
trans-1,2-Dichloroethene	1.0	U	25.0	25.8		ug/L		103	73 - 127	1	20
trans-1,3-Dichloropropene	1.0	U	25.0	27.0		ug/L		108	80 - 120	3	15
Trichloroethene	1.7		25.0	28.4		ug/L		107	74 - 123	3	16
Trichlorofluoromethane	1.0	U	25.0	27.9		ug/L		112	62 - 150	7	20
Vinyl chloride	1.0	U	25.0	27.0		ug/L		108	65 - 133	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 480-364815/7
Matrix: Water
Analysis Batch: 364815

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	0.82	ug/L			06/29/17 22:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 22:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 22:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 22:05	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 22:05	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 22:05	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 22:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 22:05	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 22:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 22:05	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 22:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 22:05	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 22:05	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 22:05	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 22:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 22:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 22:05	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 22:05	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 22:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 22:05	1
Acetone	10	U	10	3.0	ug/L			06/29/17 22:05	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 22:05	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 22:05	1

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

Lab Sample ID: MB 480-364815/7
Matrix: Water
Analysis Batch: 364815

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 22:05	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 22:05	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 22:05	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 22:05	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 22:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 22:05	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 22:05	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 22:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 22:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 22:05	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 22:05	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 22:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 22:05	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 22:05	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 22:05	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 22:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 22:05	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 22:05	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 22:05	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 22:05	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 22:05	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 22:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 22:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 22:05	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 22:05	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 22:05	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 22:05	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 22:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 22:05*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*06/29/17 22:05*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/29/17 22:05*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*06/29/17 22:05*	*1*

Lab Sample ID: LCS 480-364815/5
Matrix: Water
Analysis Batch: 364815

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	25.0	26.7		ug/L		107	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.5		ug/L		94	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	26.7		ug/L		107	61 - 148
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	76 - 122
1,1-Dichloroethane	25.0	24.2		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	25.4		ug/L		102	66 - 127
1,2,3-Trimethylbenzene	25.0	27.9		ug/L		112	78 - 120

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

Lab Sample ID: LCS 480-364815/5
Matrix: Water
Analysis Batch: 364815

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	79 - 122
1,2,4-Trimethylbenzene	25.0	26.5		ug/L		106	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	23.4		ug/L		93	56 - 134
1,2-Dibromoethane	25.0	23.4		ug/L		93	77 - 120
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	22.3		ug/L		89	75 - 120
1,2-Dichloropropane	25.0	25.4		ug/L		102	76 - 120
1,3,5-Trimethylbenzene	25.0	26.8		ug/L		107	77 - 121
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 120
2-Butanone (MEK)	125	109		ug/L		88	57 - 140
2-Hexanone	125	115		ug/L		92	65 - 127
4-Methyl-2-pentanone (MIBK)	125	107		ug/L		86	71 - 125
Acetone	125	131		ug/L		105	56 - 142
Benzene	25.0	25.6		ug/L		102	71 - 124
Bromodichloromethane	25.0	25.7		ug/L		103	80 - 122
Bromoform	25.0	26.8		ug/L		107	61 - 132
Bromomethane	25.0	24.6		ug/L		98	55 - 144
Carbon disulfide	25.0	24.7		ug/L		99	59 - 134
Carbon tetrachloride	25.0	27.5		ug/L		110	72 - 134
Chlorobenzene	25.0	25.1		ug/L		100	80 - 120
Chloroethane	25.0	25.5		ug/L		102	69 - 136
Chloroform	25.0	24.0		ug/L		96	73 - 127
Chloromethane	25.0	24.0		ug/L		96	68 - 124
cis-1,2-Dichloroethene	25.0	25.5		ug/L		102	74 - 124
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	74 - 124
Cyclohexane	25.0	26.8		ug/L		107	59 - 135
Dibromochloromethane	25.0	25.6		ug/L		102	75 - 125
Dichlorodifluoromethane	25.0	24.3		ug/L		97	59 - 135
Ethylbenzene	25.0	25.4		ug/L		101	77 - 123
Isopropylbenzene	25.0	26.8		ug/L		107	77 - 122
Methyl acetate	125	102		ug/L		82	74 - 133
Methyl tert-butyl ether	25.0	23.0		ug/L		92	77 - 120
Methylcyclohexane	25.0	27.3		ug/L		109	68 - 134
Methylene Chloride	25.0	22.9		ug/L		92	75 - 124
Styrene	25.0	25.3		ug/L		101	80 - 120
Tetrachloroethene	25.0	30.2		ug/L		121	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	26.1		ug/L		104	73 - 127
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	80 - 120
Trichloroethene	25.0	25.5		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	25.7		ug/L		103	62 - 150
Vinyl chloride	25.0	25.6		ug/L		102	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

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

Lab Sample ID: LCS 480-364815/5
Matrix: Water
Analysis Batch: 364815

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: MB 480-364888/7
Matrix: Water
Analysis Batch: 364888

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	0.82	ug/L			06/30/17 12:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 12:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 12:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 12:10	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 12:10	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 12:10	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 12:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 12:10	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 12:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 12:10	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 12:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 12:10	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 12:10	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 12:10	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 12:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 12:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 12:10	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 12:10	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 12:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 12:10	1
Acetone	10	U	10	3.0	ug/L			06/30/17 12:10	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 12:10	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 12:10	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 12:10	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 12:10	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 12:10	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 12:10	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 12:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 12:10	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 12:10	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 12:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 12:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 12:10	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 12:10	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 12:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 12:10	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 12:10	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 12:10	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 12:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 12:10	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 12:10	1

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

Lab Sample ID: MB 480-364888/7
Matrix: Water
Analysis Batch: 364888

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 12:10	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 12:10	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 12:10	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 12:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 12:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 12:10	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 12:10	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 12:10	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 12:10	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 12:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*06/30/17 12:10*	*1*
4-Bromofluorobenzene (Surr)	*112*		*73 - 120*		*06/30/17 12:10*	*1*
Dibromofluoromethane (Surr)	*114*		*75 - 123*		*06/30/17 12:10*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*06/30/17 12:10*	*1*

Lab Sample ID: LCS 480-364888/28
Matrix: Water
Analysis Batch: 364888

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	25.0	28.0		ug/L		112	73 - 126
1,1,2,2-Tetrachloroethane	25.0	28.0		ug/L		112	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.0		ug/L		112	61 - 148
1,1,2-Trichloroethane	25.0	27.9		ug/L		112	76 - 122
1,1-Dichloroethane	25.0	27.9		ug/L		112	77 - 120
1,1-Dichloroethene	25.0	27.1		ug/L		108	66 - 127
1,2,3-Trimethylbenzene	25.0	31.0	*	ug/L		124	78 - 120
1,2,4-Trichlorobenzene	25.0	29.1		ug/L		117	79 - 122
1,2,4-Trimethylbenzene	25.0	29.6		ug/L		118	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	28.3		ug/L		113	56 - 134
1,2-Dibromoethane	25.0	27.1		ug/L		109	77 - 120
1,2-Dichlorobenzene	25.0	28.5		ug/L		114	80 - 124
1,2-Dichloroethane	25.0	26.1		ug/L		105	75 - 120
1,2-Dichloropropane	25.0	28.5		ug/L		114	76 - 120
1,3,5-Trimethylbenzene	25.0	29.9		ug/L		119	77 - 121
1,3-Dichlorobenzene	25.0	28.6		ug/L		114	77 - 120
1,4-Dichlorobenzene	25.0	29.4		ug/L		118	80 - 120
2-Butanone (MEK)	125	147		ug/L		118	57 - 140
2-Hexanone	125	139		ug/L		111	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		106	71 - 125
Acetone	125	150		ug/L		120	56 - 142
Benzene	25.0	28.6		ug/L		114	71 - 124
Bromodichloromethane	25.0	30.2		ug/L		121	80 - 122
Bromoform	25.0	33.7	*	ug/L		135	61 - 132
Bromomethane	25.0	29.3		ug/L		117	55 - 144

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

Lab Sample ID: LCS 480-364888/28
Matrix: Water
Analysis Batch: 364888

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	25.0	27.3		ug/L		109	59 - 134
Carbon tetrachloride	25.0	29.7		ug/L		119	72 - 134
Chlorobenzene	25.0	28.5		ug/L		114	80 - 120
Chloroethane	25.0	28.7		ug/L		115	69 - 136
Chloroform	25.0	27.7		ug/L		111	73 - 127
Chloromethane	25.0	30.9		ug/L		123	68 - 124
cis-1,2-Dichloroethene	25.0	28.7		ug/L		115	74 - 124
cis-1,3-Dichloropropene	25.0	32.5	*	ug/L		130	74 - 124
Cyclohexane	25.0	28.2		ug/L		113	59 - 135
Dibromochloromethane	25.0	31.6	*	ug/L		126	75 - 125
Dichlorodifluoromethane	25.0	35.0	*	ug/L		140	59 - 135
Ethylbenzene	25.0	27.9		ug/L		112	77 - 123
Isopropylbenzene	25.0	28.7		ug/L		115	77 - 122
Methyl acetate	125	126		ug/L		101	74 - 133
Methyl tert-butyl ether	25.0	27.0		ug/L		108	77 - 120
Methylcyclohexane	25.0	28.6		ug/L		114	68 - 134
Methylene Chloride	25.0	26.0		ug/L		104	75 - 124
Styrene	25.0	28.9		ug/L		116	80 - 120
Tetrachloroethene	25.0	29.1		ug/L		116	74 - 122
Toluene	25.0	28.2		ug/L		113	80 - 122
trans-1,2-Dichloroethene	25.0	28.7		ug/L		115	73 - 127
trans-1,3-Dichloropropene	25.0	30.6	*	ug/L		122	80 - 120
Trichloroethene	25.0	28.2		ug/L		113	74 - 123
Trichlorofluoromethane	25.0	26.8		ug/L		107	62 - 150
Vinyl chloride	25.0	29.0		ug/L		116	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*115*		*73 - 120*
Dibromofluoromethane (Surr)	*111*		*75 - 123*
Toluene-d8 (Surr)	*112*		*80 - 120*

GC/MS VOA

Analysis Batch: 364593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119849-1	4009-7	Total/NA	Water	8260C	
480-119849-2	4009-8	Total/NA	Water	8260C	
480-119849-3	WELL 1-1	Total/NA	Water	8260C	
480-119849-4	4009-9	Total/NA	Water	8260C	
480-119849-5	4009-10	Total/NA	Water	8260C	
480-119849-6	4009-11	Total/NA	Water	8260C	
480-119849-7	4009-12	Total/NA	Water	8260C	
480-119849-8	4009-13	Total/NA	Water	8260C	
480-119849-9	4009-13A	Total/NA	Water	8260C	
480-119849-10	4009-14	Total/NA	Water	8260C	
480-119849-11	4009-15	Total/NA	Water	8260C	
480-119849-12	4009-16	Total/NA	Water	8260C	
480-119849-13	4009-16A	Total/NA	Water	8260C	
480-119849-14	4009-18	Total/NA	Water	8260C	
480-119849-15	4009-19	Total/NA	Water	8260C	
480-119849-16	4009-21	Total/NA	Water	8260C	
480-119849-17	4009-22	Total/NA	Water	8260C	
480-119849-18	4009-27S	Total/NA	Water	8260C	
MB 480-364593/6	Method Blank	Total/NA	Water	8260C	
LCS 480-364593/4	Lab Control Sample	Total/NA	Water	8260C	
480-119849-10 MS	4009-14	Total/NA	Water	8260C	
480-119849-10 MSD	4009-14	Total/NA	Water	8260C	

Analysis Batch: 364647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119849-6 - DL	4009-11	Total/NA	Water	8260C	
480-119849-19	4009-27I	Total/NA	Water	8260C	
480-119849-20	4009-27D	Total/NA	Water	8260C	
480-119849-21	4009-28	Total/NA	Water	8260C	
480-119849-22	4009-29S	Total/NA	Water	8260C	
480-119849-23	4009-29I	Total/NA	Water	8260C	
480-119849-25	4009-30	Total/NA	Water	8260C	
480-119849-26	4009-30A	Total/NA	Water	8260C	
480-119849-27	4009-11A	Total/NA	Water	8260C	
480-119849-29	DUP2	Total/NA	Water	8260C	
480-119849-30	FIELD BLANK	Total/NA	Water	8260C	
480-119849-31	4009-26	Total/NA	Water	8260C	
MB 480-364647/6	Method Blank	Total/NA	Water	8260C	
LCS 480-364647/4	Lab Control Sample	Total/NA	Water	8260C	
480-119849-19 MS	4009-27I	Total/NA	Water	8260C	
480-119849-19 MSD	4009-27I	Total/NA	Water	8260C	

Analysis Batch: 364815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119849-24	4009-29D	Total/NA	Water	8260C	
480-119849-28	DUP1	Total/NA	Water	8260C	
480-119849-29 - DL	DUP2	Total/NA	Water	8260C	
480-119849-31 - DL	4009-26	Total/NA	Water	8260C	
MB 480-364815/7	Method Blank	Total/NA	Water	8260C	
LCS 480-364815/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 364888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119849-28 - DL	DUP1	Total/NA	Water	8260C	
MB 480-364888/7	Method Blank	Total/NA	Water	8260C	
LCS 480-364888/28	Lab Control Sample	Total/NA	Water	8260C	

Client Sample ID: 4009-7 — **Lab Sample ID: 480-119849-1**
Date Collected: 06/20/17 14:35 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/28/17 23:38	NEA	TAL BUF

Client Sample ID: 4009-8 — **Lab Sample ID: 480-119849-2**
Date Collected: 06/20/17 14:15 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	364593	06/29/17 00:01	NEA	TAL BUF

Client Sample ID: WELL 1-1 — **Lab Sample ID: 480-119849-3**
Date Collected: 06/20/17 08:30 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	364593	06/29/17 00:24	NEA	TAL BUF

Client Sample ID: 4009-9 — **Lab Sample ID: 480-119849-4**
Date Collected: 06/20/17 13:45 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 00:48	NEA	TAL BUF

Client Sample ID: 4009-10 — **Lab Sample ID: 480-119849-5**
Date Collected: 06/20/17 14:00 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 01:11	NEA	TAL BUF

Client Sample ID: 4009-11 — **Lab Sample ID: 480-119849-6**
Date Collected: 06/20/17 14:05 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 01:34	NEA	TAL BUF
Total/NA	Analysis	8260C	DL	4	364647	06/29/17 11:02	ARS	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-12

Date Collected: 06/20/17 12:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	364593	06/29/17 01:57	NEA	TAL BUF

Client Sample ID: 4009-13

Date Collected: 06/20/17 13:25
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 02:19	NEA	TAL BUF

Client Sample ID: 4009-13A

Date Collected: 06/20/17 13:30
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 02:42	NEA	TAL BUF

Client Sample ID: 4009-14

Date Collected: 06/20/17 09:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 03:05	NEA	TAL BUF

Client Sample ID: 4009-15

Date Collected: 06/20/17 12:15
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 03:28	NEA	TAL BUF

Client Sample ID: 4009-16

Date Collected: 06/20/17 11:20
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 03:51	NEA	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-16A — Lab Sample ID: 480-119849-13

Date Collected: 06/20/17 11:25 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 04:13	NEA	TAL BUF

Client Sample ID: 4009-18 — Lab Sample ID: 480-119849-14

Date Collected: 06/20/17 10:35 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 04:36	NEA	TAL BUF

Client Sample ID: 4009-19 — Lab Sample ID: 480-119849-15

Date Collected: 06/20/17 10:55 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 05:00	NEA	TAL BUF

Client Sample ID: 4009-21 — Lab Sample ID: 480-119849-16

Date Collected: 06/20/17 10:45 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 05:23	NEA	TAL BUF

Client Sample ID: 4009-22 — Lab Sample ID: 480-119849-17

Date Collected: 06/20/17 09:40 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364593	06/29/17 05:46	NEA	TAL BUF

Client Sample ID: 4009-27S — Lab Sample ID: 480-119849-18

Date Collected: 06/20/17 13:05 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	364593	06/29/17 06:09	NEA	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-27I — **Lab Sample ID: 480-119849-19**
Date Collected: 06/20/17 13:10 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364647	06/29/17 11:25	ARS	TAL BUF

Client Sample ID: 4009-27D — **Lab Sample ID: 480-119849-20**
Date Collected: 06/20/17 13:15 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364647	06/29/17 11:48	ARS	TAL BUF

Client Sample ID: 4009-28 — **Lab Sample ID: 480-119849-21**
Date Collected: 06/20/17 09:25 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364647	06/29/17 12:11	ARS	TAL BUF

Client Sample ID: 4009-29S — **Lab Sample ID: 480-119849-22**
Date Collected: 06/20/17 12:45 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	364647	06/29/17 12:34	ARS	TAL BUF

Client Sample ID: 4009-29I — **Lab Sample ID: 480-119849-23**
Date Collected: 06/20/17 12:50 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	364647	06/29/17 12:57	ARS	TAL BUF

Client Sample ID: 4009-29D — **Lab Sample ID: 480-119849-24**
Date Collected: 06/20/17 12:55 — **Matrix: Water**
Date Received: 06/21/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364815	06/29/17 23:58	JAS	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-30

Date Collected: 06/20/17 11:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364647	06/29/17 13:43	ARS	TAL BUF

Client Sample ID: 4009-30A

Date Collected: 06/20/17 11:45
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364647	06/29/17 14:06	ARS	TAL BUF

Client Sample ID: 4009-11A

Date Collected: 06/20/17 14:10
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364647	06/29/17 14:29	ARS	TAL BUF

Client Sample ID: DUP1

Date Collected: 06/20/17 00:00
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364815	06/30/17 00:21	JAS	TAL BUF
Total/NA	Analysis	8260C	DL	4	364888	06/30/17 18:15	RRS	TAL BUF

Client Sample ID: DUP2

Date Collected: 06/20/17 00:00
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	364647	06/29/17 15:16	ARS	TAL BUF
Total/NA	Analysis	8260C	DL	20	364815	06/30/17 00:45	JAS	TAL BUF

Client Sample ID: FIELD BLANK

Date Collected: 06/20/17 08:35
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364647	06/29/17 15:39	ARS	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-119849-1

Client Sample ID: 4009-26
Date Collected: 06/20/17 14:20
Date Received: 06/21/17 01:45

Lab Sample ID: 480-119849-31
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	364647	06/29/17 16:02	ARS	TAL BUF
Total/NA	Analysis	8260C	DL	8	364815	06/30/17 01:08	JAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-119849-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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

Method Summary

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

TestAmerica Job ID: 480-119849-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

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

TestAmerica Job ID: 480-119849-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-119849-1	4009-7	Water	06/20/17 14:35	06/21/17 01:45
480-119849-2	4009-8	Water	06/20/17 14:15	06/21/17 01:45
480-119849-3	WELL 1-1	Water	06/20/17 08:30	06/21/17 01:45
480-119849-4	4009-9	Water	06/20/17 13:45	06/21/17 01:45
480-119849-5	4009-10	Water	06/20/17 14:00	06/21/17 01:45
480-119849-6	4009-11	Water	06/20/17 14:05	06/21/17 01:45
480-119849-7	4009-12	Water	06/20/17 12:25	06/21/17 01:45
480-119849-8	4009-13	Water	06/20/17 13:25	06/21/17 01:45
480-119849-9	4009-13A	Water	06/20/17 13:30	06/21/17 01:45
480-119849-10	4009-14	Water	06/20/17 09:45	06/21/17 01:45
480-119849-11	4009-15	Water	06/20/17 12:15	06/21/17 01:45
480-119849-12	4009-16	Water	06/20/17 11:20	06/21/17 01:45
480-119849-13	4009-16A	Water	06/20/17 11:25	06/21/17 01:45
480-119849-14	4009-18	Water	06/20/17 10:35	06/21/17 01:45
480-119849-15	4009-19	Water	06/20/17 10:55	06/21/17 01:45
480-119849-16	4009-21	Water	06/20/17 10:45	06/21/17 01:45
480-119849-17	4009-22	Water	06/20/17 09:40	06/21/17 01:45
480-119849-18	4009-27S	Water	06/20/17 13:05	06/21/17 01:45
480-119849-19	4009-27I	Water	06/20/17 13:10	06/21/17 01:45
480-119849-20	4009-27D	Water	06/20/17 13:15	06/21/17 01:45
480-119849-21	4009-28	Water	06/20/17 09:25	06/21/17 01:45
480-119849-22	4009-29S	Water	06/20/17 12:45	06/21/17 01:45
480-119849-23	4009-29I	Water	06/20/17 12:50	06/21/17 01:45
480-119849-24	4009-29D	Water	06/20/17 12:55	06/21/17 01:45
480-119849-25	4009-30	Water	06/20/17 11:35	06/21/17 01:45
480-119849-26	4009-30A	Water	06/20/17 11:45	06/21/17 01:45
480-119849-27	4009-11A	Water	06/20/17 14:10	06/21/17 01:45
480-119849-28	DUP1	Water	06/20/17 00:00	06/21/17 01:45
480-119849-29	DUP2	Water	06/20/17 00:00	06/21/17 01:45
480-119849-30	FIELD BLANK	Water	06/20/17 08:35	06/21/17 01:45
480-119849-31	4009-26	Water	06/20/17 14:20	06/21/17 01:45

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

480-119849 COC

Client Information	Sampler: Aubrey Thomas / Elizabeth	Lab PM: Stone, Judy L	Carrie
Client Contact: Ms. Katie Bidwell	Phone: 518-396-7296 / 315-569-1665	E-Mail: judy.stone@testamericainc.com	COC No: 480-98837-22802.1
Company: ARCADIS U.S. Inc			Page: Page 1 of 4
Address: 855 Route 146 Suite 210	Due Date Requested:		Job #:
City: Clifton Park	TAT Requested (days): 14 Days		
State, Zip: NY, 12065	PO #: Project 00266401.0000		
Phone: 518-250-7300(Tel)	WO #: Contract D007618		
Email: katie.bidwell@arcadis-us.com	Project #: 48005198		
Project Name: NYSDEC-Standby VESTAL	SSOW#:		
Site: Vestal Water Supply			

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	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		
4009-7	6/20/17	1435	G	Water	N	N	X		
4009-8		1415		Water			X		
Well 1-1		0830		Water			X		
4009-9		1345		Water			X		
4009-10		1400		Water			X		
4009-11		1405		Water			X		
4009-12		1225		Water			X		
4009-13		1325		Water			X		
4009-13A		1330		Water		↓	X		
4009-14		0945		Water		Y	X		
4009-15	↓	1215	↓	Water	↓	N	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: Suzie Ellsworth	Date/Time: 6/20/17 1702	Company: Arcadis	Received by: R English	Date/Time: 6-20-17, 17:02	Company: Syn
Relinquished by: R English	Date/Time: 6-20-17, 19:00	Company: Syn	Received by: [signature]	Date/Time: 6-21-17 0145	Company: DAD
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 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: Aubrey Thomas / Suzy Gilscworth	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-98837-22802.2
Client Contact: Ms. Katie Bidwell	Phone: 518-356-7296 / 315 369-1663	E-Mail: judy.stone@testamericainc.com		Page: Page 2 of 4
Company: ARCADIS U.S. Inc		Analysis Requested		Job #:
Address: 855 Route 146 Suite 210	Due Date 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:
City: Clifton Park	TAT Requested (days): 14 Day			
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: 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)	8260C - (MOD) TCL list OLM04.2	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
4009-16	6/20/17	1120	G	Water	N	N	X		
4009-16A		1125		Water			X		
4009-18		1035		Water			X		
4009-19		1055		Water			X		
4009-21		1045		Water			X		
4009-22		0940		Water			X		
4009-27S		1305		Water			X		
4009-27I		1310		Water		Y	X		
4009-27D		1315		Water		N	X		
4009-28		0925		Water			X		
4009-29S		1245		Water			X		

43326 - Syracuse SC

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	Suzy Gilscworth	6/20/17 1702	Arcadis	REnglish	6-20-17, 17:02	Sya
2	REnglish	6-20-17, 1900	Sya		6-21-17 0145	TMS
3						

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

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: Aubrey Thomas / Suzie Ellsworth	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-98837-22802.3
Client Contact: Ms. Katie Bidwell	Phone: 518-396-7296 / 315-569-1662	E-Mail: judy.stone@testamericainc.com		Page: Page 3 of 4
Company: ARCADIS U.S. Inc				Job #:
Address: 855 Route 146 Suite 210	Due Date Requested:			
City: Clifton Park	TAT Requested (days): 14 Days			
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: Vestal Water Supply	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	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		
4009-29I	6/20/17	1250		Water	N	N	X		
4009-29D		1255		Water			X		
4009-30		1135		Water			X		
4009-30A		1145		Water			X		
4009-11A		1410		Water			X		
DUP1		—		Water			X		
DUP2		—		Water			X		
MS 4009-14		0945		Water		Y	X		
MSD 4009-14		0945		Water			X		
MS 4009-27I		1310		Water			X		
MSD 4009-27I		1310		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	Suzie Ellsworth	6/20/17 1702	Arcadis	R English	6-20-17, 17:02	Lyn
2	R English	6-20-17, 19:30	Lyn	[illegible]	6-21-17 0145	TMS
3						

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

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: Aubrey Thomas / Suzie Ellsworth	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-98837-22802.4
Client Contact: Ms. Katie Bidwell	Phone: 518-396-7296 / 315-569-1662	E-Mail: judy.stone@testamericainc.com		Page: Page 4 of 4
Company: ARCADIS U.S. Inc		Analysis Requested		Job #:
Address: 855 Route 146 Suite 210	Due Date 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)
City: Clifton Park	TAT Requested (days): 14 Day			
State, Zip: NY, 12065				
Phone: 518-250-7300(Tel)	PO #: Project 00266401.0000			Other:
Email: katie.bidwell@arcadis-us.com	WO #: Contract D007618			
Project Name: NYSDEC-Standby VESTAL	Project #: 48005198			
Site: 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)	8260C - (MOD) TCL list OLM04.2	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	X	
FIELD BLANK	6/20/17	0835	G	Water	N	N	X		
4009-26	6/20/17	1420	G	Water	N	N	X		
				Water					
				Water					
				Water					

RE
6-20-17

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
Suzie Ellsworth	6/20/17 1702	Arcadis	RE-Fed/UPS	6-20-17, 17:02	Fed
Relinquished by: RE-Fed/UPS	Date/Time: 6-20-17, 1920	Company Fed	Received by:	Date/Time: 6-21-17 0145	Company DHD
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: 0.6 A1 - H1

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-119849-1

Login Number: 119849

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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: 480-119945-1
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:
7/7/2017 6:47:00 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

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

TestAmerica Job ID: 480-119945-1

Qualifiers

GC/MS VOA

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

LCMS

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)

Job ID: 480-119945-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-119945-1

Receipt
The samples were received on 6/22/2017 1:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

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

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

Organic Prep
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: 480-119945-1

Client Sample ID: 4009-18 — Lab Sample ID: 480-119945-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	1.11	J	2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	2.25		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.28		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	10.7		2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-21 — Lab Sample ID: 480-119945-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.78		0.40	0.20	ug/L	1		8260C SIM	Total/NA
Benzene	0.77	J	1.0	0.41	ug/L	1		8260C	Total/NA

Client Sample ID: DUP1 — Lab Sample ID: 480-119945-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.44		0.40	0.20	ug/L	1		8260C SIM	Total/NA

Client Sample ID: WELL 1-2A — Lab Sample ID: 480-119945-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.39	J	0.40	0.20	ug/L	1		8260C SIM	Total/NA

Client Sample ID: WELL 1-3 — Lab Sample ID: 480-119945-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	0.96	J	2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.07		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.29		2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	4.79		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.19		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	4.80		2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-119945-6

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-119945-1

Client Sample ID: 4009-18
Date Collected: 06/21/17 12:30
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/28/17 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 144*		*06/28/17 04:10*	*1*
4-Bromofluorobenzene	*103*		*72 - 133*		*06/28/17 04:10*	*1*

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	0.82	ug/L			06/30/17 01:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 01:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 01:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 01:55	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 01:55	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 01:55	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 01:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 01:55	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 01:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 01:55	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 01:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 01:55	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 01:55	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 01:55	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 01:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 01:55	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 01:55	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 01:55	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 01:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 01:55	1
Acetone	10	U	10	3.0	ug/L			06/30/17 01:55	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 01:55	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 01:55	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 01:55	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 01:55	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 01:55	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 01:55	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 01:55	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 01:55	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 01:55	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 01:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 01:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 01:55	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 01:55	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 01:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 01:55	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 01:55	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 01:55	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 01:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 01:55	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 01:55	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 01:55	1

Client Sample ID: 4009-18

Date Collected: 06/21/17 12:30
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 01:55	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 01:55	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 01:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 01:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 01:55	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 01:55	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 01:55	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 01:55	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/30/17 01:55*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*06/30/17 01:55*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/30/17 01:55*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*06/30/17 01:55*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 10:43	06/30/17 20:34	1
Perfluorohexanesulfonic acid (PFHxS)	**1.11**	**J**	2.00	0.87	ng/L		06/26/17 10:43	06/30/17 20:34	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 10:43	06/30/17 20:34	1
Perfluorooctanoic acid (PFOA)	**2.25**		2.00	0.75	ng/L		06/26/17 10:43	06/30/17 20:34	1
Perfluorooctanesulfonic acid (PFOS)	**2.28**		2.00	1.28	ng/L		06/26/17 10:43	06/30/17 20:34	1
Perfluorononanoic acid (PFNA)	**10.7**		2.00	0.65	ng/L		06/26/17 10:43	06/30/17 20:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*107*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:34*	*1*
13C4-PFHpA	*131*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:34*	*1*
13C4 PFOA	*114*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:34*	*1*
13C4 PFOS	*96*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:34*	*1*
13C5 PFNA	*114*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:34*	*1*

Client Sample ID: 4009-21

Date Collected: 06/21/17 15:40
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.78**		0.40	0.20	ug/L			06/28/17 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 144*		*06/28/17 04:32*	*1*
4-Bromofluorobenzene	*107*		*72 - 133*		*06/28/17 04:32*	*1*

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	0.82	ug/L			06/30/17 02:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 02:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 02:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 02:19	1

Client Sample ID: 4009-21
Date Collected: 06/21/17 15:40
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 02:19	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 02:19	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 02:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 02:19	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 02:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 02:19	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 02:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 02:19	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 02:19	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 02:19	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 02:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 02:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 02:19	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 02:19	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 02:19	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 02:19	1
Acetone	10	U	10	3.0	ug/L			06/30/17 02:19	1
Benzene	**0.77**	**J**	1.0	0.41	ug/L			06/30/17 02:19	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 02:19	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 02:19	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 02:19	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 02:19	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 02:19	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 02:19	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 02:19	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 02:19	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 02:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 02:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 02:19	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 02:19	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 02:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 02:19	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 02:19	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 02:19	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 02:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 02:19	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 02:19	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 02:19	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 02:19	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 02:19	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 02:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 02:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 02:19	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 02:19	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 02:19	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 02:19	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/30/17 02:19*	*1*

Client Sample ID: 4009-21

Date Collected: 06/21/17 15:40
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-2
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*06/30/17 02:19*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*06/30/17 02:19*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*06/30/17 02:19*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 10:43	06/30/17 20:53	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		06/26/17 10:43	06/30/17 20:53	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 10:43	06/30/17 20:53	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		06/26/17 10:43	06/30/17 20:53	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		06/26/17 10:43	06/30/17 20:53	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		06/26/17 10:43	06/30/17 20:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*116*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:53*	*1*
13C4-PFHpA	*138*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:53*	*1*
13C4 PFOA	*121*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:53*	*1*
13C4 PFOS	*107*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:53*	*1*
13C5 PFNA	*117*		*25 - 150*	*06/26/17 10:43*	*06/30/17 20:53*	*1*

Client Sample ID: DUP1

Date Collected: 06/21/17 00:00
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.44**		0.40	0.20	ug/L			06/28/17 04:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*71 - 144*		*06/28/17 04:55*	*1*
4-Bromofluorobenzene	*110*		*72 - 133*		*06/28/17 04:55*	*1*

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	0.82	ug/L			06/30/17 02:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 02:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 02:43	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 02:43	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 02:43	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 02:43	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 02:43	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 02:43	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 02:43	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 02:43	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 02:43	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 02:43	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 02:43	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 02:43	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 02:43	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 02:43	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 02:43	1

Client Sample ID: DUP1
Date Collected: 06/21/17 00:00
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 02:43	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 02:43	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 02:43	1
Acetone	10	U	10	3.0	ug/L			06/30/17 02:43	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 02:43	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 02:43	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 02:43	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 02:43	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 02:43	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 02:43	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 02:43	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 02:43	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 02:43	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 02:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 02:43	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 02:43	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 02:43	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 02:43	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 02:43	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 02:43	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 02:43	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 02:43	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 02:43	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 02:43	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 02:43	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 02:43	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 02:43	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 02:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 02:43	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 02:43	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 02:43	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 02:43	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 02:43	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*06/30/17 02:43*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*06/30/17 02:43*	*1*
Dibromofluoromethane (Surr)	*113*		*75 - 123*		*06/30/17 02:43*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*06/30/17 02:43*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 10:43	06/30/17 21:11	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		06/26/17 10:43	06/30/17 21:11	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 10:43	06/30/17 21:11	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		06/26/17 10:43	06/30/17 21:11	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		06/26/17 10:43	06/30/17 21:11	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		06/26/17 10:43	06/30/17 21:11	1

Client Sample ID: DUP1

Date Collected: 06/21/17 00:00
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-3
Matrix: Water

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*108*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:11*	*1*
13C4-PFHpA	*128*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:11*	*1*
13C4 PFOA	*112*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:11*	*1*
13C4 PFOS	*98*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:11*	*1*
13C5 PFNA	*108*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:11*	*1*

Client Sample ID: WELL 1-2A

Date Collected: 06/21/17 10:20
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.39	J	0.40	0.20	ug/L			06/28/17 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 144*		*06/28/17 05:18*	*1*
4-Bromofluorobenzene	*109*		*72 - 133*		*06/28/17 05:18*	*1*

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	0.82	ug/L			06/30/17 03:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 03:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 03:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 03:06	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 03:06	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 03:06	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 03:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 03:06	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 03:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 03:06	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 03:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 03:06	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 03:06	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 03:06	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 03:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 03:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 03:06	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 03:06	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 03:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 03:06	1
Acetone	10	U	10	3.0	ug/L			06/30/17 03:06	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 03:06	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 03:06	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 03:06	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 03:06	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 03:06	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 03:06	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 03:06	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 03:06	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 03:06	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 03:06	1

Client Sample ID: WELL 1-2A

Date Collected: 06/21/17 10:20
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 03:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 03:06	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 03:06	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 03:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 03:06	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 03:06	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 03:06	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 03:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 03:06	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 03:06	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 03:06	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 03:06	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 03:06	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 03:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 03:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 03:06	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 03:06	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 03:06	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 03:06	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*06/30/17 03:06*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*06/30/17 03:06*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*06/30/17 03:06*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*06/30/17 03:06*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 10:43	06/30/17 21:48	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		06/26/17 10:43	06/30/17 21:48	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 10:43	06/30/17 21:48	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		06/26/17 10:43	06/30/17 21:48	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		06/26/17 10:43	06/30/17 21:48	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		06/26/17 10:43	06/30/17 21:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*117*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:48*	*1*
13C4-PFHpA	*136*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:48*	*1*
13C4 PFOA	*122*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:48*	*1*
13C4 PFOS	*106*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:48*	*1*
13C5 PFNA	*113*		*25 - 150*	*06/26/17 10:43*	*06/30/17 21:48*	*1*

Client Sample ID: WELL 1-3

Date Collected: 06/21/17 10:30
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/28/17 05:40	1

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

TestAmerica Job ID: 480-119945-1

Client Sample ID: WELL 1-3
Date Collected: 06/21/17 10:30
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		71 - 144		06/28/17 05:40	1
4-Bromofluorobenzene	103		72 - 133		06/28/17 05:40	1

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	0.82	ug/L			06/30/17 03:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 03:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 03:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 03:30	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 03:30	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 03:30	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 03:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 03:30	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 03:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 03:30	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 03:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 03:30	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 03:30	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 03:30	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 03:30	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 03:30	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 03:30	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 03:30	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 03:30	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 03:30	1
Acetone	10	U	10	3.0	ug/L			06/30/17 03:30	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 03:30	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 03:30	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 03:30	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 03:30	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 03:30	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 03:30	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 03:30	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 03:30	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 03:30	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 03:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 03:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 03:30	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 03:30	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 03:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 03:30	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 03:30	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 03:30	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 03:30	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 03:30	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 03:30	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 03:30	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 03:30	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 03:30	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 03:30	1

Client Sample ID: WELL 1-3

Date Collected: 06/21/17 10:30
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 03:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 03:30	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 03:30	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 03:30	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 03:30	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*06/30/17 03:30*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/30/17 03:30*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*06/30/17 03:30*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*06/30/17 03:30*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**0.96**	**J**	2.00	0.92	ng/L		06/26/17 10:43	06/30/17 22:43	1
Perfluorohexanesulfonic acid (PFHxS)	**3.07**		2.00	0.87	ng/L		06/26/17 10:43	06/30/17 22:43	1
Perfluoroheptanoic acid (PFHpA)	**5.29**		2.00	0.80	ng/L		06/26/17 10:43	06/30/17 22:43	1
Perfluorooctanoic acid (PFOA)	**4.79**		2.00	0.75	ng/L		06/26/17 10:43	06/30/17 22:43	1
Perfluorooctanesulfonic acid (PFOS)	**7.19**		2.00	1.28	ng/L		06/26/17 10:43	06/30/17 22:43	1
Perfluorononanoic acid (PFNA)	**4.80**		2.00	0.65	ng/L		06/26/17 10:43	06/30/17 22:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*114*		*25 - 150*	*06/26/17 10:43*	*06/30/17 22:43*	*1*
13C4-PFHpA	*128*		*25 - 150*	*06/26/17 10:43*	*06/30/17 22:43*	*1*
13C4 PFOA	*114*		*25 - 150*	*06/26/17 10:43*	*06/30/17 22:43*	*1*
13C4 PFOS	*105*		*25 - 150*	*06/26/17 10:43*	*06/30/17 22:43*	*1*
13C5 PFNA	*109*		*25 - 150*	*06/26/17 10:43*	*06/30/17 22:43*	*1*

Client Sample ID: TRIP BLANK

Date Collected: 06/21/17 00:00
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-6
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	1.0	U	1.0	0.82	ug/L			06/30/17 03:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 03:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 03:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 03:53	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 03:53	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 03:53	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 03:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 03:53	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 03:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 03:53	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 03:53	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 03:53	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 03:53	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 03:53	1

Client Sample ID: TRIP BLANK
Date Collected: 06/21/17 00:00
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 03:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 03:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 03:53	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 03:53	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 03:53	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 03:53	1
Acetone	10	U	10	3.0	ug/L			06/30/17 03:53	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 03:53	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 03:53	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 03:53	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 03:53	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 03:53	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 03:53	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 03:53	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 03:53	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 03:53	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 03:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 03:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 03:53	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 03:53	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 03:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 03:53	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 03:53	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 03:53	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 03:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 03:53	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 03:53	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 03:53	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 03:53	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 03:53	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 03:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 03:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 03:53	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 03:53	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 03:53	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 03:53	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 03:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*06/30/17 03:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/30/17 03:53*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*06/30/17 03:53*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*06/30/17 03:53*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-119945-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-119945-1	4009-18	103	105	107	104
480-119945-2	4009-21	102	105	109	104
480-119945-3	DUP1	101	104	113	104
480-119945-4	WELL 1-2A	100	107	106	106
480-119945-4 MS	WELL 1-2A	96	105	103	104
480-119945-4 MSD	WELL 1-2A	96	104	105	106
480-119945-5	WELL 1-3	99	102	105	101
480-119945-6	TRIP BLANK	98	101	104	102
LCS 480-364815/5	Lab Control Sample	92	103	101	102
MB 480-364815/7	Method Blank	102	104	107	102

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		12DCE	BFB
Lab Sample ID	Client Sample ID	(71-144)	(72-133)
480-119945-1	4009-18	98	103
480-119945-2	4009-21	96	107
480-119945-3	DUP1	104	110
480-119945-4	WELL 1-2A	100	109
480-119945-4 MS	WELL 1-2A	108	111
480-119945-4 MSD	WELL 1-2A	118	105
480-119945-5	WELL 1-3	110	103
LCS 460-446234/5	Lab Control Sample	118	103
LCSD 460-446234/6	Lab Control Sample Dup	95	108
MB 460-446234/9	Method Blank	101	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene

Isotope Dilution Summary

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

TestAmerica Job ID: 480-119945-1

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	3O2 PFHx (25-150)	3C4-PFHp (25-150)	3C4 PFO/ (25-150)	3C4 PFO((25-150)	3C5 PFN/ (25-150)			
480-119945-1	4009-18	107	131	114	96	114			
480-119945-2	4009-21	116	138	121	107	117			
480-119945-3	DUP1	108	128	112	98	108			
480-119945-4	WELL 1-2A	117	136	122	106	113			
480-119945-4 MS	WELL 1-2A	112	127	113	100	107			
480-119945-4 MSD	WELL 1-2A	110	123	110	98	100			
480-119945-5	WELL 1-3	114	128	114	105	109			
LCS 320-170969/2-A	Lab Control Sample	111	111	87	91	75			
MB 320-170969/1-A	Method Blank	108	108	85	94	72			

Surrogate Legend

18O2 PFHxS = 18O2 PFHxS
13C4-PFHpA = 13C4-PFHpA
13C4 PFOA = 13C4 PFOA
13C4 PFOS = 13C4 PFOS
13C5 PFNA = 13C5 PFNA

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

Lab Sample ID: MB 480-364815/7
Matrix: Water
Analysis Batch: 364815

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	0.82	ug/L			06/29/17 22:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 22:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 22:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 22:05	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 22:05	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 22:05	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 22:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 22:05	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 22:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 22:05	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 22:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 22:05	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 22:05	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 22:05	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 22:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 22:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 22:05	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 22:05	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 22:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 22:05	1
Acetone	10	U	10	3.0	ug/L			06/29/17 22:05	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 22:05	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 22:05	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 22:05	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 22:05	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 22:05	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 22:05	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 22:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 22:05	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 22:05	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 22:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 22:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 22:05	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 22:05	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 22:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 22:05	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 22:05	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 22:05	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 22:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 22:05	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 22:05	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 22:05	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 22:05	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 22:05	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 22:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 22:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 22:05	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 22:05	1

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

Lab Sample ID: MB 480-364815/7
Matrix: Water
Analysis Batch: 364815

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 22:05	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 22:05	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 22:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/29/17 22:05*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*06/29/17 22:05*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/29/17 22:05*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*06/29/17 22:05*	*1*

Lab Sample ID: LCS 480-364815/5
Matrix: Water
Analysis Batch: 364815

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	25.0	26.7		ug/L		107	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.5		ug/L		94	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.7		ug/L		107	61 - 148
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	76 - 122
1,1-Dichloroethane	25.0	24.2		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	25.4		ug/L		102	66 - 127
1,2,3-Trimethylbenzene	25.0	27.9		ug/L		112	78 - 120
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	79 - 122
1,2,4-Trimethylbenzene	25.0	26.5		ug/L		106	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	23.4		ug/L		93	56 - 134
1,2-Dibromoethane	25.0	23.4		ug/L		93	77 - 120
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	22.3		ug/L		89	75 - 120
1,2-Dichloropropane	25.0	25.4		ug/L		102	76 - 120
1,3,5-Trimethylbenzene	25.0	26.8		ug/L		107	77 - 121
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 120
2-Butanone (MEK)	125	109		ug/L		88	57 - 140
2-Hexanone	125	115		ug/L		92	65 - 127
4-Methyl-2-pentanone (MIBK)	125	107		ug/L		86	71 - 125
Acetone	125	131		ug/L		105	56 - 142
Benzene	25.0	25.6		ug/L		102	71 - 124
Bromodichloromethane	25.0	25.7		ug/L		103	80 - 122
Bromoform	25.0	26.8		ug/L		107	61 - 132
Bromomethane	25.0	24.6		ug/L		98	55 - 144
Carbon disulfide	25.0	24.7		ug/L		99	59 - 134
Carbon tetrachloride	25.0	27.5		ug/L		110	72 - 134
Chlorobenzene	25.0	25.1		ug/L		100	80 - 120
Chloroethane	25.0	25.5		ug/L		102	69 - 136
Chloroform	25.0	24.0		ug/L		96	73 - 127
Chloromethane	25.0	24.0		ug/L		96	68 - 124
cis-1,2-Dichloroethene	25.0	25.5		ug/L		102	74 - 124

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

Lab Sample ID: LCS 480-364815/5
Matrix: Water
Analysis Batch: 364815

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	74 - 124
Cyclohexane	25.0	26.8		ug/L		107	59 - 135
Dibromochloromethane	25.0	25.6		ug/L		102	75 - 125
Dichlorodifluoromethane	25.0	24.3		ug/L		97	59 - 135
Ethylbenzene	25.0	25.4		ug/L		101	77 - 123
Isopropylbenzene	25.0	26.8		ug/L		107	77 - 122
Methyl acetate	125	102		ug/L		82	74 - 133
Methyl tert-butyl ether	25.0	23.0		ug/L		92	77 - 120
Methylcyclohexane	25.0	27.3		ug/L		109	68 - 134
Methylene Chloride	25.0	22.9		ug/L		92	75 - 124
Styrene	25.0	25.3		ug/L		101	80 - 120
Tetrachloroethene	25.0	30.2		ug/L		121	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	26.1		ug/L		104	73 - 127
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	80 - 120
Trichloroethene	25.0	25.5		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	25.7		ug/L		103	62 - 150
Vinyl chloride	25.0	25.6		ug/L		102	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 480-119945-4 MS
Matrix: Water
Analysis Batch: 364815

Client Sample ID: WELL 1-2A
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	25.0	29.9		ug/L		120	73 - 126
1,1,2,2-Tetrachloroethane	1.0	U	25.0	25.7		ug/L		103	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	25.0	27.5		ug/L		110	61 - 148
1,1,2-Trichloroethane	1.0	U	25.0	26.3		ug/L		105	76 - 122
1,1-Dichloroethane	1.0	U	25.0	28.4		ug/L		114	77 - 120
1,1-Dichloroethene	1.0	U	25.0	29.1		ug/L		116	66 - 127
1,2,3-Trimethylbenzene	1.0	U	25.0	27.8		ug/L		111	78 - 120
1,2,4-Trichlorobenzene	1.0	U	25.0	26.7		ug/L		107	79 - 122
1,2,4-Trimethylbenzene	1.0	U	25.0	29.3		ug/L		117	76 - 121
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	26.5		ug/L		106	56 - 134
1,2-Dibromoethane	1.0	U	25.0	25.6		ug/L		103	77 - 120
1,2-Dichlorobenzene	1.0	U	25.0	27.3		ug/L		109	80 - 124
1,2-Dichloroethane	1.0	U	25.0	25.2		ug/L		101	75 - 120
1,2-Dichloropropane	1.0	U	25.0	28.3		ug/L		113	76 - 120
1,3,5-Trimethylbenzene	1.0	U	25.0	30.3		ug/L		121	77 - 121
1,3-Dichlorobenzene	1.0	U	25.0	28.7		ug/L		115	77 - 120
1,4-Dichlorobenzene	1.0	U	25.0	28.6		ug/L		114	78 - 124

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

Lab Sample ID: 480-119945-4 MS
Matrix: Water
Analysis Batch: 364815

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	10	U	125	127		ug/L		102	57 - 140
2-Hexanone	5.0	U	125	119		ug/L		95	65 - 127
4-Methyl-2-pentanone (MIBK)	5.0	U	125	118		ug/L		94	71 - 125
Acetone	10	U	125	110		ug/L		88	56 - 142
Benzene	1.0	U	25.0	29.1		ug/L		116	71 - 124
Bromodichloromethane	1.0	U	25.0	28.8		ug/L		115	80 - 122
Bromoform	1.0	U	25.0	28.8		ug/L		115	61 - 132
Bromomethane	1.0	U	25.0	25.1		ug/L		101	55 - 144
Carbon disulfide	1.0	U	25.0	26.7		ug/L		107	59 - 134
Carbon tetrachloride	1.0	U	25.0	31.8		ug/L		127	72 - 134
Chlorobenzene	1.0	U	25.0	28.3		ug/L		113	80 - 120
Chloroethane	1.0	U	25.0	26.0		ug/L		104	69 - 136
Chloroform	1.0	U	25.0	27.9		ug/L		112	73 - 127
Chloromethane	1.0	U	25.0	24.0		ug/L		96	68 - 124
cis-1,2-Dichloroethene	1.0	U	25.0	28.8		ug/L		115	74 - 124
cis-1,3-Dichloropropene	1.0	U	25.0	28.6		ug/L		114	74 - 124
Cyclohexane	1.0	U	25.0	28.6		ug/L		114	59 - 135
Dibromochloromethane	1.0	U	25.0	28.3		ug/L		113	75 - 125
Dichlorodifluoromethane	1.0	U	25.0	20.9		ug/L		83	59 - 135
Ethylbenzene	1.0	U	25.0	29.1		ug/L		117	77 - 123
Isopropylbenzene	1.0	U	25.0	29.5		ug/L		118	77 - 122
Methyl acetate	2.5	U	125	109		ug/L		87	74 - 133
Methyl tert-butyl ether	1.0	U	25.0	25.3		ug/L		101	77 - 120
Methylcyclohexane	1.0	U	25.0	29.3		ug/L		117	68 - 134
Methylene Chloride	1.0	U	25.0	25.1		ug/L		100	75 - 124
Styrene	1.0	U	25.0	27.9		ug/L		112	80 - 120
Tetrachloroethene	1.0	U	25.0	29.9		ug/L		119	74 - 122
Toluene	1.0	U	25.0	28.0		ug/L		112	80 - 122
trans-1,2-Dichloroethene	1.0	U	25.0	29.1		ug/L		117	73 - 127
trans-1,3-Dichloropropene	1.0	U	25.0	26.8		ug/L		107	80 - 120
Trichloroethene	1.0	U	25.0	28.5		ug/L		114	74 - 123
Trichlorofluoromethane	1.0	U	25.0	24.7		ug/L		99	62 - 150
Vinyl chloride	1.0	U	25.0	25.5		ug/L		102	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 480-119945-4 MSD
Matrix: Water
Analysis Batch: 364815

Client Sample ID: WELL 1-2A
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	25.0	30.2		ug/L		121	73 - 126	1	15
1,1,2,2-Tetrachloroethane	1.0	U	25.0	25.4		ug/L		102	76 - 120	1	15

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

Lab Sample ID: 480-119945-4 MSD
Matrix: Water
Analysis Batch: 364815

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	25.0	27.0		ug/L		108	61 - 148	2	20
1,1,2-Trichloroethane	1.0	U	25.0	25.7		ug/L		103	76 - 122	2	15
1,1-Dichloroethane	1.0	U	25.0	28.7		ug/L		115	77 - 120	1	20
1,1-Dichloroethene	1.0	U	25.0	28.5		ug/L		114	66 - 127	2	16
1,2,3-Trimethylbenzene	1.0	U	25.0	27.7		ug/L		111	78 - 120	0	20
1,2,4-Trichlorobenzene	1.0	U	25.0	27.8		ug/L		111	79 - 122	4	20
1,2,4-Trimethylbenzene	1.0	U	25.0	29.6		ug/L		118	76 - 121	1	20
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	25.3		ug/L		101	56 - 134	4	15
1,2-Dibromoethane	1.0	U	25.0	25.8		ug/L		103	77 - 120	1	15
1,2-Dichlorobenzene	1.0	U	25.0	27.1		ug/L		108	80 - 124	1	20
1,2-Dichloroethane	1.0	U	25.0	25.0		ug/L		100	75 - 120	1	20
1,2-Dichloropropane	1.0	U	25.0	28.0		ug/L		112	76 - 120	1	20
1,3,5-Trimethylbenzene	1.0	U	25.0	29.8		ug/L		119	77 - 121	1	20
1,3-Dichlorobenzene	1.0	U	25.0	28.3		ug/L		113	77 - 120	1	20
1,4-Dichlorobenzene	1.0	U	25.0	28.1		ug/L		113	78 - 124	2	20
2-Butanone (MEK)	10	U	125	111		ug/L		88	57 - 140	14	20
2-Hexanone	5.0	U	125	119		ug/L		95	65 - 127	0	15
4-Methyl-2-pentanone (MIBK)	5.0	U	125	118		ug/L		95	71 - 125	0	35
Acetone	10	U	125	112		ug/L		90	56 - 142	2	15
Benzene	1.0	U	25.0	29.2		ug/L		117	71 - 124	0	13
Bromodichloromethane	1.0	U	25.0	28.7		ug/L		115	80 - 122	0	15
Bromoform	1.0	U	25.0	28.9		ug/L		115	61 - 132	0	15
Bromomethane	1.0	U	25.0	24.9		ug/L		100	55 - 144	1	15
Carbon disulfide	1.0	U	25.0	26.5		ug/L		106	59 - 134	1	15
Carbon tetrachloride	1.0	U	25.0	31.4		ug/L		125	72 - 134	1	15
Chlorobenzene	1.0	U	25.0	28.4		ug/L		113	80 - 120	0	25
Chloroethane	1.0	U	25.0	25.9		ug/L		104	69 - 136	0	15
Chloroform	1.0	U	25.0	27.6		ug/L		110	73 - 127	1	20
Chloromethane	1.0	U	25.0	23.4		ug/L		94	68 - 124	3	15
cis-1,2-Dichloroethene	1.0	U	25.0	29.4		ug/L		117	74 - 124	2	15
cis-1,3-Dichloropropene	1.0	U	25.0	29.5		ug/L		118	74 - 124	3	15
Cyclohexane	1.0	U	25.0	27.9		ug/L		112	59 - 135	2	20
Dibromochloromethane	1.0	U	25.0	28.7		ug/L		115	75 - 125	1	15
Dichlorodifluoromethane	1.0	U	25.0	20.6		ug/L		82	59 - 135	1	20
Ethylbenzene	1.0	U	25.0	28.5		ug/L		114	77 - 123	2	15
Isopropylbenzene	1.0	U	25.0	29.5		ug/L		118	77 - 122	0	20
Methyl acetate	2.5	U	125	110		ug/L		88	74 - 133	1	20
Methyl tert-butyl ether	1.0	U	25.0	25.1		ug/L		100	77 - 120	1	37
Methylcyclohexane	1.0	U	25.0	27.6		ug/L		110	68 - 134	6	20
Methylene Chloride	1.0	U	25.0	25.4		ug/L		102	75 - 124	1	15
Styrene	1.0	U	25.0	28.5		ug/L		114	80 - 120	2	20
Tetrachloroethene	1.0	U	25.0	29.6		ug/L		118	74 - 122	1	20
Toluene	1.0	U	25.0	28.7		ug/L		115	80 - 122	2	15
trans-1,2-Dichloroethene	1.0	U	25.0	29.7		ug/L		119	73 - 127	2	20
trans-1,3-Dichloropropene	1.0	U	25.0	27.3		ug/L		109	80 - 120	2	15
Trichloroethene	1.0	U	25.0	29.5		ug/L		118	74 - 123	4	16
Trichlorofluoromethane	1.0	U	25.0	23.9		ug/L		96	62 - 150	3	20

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

Lab Sample ID: 480-119945-4 MSD
Matrix: Water
Analysis Batch: 364815

Client Sample ID: WELL 1-2A
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	1.0	U	25.0	25.6		ug/L		102	65 - 133	0	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*
Toluene-d8 (Surr)	*106*		*80 - 120*

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

Lab Sample ID: MB 460-446234/9
Matrix: Water
Analysis Batch: 446234

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/27/17 23:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 144*		*06/27/17 23:14*	*1*
4-Bromofluorobenzene	*106*		*72 - 133*		*06/27/17 23:14*	*1*

Lab Sample ID: LCS 460-446234/5
Matrix: Water
Analysis Batch: 446234

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.66		ug/L		93	66 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*118*		*71 - 144*
4-Bromofluorobenzene	*103*		*72 - 133*

Lab Sample ID: LCSD 460-446234/6
Matrix: Water
Analysis Batch: 446234

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
1,4-Dioxane			5.00	5.26		ug/L		105	66 - 135	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 144*
4-Bromofluorobenzene	*108*		*72 - 133*

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

Lab Sample ID: 480-119945-4 MS
Matrix: Water
Analysis Batch: 446234

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.39	J	5.00	6.46		ug/L		121	66 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 144*
4-Bromofluorobenzene	*111*		*72 - 133*

Lab Sample ID: 480-119945-4 MSD
Matrix: Water
Analysis Batch: 446234

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.39	J	5.00	6.03		ug/L		113	66 - 135	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*118*		*71 - 144*
4-Bromofluorobenzene	*105*		*72 - 133*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Lab Sample ID: MB 320-170969/1-A
Matrix: Water
Analysis Batch: 172065

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 170969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 10:43	06/29/17 13:19	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		06/26/17 10:43	06/29/17 13:19	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 10:43	06/29/17 13:19	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		06/26/17 10:43	06/29/17 13:19	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		06/26/17 10:43	06/29/17 13:19	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		06/26/17 10:43	06/29/17 13:19	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*108*		*25 - 150*	*06/26/17 10:43*	*06/29/17 13:19*	*1*
13C4-PFHpA	*108*		*25 - 150*	*06/26/17 10:43*	*06/29/17 13:19*	*1*
13C4 PFOA	*85*		*25 - 150*	*06/26/17 10:43*	*06/29/17 13:19*	*1*
13C4 PFOS	*94*		*25 - 150*	*06/26/17 10:43*	*06/29/17 13:19*	*1*
13C5 PFNA	*72*		*25 - 150*	*06/26/17 10:43*	*06/29/17 13:19*	*1*

Lab Sample ID: LCS 320-170969/2-A
Matrix: Water
Analysis Batch: 172065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 170969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	20.92		ng/L		118	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	19.11		ng/L		105	73 - 157
Perfluoroheptanoic acid (PFHpA)	20.0	23.51		ng/L		118	71 - 138

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-170969/2-A
Matrix: Water
Analysis Batch: 172065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 170969

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorooctanoic acid (PFOA)			20.0	22.39		ng/L		112	70 - 140		
Perfluorooctanesulfonic acid (PFOS)			18.6	20.40		ng/L		110	69 - 144		
Perfluorononanoic acid (PFNA)			20.0	22.59		ng/L		113	73 - 147		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*111*		*25 - 150*
13C4-PFHpA	*111*		*25 - 150*
13C4 PFOA	*87*		*25 - 150*
13C4 PFOS	*91*		*25 - 150*
13C5 PFNA	*75*		*25 - 150*

Lab Sample ID: 480-119945-4 MS
Matrix: Water
Analysis Batch: 172012

Client Sample ID: WELL 1-2A
Prep Type: Total/NA
Prep Batch: 170969

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorobutanesulfonic acid (PFBS)	2.00	U	14.8	15.83		ng/L		107	55 - 147		
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	15.2	15.57		ng/L		102	58 - 138		
Perfluoroheptanoic acid (PFHpA)	2.00	U	16.7	19.03		ng/L		114	63 - 135		
Perfluorooctanoic acid (PFOA)	2.00	U	16.7	17.84		ng/L		107	63 - 141		
Perfluorooctanesulfonic acid (PFOS)	2.00	U	15.5	15.09		ng/L		97	47 - 162		
Perfluorononanoic acid (PFNA)	2.00	U	16.7	18.30		ng/L		110	71 - 140		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
18O2 PFHxS	*112*		*25 - 150*
13C4-PFHpA	*127*		*25 - 150*
13C4 PFOA	*113*		*25 - 150*
13C4 PFOS	*100*		*25 - 150*
13C5 PFNA	*107*		*25 - 150*

Lab Sample ID: 480-119945-4 MSD
Matrix: Water
Analysis Batch: 172012

Client Sample ID: WELL 1-2A
Prep Type: Total/NA
Prep Batch: 170969

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)	2.00	U	15.5	16.84		ng/L		109	55 - 147	6	30
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	15.9	15.96		ng/L		100	58 - 138	3	30
Perfluoroheptanoic acid (PFHpA)	2.00	U	17.5	19.85		ng/L		113	63 - 135	4	30
Perfluorooctanoic acid (PFOA)	2.00	U	17.5	19.29		ng/L		110	63 - 141	8	30
Perfluorooctanesulfonic acid (PFOS)	2.00	U	16.2	15.60		ng/L		96	47 - 162	3	30
Perfluorononanoic acid (PFNA)	2.00	U	17.5	18.55		ng/L		106	71 - 140	1	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
18O2 PFHxS	110		25 - 150
13C4-PFHpA	123		25 - 150
13C4 PFOA	110		25 - 150
13C4 PFOS	98		25 - 150
13C5 PFNA	100		25 - 150

GC/MS VOA

Analysis Batch: 364815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119945-1	4009-18	Total/NA	Water	8260C	
480-119945-2	4009-21	Total/NA	Water	8260C	
480-119945-3	DUP1	Total/NA	Water	8260C	
480-119945-4	WELL 1-2A	Total/NA	Water	8260C	
480-119945-5	WELL 1-3	Total/NA	Water	8260C	
480-119945-6	TRIP BLANK	Total/NA	Water	8260C	
MB 480-364815/7	Method Blank	Total/NA	Water	8260C	
LCS 480-364815/5	Lab Control Sample	Total/NA	Water	8260C	
480-119945-4 MS	WELL 1-2A	Total/NA	Water	8260C	
480-119945-4 MSD	WELL 1-2A	Total/NA	Water	8260C	

Analysis Batch: 446234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119945-1	4009-18	Total/NA	Water	8260C SIM	
480-119945-2	4009-21	Total/NA	Water	8260C SIM	
480-119945-3	DUP1	Total/NA	Water	8260C SIM	
480-119945-4	WELL 1-2A	Total/NA	Water	8260C SIM	
480-119945-5	WELL 1-3	Total/NA	Water	8260C SIM	
MB 460-446234/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-446234/5	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-446234/6	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
480-119945-4 MS	WELL 1-2A	Total/NA	Water	8260C SIM	
480-119945-4 MSD	WELL 1-2A	Total/NA	Water	8260C SIM	

LCMS

Prep Batch: 170969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119945-1	4009-18	Total/NA	Water	PFAS Prep	
480-119945-2	4009-21	Total/NA	Water	PFAS Prep	
480-119945-3	DUP1	Total/NA	Water	PFAS Prep	
480-119945-4	WELL 1-2A	Total/NA	Water	PFAS Prep	
480-119945-5	WELL 1-3	Total/NA	Water	PFAS Prep	
MB 320-170969/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-170969/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
480-119945-4 MS	WELL 1-2A	Total/NA	Water	PFAS Prep	
480-119945-4 MSD	WELL 1-2A	Total/NA	Water	PFAS Prep	

Analysis Batch: 172012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119945-1	4009-18	Total/NA	Water	WS-LC-0025 At1	170969
480-119945-2	4009-21	Total/NA	Water	WS-LC-0025 At1	170969
480-119945-3	DUP1	Total/NA	Water	WS-LC-0025 At1	170969
480-119945-4	WELL 1-2A	Total/NA	Water	WS-LC-0025 At1	170969
480-119945-5	WELL 1-3	Total/NA	Water	WS-LC-0025 At1	170969
480-119945-4 MS	WELL 1-2A	Total/NA	Water	WS-LC-0025 At1	170969

LCMS (Continued)

Analysis Batch: 172012 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-119945-4 MSD	WELL 1-2A	Total/NA	Water	WS-LC-0025 At1	170969

Analysis Batch: 172065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-170969/1-A	Method Blank	Total/NA	Water	WS-LC-0025 At1	170969
LCS 320-170969/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 At1	170969

Lab Chronicle

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

TestAmerica Job ID: 480-119945-1

Client Sample ID: 4009-18
Date Collected: 06/21/17 12:30
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364815	06/30/17 01:55	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	446234	06/28/17 04:10	KLB	TAL EDI
Total/NA	Prep	PFAS Prep			170969	06/26/17 10:43	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	172012	06/30/17 20:34	SER	TAL SAC

Client Sample ID: 4009-21
Date Collected: 06/21/17 15:40
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364815	06/30/17 02:19	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	446234	06/28/17 04:32	KLB	TAL EDI
Total/NA	Prep	PFAS Prep			170969	06/26/17 10:43	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	172012	06/30/17 20:53	SER	TAL SAC

Client Sample ID: DUP1
Date Collected: 06/21/17 00:00
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364815	06/30/17 02:43	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	446234	06/28/17 04:55	KLB	TAL EDI
Total/NA	Prep	PFAS Prep			170969	06/26/17 10:43	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	172012	06/30/17 21:11	SER	TAL SAC

Client Sample ID: WELL 1-2A
Date Collected: 06/21/17 10:20
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364815	06/30/17 03:06	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	446234	06/28/17 05:18	KLB	TAL EDI
Total/NA	Prep	PFAS Prep			170969	06/26/17 10:43	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	172012	06/30/17 21:48	SER	TAL SAC

Client Sample ID: WELL 1-3
Date Collected: 06/21/17 10:30
Date Received: 06/22/17 01:45

Lab Sample ID: 480-119945-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364815	06/30/17 03:30	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	446234	06/28/17 05:40	KLB	TAL EDI

Lab Chronicle

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

TestAmerica Job ID: 480-119945-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			170969	06/26/17 10:43	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	172012	06/30/17 22:43	SER	TAL SAC

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-119945-6

Date Collected: 06/21/17 00:00

Matrix: Water

Date Received: 06/22/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364815	06/30/17 03:53	JAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-119945-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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 Edison

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-18

Laboratory: TestAmerica Sacramento

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	11666	04-01-18

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

Analysis Method	Prep Method	Matrix	Analyte
WS-LC-0025 At1	PFAS Prep	Water	Perfluorobutanesulfonic acid (PFBS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluoroheptanoic acid (PFHpA)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorohexanesulfonic acid (PFHxS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorononanoic acid (PFNA)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorooctanesulfonic acid (PFOS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorooctanoic acid (PFOA)

Method Summary

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

TestAmerica Job ID: 480-119945-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
WS-LC-0025 At1	Perfluorinated Alkyl Substances	TAL-SAC	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

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

TestAmerica Job ID: 480-119945-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-119945-1	4009-18	Water	06/21/17 12:30	06/22/17 01:45
480-119945-2	4009-21	Water	06/21/17 15:40	06/22/17 01:45
480-119945-3	DUP1	Water	06/21/17 00:00	06/22/17 01:45
480-119945-4	WELL 1-2A	Water	06/21/17 10:20	06/22/17 01:45
480-119945-5	WELL 1-3	Water	06/21/17 10:30	06/22/17 01:45
480-119945-6	TRIP BLANK	Water	06/21/17 00:00	06/22/17 01:45

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-119945 COC

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis (Katie Bidwell)	Katie Bidwell	6/21/17	277800
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300 FT		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Clifton Park / NY / 12065	Aubrey Thomas	Judy Stone	
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC - Standby Vestal, NY			
Contract/Purchase Order/Quote No.			
Contract D007618 PO Project# 60266401.0000			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260C (NaD) TCL List VOA	PFAs, DI - PFAS, UCMR List (6)	8260C - SIM - 1,4 Dioxane	Special Instructions/ Conditions of Receipt
4009-18	6/21/17	1230		X			2			5			3	2	2	
4009-21	6/21/17	1540		X			2			5			3	2	2	
DUP1	6/21/17	—		X			2			5			3	2	2	
Well 1-2A	6/21/17	1020		X			6			15			9	6	6	(MS/MSD)
Well 1-3	6/21/17	1030		X			2			5			3	2	2	
Trip Blank	—	—		X						2			2			

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
Suzie Ellsworth	6/21/17	1745	RE English, Syr	6-21-17	17:45
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
RE English	6-21-17	19:00	TAS 6-22-17 0145		
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments
PFCs → SACRAMENTO from Syr. - RE

1.1 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

7/7/2017

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis (Katie Bidwell)	Katie Bidwell	6/21/17	277800
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
855 Route 146 Suite 210	518-250-7300 (F)		
City / **State** / **Zip Code**	**Site Contact** / **Lab Contact**		
Clifton Park / NY / 12065	Aubrey Thomas / Judy Stone		
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC - Stanley Vestal, NY			
Contract/Purchase Order/Quote No: PO			
Contract D007618 Project# 00266401.0000			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260C (MOD) TCL List+VOA	PFAs_DI - PFAs, UCMR List (9)	8260C - SIM - 1,4 Dioxane	Special Instructions/ Conditions of Receipt
4009-18	6/21/17	1230		X			2			5			3	2	2	
4009-21	6/21/17	1540		X			2			5			3	2	2	
DUP1	6/21/17	—		X			2			5			3	2	2	
Well 1-2A	6/21/17	1020		X			6			15			9	6	6	(MS/MSD)
Well 1-3	6/21/17	1030		X			2			5			3	2	2	
Trip Blank	—	—		X						2			2			

480-119945 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Susie Johnson	6/21/17	1745	1. Received By: Reinhold, Syr	6-21-17	17:45
2. Relinquished By: Reinhold	6-21-17	19:00	2. Received By: [signature] JANS	6/22/17	930 1.1°C
3. Relinquished By			3. Received By		

Comments: PCB → Sacramento from Syr. - RE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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

7/7/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-35635.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-119945-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/5/2017			Preservation Codes:
City: Edison	TAT Requested (days):			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)
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: NYSDEC-Standby VESTAL	Project #: 48005198			
Site:	SSOW#:			

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_SIM/6030C (MOD) Volatile SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:				Analysis Requested		
4009-18 (480-119945-1)	6/21/17	12:30 Eastern		Water			X	2	
4009-21 (480-119945-2)	6/21/17	15:40 Eastern		Water			X	2	
DUP1 (480-119945-3)	6/21/17	Eastern		Water			X	2	
WELL 1-2A (480-119945-4)	6/21/17	10:20 Eastern		Water			X	2	
WELL 1-2A (480-119945-4MS)	6/21/17	10:20 Eastern	MS	Water			X	2	
WELL 1-2A (480-119945-4MSD)	6/21/17	10:20 Eastern	MSD	Water			X	2	
WELL 1-3 (480-119945-5)	6/21/17	10:30 Eastern		Water			X	2	

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
[signature]	6/22/17 1600	TAB	[signature] Victor Fodera	6/23/17 1000	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No	Custody Seal No.: 033848	Cooler Temperature(s) °C and Other Remarks: 3.2°C IR8

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THE LEADER IN ENVIRONMENTAL TESTING

Sa

480-119945 Field Sheet

Tracking # 7346 0301 1824 5.a,

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes:

Therm. ID: AK-1 / AK-2 / HACCP /Other

Ice X Wet X Dry Other

Cooler Custody Seal: seal

Sample Custody Seal: —

Cooler ID: —

Temp: Observed 1.1°C

Corrected: —

From: Temp Blank ☐ Sample ☒

NCM Filed: Yes ☐ No ☐

	Yes	No	NA
Perchlorate has headspace?	☐	☐	☒
CoC is complete w/o discrepancies?	☒	☐	☐
Samples received within holding time?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Cooler compromised/tampered with?	☐	☒	☐
Samples compromised/tampered with?	☐	☒	☐
COC and Samples w/o discrepancies?	☒	☐	☐
Sample containers have legible labels?	☒	☐	☐
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided.	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☐	☐	☒
Zero headspace?*	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

Initials: AA Date: 6/22/17

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")


ORIGIN ID:SYRA (315) 431-0171
SYR SERVICE CENTER
TESTAMERICA
118 BOSS RD
SYRACUSE, NY 13211
UNITED STATES US
SHIP DATE: 21JUN17
ACTWGT: 25.00 LB MAN
CAD: 251798/CAFE3012
BILL SENDER
TO SAMPLE RECIEVING
TESTAMERICA W. SACRAMENTO
880 RIVERSIDE PARKWAY
WEST SACRAMENTO CA 95605
(916) 373- -5600
REF: AR CADIS VESTEL 1 COOLER
FedEx
Express
THU - 22 JUN 3:00P
STANDARD OVERNIGHT
TRK# 0201 7346 0301 1824
95605
CA-US SMF
XH BLUA


CUSTODY SEAL
QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900
DATE
SIGNATURE

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-119945-1

Login Number: 119945
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

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.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-119945-1

Login Number: 119945
List Number: 3
Creator: Armbruster, Chris

List Source: TestAmerica Edison
List Creation: 06/23/17 11:32 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	033848
Sample custody seals, if present, are intact.	N/A	
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	3.2°C IR8
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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-119945-1

Login Number: 119945
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 06/22/17 01:44 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	1.1
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	Not requested on COC.
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

TestAmerica Job ID: 480-120027-1
Client Project/Site: NYSDEC-Standby VESTAL

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

Attn: Jeremy Wyckoff

Joseph V. Giacomazza

Authorized for release by:
7/10/2017 12:28:49 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

LINKS

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Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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

TestAmerica Job ID: 480-120027-1

Qualifiers

GC/MS VOA

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

LCMS

Qualifier	Qualifier Description
U	Analyzed for but not detected.
Z	See case narrative notes for explanation of the 'Z' flag
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)

Job ID: 480-120027-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-120027-1

Comments
No additional comments.

Receipt
The samples were received on 6/23/2017 1:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-364828 recovered outside acceptance criteria, low biased, for Carbon disulfide, Vinyl chloride, Chloromethane and 1,1-Dichloroethene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples had no detections over the reporting limit (RL) for these analytes, the data have been reported. The following samples are impacted: 4009-19 (480-120027-1), 4009-16 (480-120027-2), 4009-16A (480-120027-3), 4009-30 (480-120027-4), 4009-30A (480-120027-5) and TRIP BLANK (480-120027-6).

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

LCMS
Method(s) WS-LC-0025 At1: In the following sample, the peak identified for Perfluorohexanesulfonic acid (PFHxS) and Perfluorooctanoic acid (PFOA) by the data system exhibited chromatographic interferences that could not be resolved.

Method(s) WS-LC-0025 At1: The Isotope Dilution Analyte (IDA) recoveries associated with this continuous calibration verification (CCV) sample(CCV) are below the method recommended limit. IDA recoveries are in control in the associated samples in addition to the previous CCV sample. Moreover, native recoveries are in control in the impacted CCV; therefore, there is no adverse impact in the samples.

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

Organic Prep
Method(s) PFAS Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-171768.

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: 480-120027-1

Client Sample ID: 4009-19 — Lab Sample ID: 480-120027-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.85		0.40	0.20	ug/L	1		8260C SIM	Total/NA

Client Sample ID: 4009-16 — Lab Sample ID: 480-120027-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.91		0.40	0.20	ug/L	1		8260C SIM	Total/NA
2-Butanone (MEK)	3.6	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	140		10	3.0	ug/L	1		8260C	Total/NA
Benzene	47		1.0	0.41	ug/L	1		8260C	Total/NA
Toluene	0.93	J	1.0	0.51	ug/L	1		8260C	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.01	Z	2.00	0.87	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorooctanoic acid (PFOA)	6.22	Z	2.00	0.75	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorononanoic acid (PFNA)	3.05		2.00	0.65	ng/L	1		WS-LC-0025 Att1	Total/NA

Client Sample ID: 4009-16A — Lab Sample ID: 480-120027-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.58	J	1.0	0.34	ug/L	1		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.43		2.00	0.92	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.28		2.00	0.87	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.67		2.00	0.80	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorooctanoic acid (PFOA)	8.88		2.00	0.75	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.18		2.00	1.28	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorononanoic acid (PFNA)	3.65		2.00	0.65	ng/L	1		WS-LC-0025 Att1	Total/NA

Client Sample ID: 4009-30 — Lab Sample ID: 480-120027-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.4		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.37	J	1.0	0.29	ug/L	1		8260C	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.90	J	2.00	0.87	ng/L	1		WS-LC-0025 Att1	Total/NA

Client Sample ID: 4009-30A — Lab Sample ID: 480-120027-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.43	J	1.0	0.34	ug/L	1		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.75	J	2.00	0.92	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.65		2.00	0.87	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.54		2.00	0.80	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorooctanoic acid (PFOA)	8.59		2.00	0.75	ng/L	1		WS-LC-0025 Att1	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample ID: 4009-30A (Continued) — Lab Sample ID: 480-120027-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	7.43		2.00	1.28	ng/L	1		WS-LC-0025 Att1	Total/NA
Perfluorononanoic acid (PFNA)	1.52	J	2.00	0.65	ng/L	1		WS-LC-0025 Att1	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-120027-6

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-120027-1

Client Sample ID: 4009-19
Date Collected: 06/22/17 10:10
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.85		0.40	0.20	ug/L			06/27/17 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 144*		*06/27/17 16:01*	*1*
4-Bromofluorobenzene	*118*		*72 - 133*		*06/27/17 16:01*	*1*

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	0.82	ug/L			06/30/17 00:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 00:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 00:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 00:38	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 00:38	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 00:38	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 00:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 00:38	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 00:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 00:38	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 00:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 00:38	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 00:38	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 00:38	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 00:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 00:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 00:38	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 00:38	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 00:38	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 00:38	1
Acetone	10	U	10	3.0	ug/L			06/30/17 00:38	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 00:38	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 00:38	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 00:38	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 00:38	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 00:38	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 00:38	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 00:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 00:38	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 00:38	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 00:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 00:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 00:38	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 00:38	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 00:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 00:38	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 00:38	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 00:38	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 00:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 00:38	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 00:38	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 00:38	1

Client Sample ID: 4009-19

Date Collected: 06/22/17 10:10
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 00:38	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 00:38	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 00:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 00:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 00:38	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 00:38	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 00:38	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 00:38	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/30/17 00:38*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*06/30/17 00:38*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*06/30/17 00:38*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/30/17 00:38*	*1*

Method: WS-LC-0025 Att1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 15:41	06/28/17 14:39	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		06/26/17 15:41	06/28/17 14:39	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 15:41	06/28/17 14:39	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		06/26/17 15:41	06/28/17 14:39	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		06/26/17 15:41	06/28/17 14:39	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		06/26/17 15:41	06/28/17 14:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*109*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:39*	*1*
13C4-PFHpA	*117*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:39*	*1*
13C4 PFOA	*96*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:39*	*1*
13C4 PFOS	*95*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:39*	*1*
13C5 PFNA	*83*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:39*	*1*

Client Sample ID: 4009-16

Date Collected: 06/22/17 12:05
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.91**		0.40	0.20	ug/L			06/28/17 10:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*71 - 144*		*06/28/17 10:48*	*1*
4-Bromofluorobenzene	*105*		*72 - 133*		*06/28/17 10:48*	*1*

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	0.82	ug/L			06/30/17 01:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 01:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 01:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 01:02	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 01:02	1

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

TestAmerica Job ID: 480-120027-1

Client Sample ID: 4009-16
Date Collected: 06/22/17 12:05
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-2
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	0.29	ug/L			06/30/17 01:02	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 01:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 01:02	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 01:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 01:02	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 01:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 01:02	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 01:02	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 01:02	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 01:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 01:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 01:02	1
2-Butanone (MEK)	**3.6**	**J**	10	1.3	ug/L			06/30/17 01:02	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 01:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 01:02	1
Acetone	**140**		10	3.0	ug/L			06/30/17 01:02	1
Benzene	**47**		1.0	0.41	ug/L			06/30/17 01:02	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 01:02	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 01:02	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 01:02	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 01:02	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 01:02	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 01:02	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 01:02	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 01:02	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 01:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 01:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 01:02	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 01:02	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 01:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 01:02	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 01:02	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 01:02	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 01:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 01:02	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 01:02	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 01:02	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 01:02	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 01:02	1
Toluene	**0.93**	**J**	1.0	0.51	ug/L			06/30/17 01:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 01:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 01:02	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 01:02	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 01:02	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 01:02	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*06/30/17 01:02*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*06/30/17 01:02*	*1*

Client Sample ID: 4009-16

Date Collected: 06/22/17 12:05
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-2

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*06/30/17 01:02*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/30/17 01:02*	*1*

Method: WS-LC-0025 Att1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 15:41	06/28/17 14:58	1
Perfluorohexanesulfonic acid (PFHxS)	**5.01**	**Z**	2.00	0.87	ng/L		06/26/17 15:41	06/28/17 14:58	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 15:41	06/28/17 14:58	1
Perfluorooctanoic acid (PFOA)	**6.22**	**Z**	2.00	0.75	ng/L		06/26/17 15:41	06/28/17 14:58	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		06/26/17 15:41	06/28/17 14:58	1
Perfluorononanoic acid (PFNA)	**3.05**		2.00	0.65	ng/L		06/26/17 15:41	06/28/17 14:58	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	*127*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:58*	*1*
13C4-PFHpA	*134*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:58*	*1*
13C4 PFOA	*98*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:58*	*1*
13C4 PFOS	*124*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:58*	*1*
13C5 PFNA	*171*		*25 - 150*	*06/26/17 15:41*	*06/28/17 14:58*	*1*

Client Sample ID: 4009-16A

Date Collected: 06/22/17 12:45
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/27/17 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*90*		*71 - 144*		*06/27/17 16:46*	*1*
4-Bromofluorobenzene	*128*		*72 - 133*		*06/27/17 16:46*	*1*

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	0.82	ug/L			06/30/17 01:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 01:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 01:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 01:25	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 01:25	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 01:25	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 01:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 01:25	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 01:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 01:25	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 01:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 01:25	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 01:25	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 01:25	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 01:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 01:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 01:25	1

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

TestAmerica Job ID: 480-120027-1

Client Sample ID: 4009-16A
Date Collected: 06/22/17 12:45
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 01:25	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 01:25	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 01:25	1
Acetone	10	U	10	3.0	ug/L			06/30/17 01:25	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 01:25	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 01:25	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 01:25	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 01:25	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 01:25	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 01:25	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 01:25	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 01:25	1
Chloroform	**0.58**	**J**	1.0	0.34	ug/L			06/30/17 01:25	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 01:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 01:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 01:25	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 01:25	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 01:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 01:25	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 01:25	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 01:25	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 01:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 01:25	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 01:25	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 01:25	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 01:25	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 01:25	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 01:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 01:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 01:25	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 01:25	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 01:25	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 01:25	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*06/30/17 01:25*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*06/30/17 01:25*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*06/30/17 01:25*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/30/17 01:25*	*1*

Method: WS-LC-0025 Att1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**2.43**		2.00	0.92	ng/L		06/26/17 15:41	06/28/17 15:16	1
Perfluorohexanesulfonic acid (PFHxS)	**4.28**		2.00	0.87	ng/L		06/26/17 15:41	06/28/17 15:16	1
Perfluoroheptanoic acid (PFHpA)	**2.67**		2.00	0.80	ng/L		06/26/17 15:41	06/28/17 15:16	1
Perfluorooctanoic acid (PFOA)	**8.88**		2.00	0.75	ng/L		06/26/17 15:41	06/28/17 15:16	1
Perfluorooctanesulfonic acid (PFOS)	**9.18**		2.00	1.28	ng/L		06/26/17 15:41	06/28/17 15:16	1

Client Sample ID: 4009-16A

Date Collected: 06/22/17 12:45
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-3

Matrix: Water

Method: WS-LC-0025 Att1 - Perfluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**3.65**		2.00	0.65	ng/L		06/26/17 15:41	06/28/17 15:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*111*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:16*	*1*
13C4-PFHpA	*114*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:16*	*1*
13C4 PFOA	*94*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:16*	*1*
13C4 PFOS	*102*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:16*	*1*
13C5 PFNA	*75*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:16*	*1*

Client Sample ID: 4009-30

Date Collected: 06/22/17 16:10
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/27/17 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*71 - 144*		*06/27/17 17:09*	*1*
4-Bromofluorobenzene	*129*		*72 - 133*		*06/27/17 17:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**2.4**		1.0	0.82	ug/L			06/30/17 01:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 01:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 01:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 01:48	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 01:48	1
1,1-Dichloroethene	**0.37**	**J**	1.0	0.29	ug/L			06/30/17 01:48	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 01:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 01:48	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 01:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 01:48	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 01:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 01:48	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 01:48	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 01:48	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 01:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 01:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 01:48	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 01:48	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 01:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 01:48	1
Acetone	10	U	10	3.0	ug/L			06/30/17 01:48	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 01:48	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 01:48	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 01:48	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 01:48	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 01:48	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 01:48	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 01:48	1

Client Sample ID: 4009-30
Date Collected: 06/22/17 16:10
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-4
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			06/30/17 01:48	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 01:48	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 01:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 01:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 01:48	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 01:48	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 01:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 01:48	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 01:48	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 01:48	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 01:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 01:48	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 01:48	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 01:48	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 01:48	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 01:48	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 01:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 01:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 01:48	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 01:48	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 01:48	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 01:48	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*06/30/17 01:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*06/30/17 01:48*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*06/30/17 01:48*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/30/17 01:48*	*1*

Method: WS-LC-0025 Att1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 15:41	06/28/17 15:34	1
Perfluorohexanesulfonic acid (PFHxS)	**0.90**	**J**	2.00	0.87	ng/L		06/26/17 15:41	06/28/17 15:34	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 15:41	06/28/17 15:34	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		06/26/17 15:41	06/28/17 15:34	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		06/26/17 15:41	06/28/17 15:34	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		06/26/17 15:41	06/28/17 15:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*110*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:34*	*1*
13C4-PFHpA	*111*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:34*	*1*
13C4 PFOA	*91*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:34*	*1*
13C4 PFOS	*98*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:34*	*1*
13C5 PFNA	*79*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:34*	*1*

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

TestAmerica Job ID: 480-120027-1

Client Sample ID: 4009-30A
Date Collected: 06/22/17 15:05
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/27/17 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*71 - 144*		*06/27/17 17:32*	*1*
4-Bromofluorobenzene	*129*		*72 - 133*		*06/27/17 17:32*	*1*

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	0.82	ug/L			06/30/17 02:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 02:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 02:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 02:11	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 02:11	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 02:11	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 02:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 02:11	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 02:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 02:11	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 02:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 02:11	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 02:11	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 02:11	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 02:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 02:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 02:11	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 02:11	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 02:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 02:11	1
Acetone	10	U	10	3.0	ug/L			06/30/17 02:11	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 02:11	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 02:11	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 02:11	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 02:11	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 02:11	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 02:11	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 02:11	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 02:11	1
Chloroform	**0.43**	**J**	1.0	0.34	ug/L			06/30/17 02:11	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 02:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 02:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 02:11	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 02:11	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 02:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 02:11	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 02:11	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 02:11	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 02:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 02:11	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 02:11	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 02:11	1

Client Sample ID: 4009-30A
Date Collected: 06/22/17 15:05
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 02:11	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 02:11	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 02:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 02:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 02:11	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 02:11	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 02:11	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 02:11	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/30/17 02:11*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*06/30/17 02:11*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*06/30/17 02:11*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/30/17 02:11*	*1*

Method: WS-LC-0025 Att1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**1.75**	**J**	2.00	0.92	ng/L		06/26/17 15:41	06/28/17 15:53	1
Perfluorohexanesulfonic acid (PFHxS)	**3.65**		2.00	0.87	ng/L		06/26/17 15:41	06/28/17 15:53	1
Perfluoroheptanoic acid (PFHpA)	**2.54**		2.00	0.80	ng/L		06/26/17 15:41	06/28/17 15:53	1
Perfluorooctanoic acid (PFOA)	**8.59**		2.00	0.75	ng/L		06/26/17 15:41	06/28/17 15:53	1
Perfluorooctanesulfonic acid (PFOS)	**7.43**		2.00	1.28	ng/L		06/26/17 15:41	06/28/17 15:53	1
Perfluorononanoic acid (PFNA)	**1.52**	**J**	2.00	0.65	ng/L		06/26/17 15:41	06/28/17 15:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*140*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:53*	*1*
13C4-PFHpA	*139*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:53*	*1*
13C4 PFOA	*115*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:53*	*1*
13C4 PFOS	*120*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:53*	*1*
13C5 PFNA	*88*		*25 - 150*	*06/26/17 15:41*	*06/28/17 15:53*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 06/22/17 00:00
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-6
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	1.0	U	1.0	0.82	ug/L			06/30/17 02:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 02:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/30/17 02:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/30/17 02:34	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/30/17 02:34	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/30/17 02:34	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/30/17 02:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/30/17 02:34	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/30/17 02:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/30/17 02:34	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/30/17 02:34	1

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

TestAmerica Job ID: 480-120027-1

Client Sample ID: TRIP BLANK
Date Collected: 06/22/17 00:00
Date Received: 06/23/17 01:45

Lab Sample ID: 480-120027-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/30/17 02:34	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/30/17 02:34	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/30/17 02:34	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/30/17 02:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/30/17 02:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/30/17 02:34	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/30/17 02:34	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/30/17 02:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/30/17 02:34	1
Acetone	10	U	10	3.0	ug/L			06/30/17 02:34	1
Benzene	1.0	U	1.0	0.41	ug/L			06/30/17 02:34	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/30/17 02:34	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/30/17 02:34	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/30/17 02:34	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/30/17 02:34	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/30/17 02:34	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/30/17 02:34	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/30/17 02:34	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/30/17 02:34	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/30/17 02:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/30/17 02:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/30/17 02:34	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/30/17 02:34	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/30/17 02:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/30/17 02:34	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/30/17 02:34	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/30/17 02:34	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/30/17 02:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/30/17 02:34	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/30/17 02:34	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/30/17 02:34	1
Styrene	1.0	U	1.0	0.73	ug/L			06/30/17 02:34	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/30/17 02:34	1
Toluene	1.0	U	1.0	0.51	ug/L			06/30/17 02:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/30/17 02:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/30/17 02:34	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/30/17 02:34	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/30/17 02:34	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/30/17 02:34	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/30/17 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/30/17 02:34*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*06/30/17 02:34*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*06/30/17 02:34*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/30/17 02:34*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-120027-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-120027-1	4009-19	105	92	102	95
480-120027-2	4009-16	99	90	94	94
480-120027-3	4009-16A	107	92	100	96
480-120027-4	4009-30	111	95	106	97
480-120027-5	4009-30A	102	92	97	95
480-120027-6	TRIP BLANK	105	94	101	97
LCS 480-364828/4	Lab Control Sample	105	98	99	96
MB 480-364828/6	Method Blank	101	91	96	93

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		12DCE	BFB
Lab Sample ID	Client Sample ID	(71-144)	(72-133)
480-120027-1	4009-19	102	118
480-120027-2	4009-16	77	105
480-120027-3	4009-16A	90	128
480-120027-4	4009-30	88	129
480-120027-5	4009-30A	89	129
LCS 460-446052/3	Lab Control Sample	114	93
LCS 460-446325/3	Lab Control Sample	96	100
LCSD 460-446052/4	Lab Control Sample Dup	104	95
LCSD 460-446325/4	Lab Control Sample Dup	98	100
MB 460-446052/7	Method Blank	89	90
MB 460-446325/7	Method Blank	74	107

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene

Isotope Dilution Summary

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

TestAmerica Job ID: 480-120027-1

Method: WS-LC-0025 Att1 - Perfluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		18O2 PFHxS	3C4-PFHpA	13C4 PFOA	13C4 PFOS	13C5 PFNA			
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)			
480-120027-1	4009-19	109	117	96	95	83			
480-120027-2	4009-16	127	134	98	124	171			
480-120027-3	4009-16A	111	114	94	102	75			
480-120027-4	4009-30	110	111	91	98	79			
480-120027-5	4009-30A	140	139	115	120	88			
LCS 320-171069/2-A	Lab Control Sample	108	106	91	92	73			
MB 320-171069/1-A	Method Blank	101	99	83	90	69			

Surrogate Legend

18O2 PFHxS = 18O2 PFHxS
13C4-PFHpA = 13C4-PFHpA
13C4 PFOA = 13C4 PFOA
13C4 PFOS = 13C4 PFOS
13C5 PFNA = 13C5 PFNA

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

Lab Sample ID: MB 480-364828/6
Matrix: Water
Analysis Batch: 364828

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	0.82	ug/L			06/29/17 21:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 21:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/29/17 21:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/29/17 21:58	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/29/17 21:58	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/29/17 21:58	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/29/17 21:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/29/17 21:58	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/29/17 21:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/29/17 21:58	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/29/17 21:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/29/17 21:58	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/29/17 21:58	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/29/17 21:58	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/29/17 21:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/29/17 21:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/29/17 21:58	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/29/17 21:58	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/29/17 21:58	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/29/17 21:58	1
Acetone	10	U	10	3.0	ug/L			06/29/17 21:58	1
Benzene	1.0	U	1.0	0.41	ug/L			06/29/17 21:58	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/29/17 21:58	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/29/17 21:58	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/29/17 21:58	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/29/17 21:58	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/29/17 21:58	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/29/17 21:58	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/29/17 21:58	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/29/17 21:58	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/29/17 21:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/29/17 21:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/29/17 21:58	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/29/17 21:58	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/29/17 21:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/29/17 21:58	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/29/17 21:58	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/29/17 21:58	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/29/17 21:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/29/17 21:58	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/29/17 21:58	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/29/17 21:58	1
Styrene	1.0	U	1.0	0.73	ug/L			06/29/17 21:58	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/29/17 21:58	1
Toluene	1.0	U	1.0	0.51	ug/L			06/29/17 21:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/29/17 21:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/29/17 21:58	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/29/17 21:58	1

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

Lab Sample ID: MB 480-364828/6
Matrix: Water
Analysis Batch: 364828

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/29/17 21:58	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/29/17 21:58	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/29/17 21:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*06/29/17 21:58*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*06/29/17 21:58*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*06/29/17 21:58*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/29/17 21:58*	*1*

Lab Sample ID: LCS 480-364828/4
Matrix: Water
Analysis Batch: 364828

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	25.0	25.0		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		98	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	23.1		ug/L		92	61 - 148
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	76 - 122
1,1-Dichloroethane	25.0	24.1		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	22.0		ug/L		88	66 - 127
1,2,3-Trimethylbenzene	25.0	27.9		ug/L		112	78 - 120
1,2,4-Trichlorobenzene	25.0	27.1		ug/L		109	79 - 122
1,2,4-Trimethylbenzene	25.0	26.3		ug/L		105	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	25.1		ug/L		101	56 - 134
1,2-Dibromoethane	25.0	24.9		ug/L		99	77 - 120
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120
1,3,5-Trimethylbenzene	25.0	25.7		ug/L		103	77 - 121
1,3-Dichlorobenzene	25.0	24.7		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	80 - 120
2-Butanone (MEK)	125	119		ug/L		95	57 - 140
2-Hexanone	125	132		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	71 - 125
Acetone	125	137		ug/L		109	56 - 142
Benzene	25.0	23.6		ug/L		94	71 - 124
Bromodichloromethane	25.0	25.2		ug/L		101	80 - 122
Bromoform	25.0	24.2		ug/L		97	61 - 132
Bromomethane	25.0	19.4		ug/L		77	55 - 144
Carbon disulfide	25.0	21.1		ug/L		84	59 - 134
Carbon tetrachloride	25.0	23.9		ug/L		96	72 - 134
Chlorobenzene	25.0	23.8		ug/L		95	80 - 120
Chloroethane	25.0	22.8		ug/L		91	69 - 136
Chloroform	25.0	23.4		ug/L		93	73 - 127
Chloromethane	25.0	19.5		ug/L		78	68 - 124
cis-1,2-Dichloroethene	25.0	22.9		ug/L		92	74 - 124

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

Lab Sample ID: LCS 480-364828/4
Matrix: Water
Analysis Batch: 364828

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	26.3		ug/L		105	74 - 124
Cyclohexane	25.0	23.9		ug/L		96	59 - 135
Dibromochloromethane	25.0	26.2		ug/L		105	75 - 125
Dichlorodifluoromethane	25.0	18.1		ug/L		72	59 - 135
Ethylbenzene	25.0	24.8		ug/L		99	77 - 123
Isopropylbenzene	25.0	25.2		ug/L		101	77 - 122
Methyl acetate	125	126		ug/L		101	74 - 133
Methyl tert-butyl ether	25.0	23.9		ug/L		96	77 - 120
Methylcyclohexane	25.0	24.3		ug/L		97	68 - 134
Methylene Chloride	25.0	21.8		ug/L		87	75 - 124
Styrene	25.0	25.3		ug/L		101	80 - 120
Tetrachloroethene	25.0	27.4		ug/L		110	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	22.6		ug/L		90	73 - 127
trans-1,3-Dichloropropene	25.0	25.5		ug/L		102	80 - 120
Trichloroethene	25.0	24.6		ug/L		99	74 - 123
Trichlorofluoromethane	25.0	22.9		ug/L		92	62 - 150
Vinyl chloride	25.0	20.6		ug/L		82	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*
Toluene-d8 (Surr)	*96*		*80 - 120*

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

Lab Sample ID: MB 460-446052/7
Matrix: Water
Analysis Batch: 446052

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/27/17 11:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*71 - 144*		*06/27/17 11:05*	*1*
4-Bromofluorobenzene	*90*		*72 - 133*		*06/27/17 11:05*	*1*

Lab Sample ID: LCS 460-446052/3
Matrix: Water
Analysis Batch: 446052

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	6.37		ug/L		127	66 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 144*

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

Lab Sample ID: LCS 460-446052/3
Matrix: Water
Analysis Batch: 446052

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	93		72 - 133

Lab Sample ID: LCSD 460-446052/4
Matrix: Water
Analysis Batch: 446052

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
1,4-Dioxane			5.00	6.18		ug/L		124	66 - 135	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		71 - 144
4-Bromofluorobenzene	95		72 - 133

Lab Sample ID: MB 460-446325/7
Matrix: Water
Analysis Batch: 446325

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/28/17 09:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		71 - 144		06/28/17 09:40	1
4-Bromofluorobenzene	107		72 - 133		06/28/17 09:40	1

Lab Sample ID: LCS 460-446325/3
Matrix: Water
Analysis Batch: 446325

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	5.61		ug/L		112	66 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		71 - 144
4-Bromofluorobenzene	100		72 - 133

Lab Sample ID: LCSD 460-446325/4
Matrix: Water
Analysis Batch: 446325

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
1,4-Dioxane			5.00	5.17		ug/L		103	66 - 135	8	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		71 - 144
4-Bromofluorobenzene	100		72 - 133

Method: WS-LC-0025 Att1 - Perfluorinated Alkyl Substances

Lab Sample ID: MB 320-171069/1-A
Matrix: Water
Analysis Batch: 171357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 171069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		06/26/17 15:41	06/28/17 05:47	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		06/26/17 15:41	06/28/17 05:47	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		06/26/17 15:41	06/28/17 05:47	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		06/26/17 15:41	06/28/17 05:47	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		06/26/17 15:41	06/28/17 05:47	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		06/26/17 15:41	06/28/17 05:47	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*101*		*25 - 150*	*06/26/17 15:41*	*06/28/17 05:47*	*1*
13C4-PFHpA	*99*		*25 - 150*	*06/26/17 15:41*	*06/28/17 05:47*	*1*
13C4 PFOA	*83*		*25 - 150*	*06/26/17 15:41*	*06/28/17 05:47*	*1*
13C4 PFOS	*90*		*25 - 150*	*06/26/17 15:41*	*06/28/17 05:47*	*1*
13C5 PFNA	*69*		*25 - 150*	*06/26/17 15:41*	*06/28/17 05:47*	*1*

Lab Sample ID: LCS 320-171069/2-A
Matrix: Water
Analysis Batch: 171357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 171069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	18.86		ng/L		107	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	17.89		ng/L		98	73 - 157
Perfluoroheptanoic acid (PFHpA)	20.0	21.76		ng/L		109	71 - 138
Perfluorooctanoic acid (PFOA)	20.0	20.33		ng/L		102	70 - 140
Perfluorooctanesulfonic acid (PFOS)	18.6	18.25		ng/L		98	69 - 144
Perfluorononanoic acid (PFNA)	20.0	19.91		ng/L		100	73 - 147

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*108*		*25 - 150*
13C4-PFHpA	*106*		*25 - 150*
13C4 PFOA	*91*		*25 - 150*
13C4 PFOS	*92*		*25 - 150*
13C5 PFNA	*73*		*25 - 150*

GC/MS VOA

Analysis Batch: 364828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120027-1	4009-19	Total/NA	Water	8260C	
480-120027-2	4009-16	Total/NA	Water	8260C	
480-120027-3	4009-16A	Total/NA	Water	8260C	
480-120027-4	4009-30	Total/NA	Water	8260C	
480-120027-5	4009-30A	Total/NA	Water	8260C	
480-120027-6	TRIP BLANK	Total/NA	Water	8260C	
MB 480-364828/6	Method Blank	Total/NA	Water	8260C	
LCS 480-364828/4	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 446052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120027-1	4009-19	Total/NA	Water	8260C SIM	
480-120027-3	4009-16A	Total/NA	Water	8260C SIM	
480-120027-4	4009-30	Total/NA	Water	8260C SIM	
480-120027-5	4009-30A	Total/NA	Water	8260C SIM	
MB 460-446052/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-446052/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-446052/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 446325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120027-2	4009-16	Total/NA	Water	8260C SIM	
MB 460-446325/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-446325/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-446325/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

LCMS

Prep Batch: 171069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120027-1	4009-19	Total/NA	Water	PFAS Prep	
480-120027-2	4009-16	Total/NA	Water	PFAS Prep	
480-120027-3	4009-16A	Total/NA	Water	PFAS Prep	
480-120027-4	4009-30	Total/NA	Water	PFAS Prep	
480-120027-5	4009-30A	Total/NA	Water	PFAS Prep	
MB 320-171069/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-171069/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	

Analysis Batch: 171357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120027-1	4009-19	Total/NA	Water	WS-LC-0025 Att1	171069
480-120027-2	4009-16	Total/NA	Water	WS-LC-0025 Att1	171069
480-120027-3	4009-16A	Total/NA	Water	WS-LC-0025 Att1	171069
480-120027-4	4009-30	Total/NA	Water	WS-LC-0025 Att1	171069
480-120027-5	4009-30A	Total/NA	Water	WS-LC-0025 Att1	171069
MB 320-171069/1-A	Method Blank	Total/NA	Water	WS-LC-0025 Att1	171069

LCMS (Continued)

Analysis Batch: 171357 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-171069/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 Att1	171069

Lab Chronicle

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

TestAmerica Job ID: 480-120027-1

Client Sample ID: 4009-19

Lab Sample ID: 480-120027-1

Date Collected: 06/22/17 10:10

Matrix: Water

Date Received: 06/23/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364828	06/30/17 00:38	LCH	TAL BUF
Total/NA	Analysis	8260C SIM		1	446052	06/27/17 16:01	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			171069	06/26/17 15:41	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	171357	06/28/17 14:39	CBW	TAL SAC

Client Sample ID: 4009-16

Lab Sample ID: 480-120027-2

Date Collected: 06/22/17 12:05

Matrix: Water

Date Received: 06/23/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364828	06/30/17 01:02	LCH	TAL BUF
Total/NA	Analysis	8260C SIM		1	446325	06/28/17 10:48	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			171069	06/26/17 15:41	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	171357	06/28/17 14:58	CBW	TAL SAC

Client Sample ID: 4009-16A

Lab Sample ID: 480-120027-3

Date Collected: 06/22/17 12:45

Matrix: Water

Date Received: 06/23/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364828	06/30/17 01:25	LCH	TAL BUF
Total/NA	Analysis	8260C SIM		1	446052	06/27/17 16:46	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			171069	06/26/17 15:41	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	171357	06/28/17 15:16	CBW	TAL SAC

Client Sample ID: 4009-30

Lab Sample ID: 480-120027-4

Date Collected: 06/22/17 16:10

Matrix: Water

Date Received: 06/23/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364828	06/30/17 01:48	LCH	TAL BUF
Total/NA	Analysis	8260C SIM		1	446052	06/27/17 17:09	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			171069	06/26/17 15:41	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	171357	06/28/17 15:34	CBW	TAL SAC

Client Sample ID: 4009-30A

Lab Sample ID: 480-120027-5

Date Collected: 06/22/17 15:05

Matrix: Water

Date Received: 06/23/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364828	06/30/17 02:11	LCH	TAL BUF
Total/NA	Analysis	8260C SIM		1	446052	06/27/17 17:32	SZD	TAL EDI

Lab Chronicle

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

TestAmerica Job ID: 480-120027-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			171069	06/26/17 15:41	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 Att1		1	171357	06/28/17 15:53	CBW	TAL SAC

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-120027-6

Date Collected: 06/22/17 00:00

Matrix: Water

Date Received: 06/23/17 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	364828	06/30/17 02:34	LCH	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-120027-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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 Edison

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-18

Laboratory: TestAmerica Sacramento

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	11666	04-01-18

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

Analysis Method	Prep Method	Matrix	Analyte
WS-LC-0025 Att1	PFAS Prep	Water	Perfluorobutanesulfonic acid (PFBS)
WS-LC-0025 Att1	PFAS Prep	Water	Perfluoroheptanoic acid (PFHpA)
WS-LC-0025 Att1	PFAS Prep	Water	Perfluorohexanesulfonic acid (PFHxS)
WS-LC-0025 Att1	PFAS Prep	Water	Perfluorononanoic acid (PFNA)
WS-LC-0025 Att1	PFAS Prep	Water	Perfluorooctanesulfonic acid (PFOS)
WS-LC-0025 Att1	PFAS Prep	Water	Perfluorooctanoic acid (PFOA)

Method Summary

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

TestAmerica Job ID: 480-120027-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
WS-LC-0025 Att1	Perfluorinated Alkyl Substances	TAL-SAC	TAL SAC

Protocol References:

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

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

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

TestAmerica Job ID: 480-120027-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-120027-1	4009-19	Water	06/22/17 10:10	06/23/17 01:45
480-120027-2	4009-16	Water	06/22/17 12:05	06/23/17 01:45
480-120027-3	4009-16A	Water	06/22/17 12:45	06/23/17 01:45
480-120027-4	4009-30	Water	06/22/17 16:10	06/23/17 01:45
480-120027-5	4009-30A	Water	06/22/17 15:05	06/23/17 01:45
480-120027-6	TRIP BLANK	Water	06/22/17 00:00	06/23/17 01:45

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-120027 COC

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/22/17	277801
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Clifton Park / NY / 12065	Aubrey Thomas	Judy Stone	
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC - Standby Vestal (NY)			
Contract/Purchase Order/Quote No.			
Contract D007618 Project 00266401 6000			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8260C - MOD TCL List vent	PFAS - DI - PFAS, QSM List(s)	8260C - SIM - 1,4 Dioxane	Special Instructions/ Conditions of Receipt
4009-19	6/22/17	1010		X			2			5			3	2	2	
4009-16	6/22/17	1205		X			3			5			3	2	2	
4009-16A	6/22/17	1245		X			2			5			3	2	2	
4009-30	6/22/17	1610		X			2			5			3	2	2	
4009-30A	6/22/17	1505		X			2			5			3	2	2	
Trip Blank	—	—		X						2			2			

RE
6-22-17

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☑ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Susan Zollweg	6/22/17	17:55	RE English Syr	6-22-17	17:55
2.	RE English	6-22-17	19:00	[signature] TAS	6-23-17	0145
3.						

Comments
PFCs → SACRAMENTO FROM SYR. — RE

0.9 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

483325 - Syracuse SC

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/22/17	277801
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 **of** 1
855 Route 146 Suite 210	518-250-7300		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	**Analysis (Attach list if more space is needed)**
Clifton Park / NY / 12065	Aubrey Thomas	Judy Stone	
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC - Standby Vesta (NY)			
Contract/Purchase Order/Quote No.			
Contract D007617 Project 00216401.0002			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: B260C Modified (1 vial)	537 DW (DI PFAS) (250 mL)	537 DW - SIM - 14 (250 mL)
4009-19	6/22/17	1010		X			2			5			3	2	2
4009-16	6/22/17	1205		X			2			5			3	2	2
4009-16A	6/22/17	1245		X			2			5			3	2	2
4009-30	6/22/17	1610		X			2			5			3	2	2
4009-[illegible]	6/22/17	1505		X			2			5			3	2	2
Trip Blank	—	—		X						2			2		

RE

6-22-17

480-120027 Chain of Custody

Special Instructions/ Conditions of Receipt

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Sidney Colarusso	6/22/17	17:55	Kenglish SYR	6-22-17	17:55
2.	KC English	6-22-17	19:00	TAMS	6/23/17	910 3.1°C
3.						

Comments

PFCs → SACRAMENTO FROM SYR. - RE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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

7/10/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-35679.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-120027-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/6/2017			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: NYSDEC-Standby VESTAL	Project #: 48005198			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acatate	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 - 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_SIM/5030C (MOD) Volatile SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
4009-19 (480-120027-1)	6/22/17	10:10 Eastern		Water			X	2	
4009-16 (480-120027-2)	6/22/17	12:05 Eastern		Water			X	2	
4009-16A (480-120027-3)	6/22/17	12:45 Eastern		Water			X	2	
4009-30 (480-120027-4)	6/22/17	16:10 Eastern		Water			X	2	
4009-30A (480-120027-5)	6/22/17	15:05 Eastern		Water			X	2	

480-120027 Chain of Custody

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 f 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 change 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
[signature]	6/23/17 1600		[signature] (FEDEX)	6/24/17 1125	TAEN
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.: 033834	Cooler Temperature(s) °C and Other Remarks: 4.0 IR#8

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120027-1

Login Number: 120027

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120027-1

Login Number: 120027
List Number: 3
Creator: Meyers, Gary

List Source: TestAmerica Edison
List Creation: 06/26/17 01:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	033834
Sample custody seals, if present, are 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	4.0 ° C IR #8
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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120027-1

Login Number: 120027
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 06/24/17 12:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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?	False	Not requested on COC.
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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: 480-120133-1
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:
7/11/2017 3:33:45 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

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

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

LCMS

Qualifier	Qualifier Description
U	Analyzed for but not detected.

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: 480-120133-1

Job ID: 480-120133-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-120133-1

Comments
No additional comments.

Receipt
The samples were received on 6/24/2017 2:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8º C.

GC/MS VOA
Method(s) 8260C: The surrogate Dibromofluoromethane (SURR) was outside the 20%D limits on the continuing calibration verification (CCV 480-365224/4) but was within laboratory limits. The following samples are impacted: 4009-28 (480-120133-1), 4009-15 (480-120133-2), 4009-14 (480-120133-3) and TRIP BLANK (480-120133-6).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-365224 recovered above the upper control limit for Chloromethane and Vinyl Chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 4009-28 (480-120133-1), 4009-15 (480-120133-2), 4009-14 (480-120133-3) and TRIP BLANK (480-120133-6).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-365224 recovered outside control limits for the following analyte: Chloromethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 4009-28 (480-120133-1), 4009-15 (480-120133-2), 4009-14 (480-120133-3) and TRIP BLANK (480-120133-6)

Method(s) 8260C: Due to the co-elution of Ethyl Acetate with 2-Butanone and n-butyl Acetate with 2-Hexanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) associated with batch 480-365224. The following samples were affected : 4009-28 (480-120133-1), 4009-15 (480-120133-2), 4009-14 (480-120133-3) and TRIP BLANK (480-120133-6).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: 4009-12 (480-120133-5). Elevated reporting limits (RLs) are provided.

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

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

Organic Prep
Method(s) PFAS Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-171686.

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: 480-120133-1

Client Sample ID: 4009-28 — Lab Sample ID: 480-120133-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.61		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1,1-Trichloroethane	2.6		1.0	0.82	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-15 — Lab Sample ID: 480-120133-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.0		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.56	J	1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	3.4	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-14 — Lab Sample ID: 480-120133-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.5		1.0	0.41	ug/L	1		8260C	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.79		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-22 — Lab Sample ID: 480-120133-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.78		0.40	0.20	ug/L	1		8260C SIM	Total/NA
2-Butanone (MEK)	2.8	J	10	1.3	ug/L	1		8260C	Total/NA
2-Hexanone	1.5	J	5.0	1.2	ug/L	1		8260C	Total/NA
Acetone	9.8	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	1.1		1.0	0.41	ug/L	1		8260C	Total/NA
Toluene	1.3		1.0	0.51	ug/L	1		8260C	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.09		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	3.57		2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-12 — Lab Sample ID: 480-120133-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.4		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1,1-Trichloroethane	430		10	8.2	ug/L	10		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	7.1	J	10	3.1	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	30		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	75		10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	110		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	100		10	4.6	ug/L	10		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.26		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.16		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.51		2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	6.76		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 480-120133-1

Client Sample ID: TRIP BLANK **Lab Sample ID: 480-120133-6**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-28
Date Collected: 06/23/17 10:25
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.61		0.40	0.20	ug/L			06/28/17 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 144*		*06/28/17 00:13*	*1*
4-Bromofluorobenzene	*101*		*72 - 133*		*06/28/17 00:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.6		1.0	0.82	ug/L			07/03/17 15:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 15:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/17 15:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/03/17 15:32	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/03/17 15:32	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/03/17 15:32	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/03/17 15:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/03/17 15:32	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/03/17 15:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/03/17 15:32	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/03/17 15:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/03/17 15:32	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 15:32	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/03/17 15:32	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/03/17 15:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/03/17 15:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/03/17 15:32	1
2-Butanone (MEK)	10	U *	10	1.3	ug/L			07/03/17 15:32	1
2-Hexanone	5.0	U *	5.0	1.2	ug/L			07/03/17 15:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/03/17 15:32	1
Acetone	10	U	10	3.0	ug/L			07/03/17 15:32	1
Benzene	1.0	U	1.0	0.41	ug/L			07/03/17 15:32	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/03/17 15:32	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/03/17 15:32	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/03/17 15:32	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/03/17 15:32	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/03/17 15:32	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/03/17 15:32	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/17 15:32	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/03/17 15:32	1
Chloromethane	1.0	U *	1.0	0.35	ug/L			07/03/17 15:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/03/17 15:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/03/17 15:32	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/03/17 15:32	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/03/17 15:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/03/17 15:32	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/03/17 15:32	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/03/17 15:32	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/03/17 15:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/03/17 15:32	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/03/17 15:32	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/03/17 15:32	1

Client Sample ID: 4009-28

Date Collected: 06/23/17 10:25
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.73	ug/L			07/03/17 15:32	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/03/17 15:32	1
Toluene	1.0	U	1.0	0.51	ug/L			07/03/17 15:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/03/17 15:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/03/17 15:32	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/03/17 15:32	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/03/17 15:32	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/03/17 15:32	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/03/17 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*07/03/17 15:32*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*07/03/17 15:32*	*1*
Dibromofluoromethane (Surr)	*85*		*75 - 123*		*07/03/17 15:32*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*07/03/17 15:32*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/09/17 19:19	07/09/17 21:59	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/09/17 19:19	07/09/17 21:59	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/09/17 19:19	07/09/17 21:59	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/09/17 19:19	07/09/17 21:59	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/09/17 19:19	07/09/17 21:59	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/09/17 19:19	07/09/17 21:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*96*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:59*	*1*
13C4-PFHpA	*104*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:59*	*1*
13C4 PFOA	*116*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:59*	*1*
13C4 PFOS	*106*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:59*	*1*
13C5 PFNA	*120*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:59*	*1*

Client Sample ID: 4009-15

Date Collected: 06/23/17 10:55
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/28/17 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 144*		*06/28/17 00:37*	*1*
4-Bromofluorobenzene	*100*		*72 - 133*		*06/28/17 00:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**2.0**		1.0	0.82	ug/L			07/03/17 15:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 15:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/17 15:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/03/17 15:57	1
1,1-Dichloroethane	**0.56**	**J**	1.0	0.38	ug/L			07/03/17 15:57	1

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

TestAmerica Job ID: 480-120133-1

Client Sample ID: 4009-15
Date Collected: 06/23/17 10:55
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-2
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	0.29	ug/L			07/03/17 15:57	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/03/17 15:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/03/17 15:57	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/03/17 15:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/03/17 15:57	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/03/17 15:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/03/17 15:57	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 15:57	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/03/17 15:57	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/03/17 15:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/03/17 15:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/03/17 15:57	1
2-Butanone (MEK)	10	U *	10	1.3	ug/L			07/03/17 15:57	1
2-Hexanone	5.0	U *	5.0	1.2	ug/L			07/03/17 15:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/03/17 15:57	1
Acetone	**3.4**	**J**	10	3.0	ug/L			07/03/17 15:57	1
Benzene	1.0	U	1.0	0.41	ug/L			07/03/17 15:57	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/03/17 15:57	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/03/17 15:57	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/03/17 15:57	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/03/17 15:57	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/03/17 15:57	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/03/17 15:57	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/17 15:57	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/03/17 15:57	1
Chloromethane	1.0	U *	1.0	0.35	ug/L			07/03/17 15:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/03/17 15:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/03/17 15:57	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/03/17 15:57	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/03/17 15:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/03/17 15:57	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/03/17 15:57	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/03/17 15:57	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/03/17 15:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/03/17 15:57	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/03/17 15:57	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/03/17 15:57	1
Styrene	1.0	U	1.0	0.73	ug/L			07/03/17 15:57	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/03/17 15:57	1
Toluene	1.0	U	1.0	0.51	ug/L			07/03/17 15:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/03/17 15:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/03/17 15:57	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/03/17 15:57	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/03/17 15:57	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/03/17 15:57	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/03/17 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*07/03/17 15:57*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*07/03/17 15:57*	*1*

Client Sample ID: 4009-15
Date Collected: 06/23/17 10:55
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-2
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*07/03/17 15:57*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*07/03/17 15:57*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/09/17 19:19	07/09/17 22:17	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/09/17 19:19	07/09/17 22:17	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/09/17 19:19	07/09/17 22:17	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/09/17 19:19	07/09/17 22:17	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/09/17 19:19	07/09/17 22:17	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/09/17 19:19	07/09/17 22:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*97*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:17*	*1*
13C4-PFHpA	*112*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:17*	*1*
13C4 PFOA	*124*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:17*	*1*
13C4 PFOS	*116*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:17*	*1*
13C5 PFNA	*156*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:17*	*1*

Client Sample ID: 4009-14
Date Collected: 06/23/17 12:45
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/28/17 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 144*		*06/28/17 01:00*	*1*
4-Bromofluorobenzene	*101*		*72 - 133*		*06/28/17 01:00*	*1*

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	0.82	ug/L			07/03/17 16:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 16:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/17 16:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/03/17 16:22	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/03/17 16:22	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/03/17 16:22	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/03/17 16:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/03/17 16:22	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/03/17 16:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/03/17 16:22	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/03/17 16:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/03/17 16:22	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 16:22	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/03/17 16:22	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/03/17 16:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/03/17 16:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/03/17 16:22	1
2-Butanone (MEK)	10	U *	10	1.3	ug/L			07/03/17 16:22	1

Client Sample ID: 4009-14
Date Collected: 06/23/17 12:45
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U *	5.0	1.2	ug/L			07/03/17 16:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/03/17 16:22	1
Acetone	10	U	10	3.0	ug/L			07/03/17 16:22	1
Benzene	**2.5**		1.0	0.41	ug/L			07/03/17 16:22	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/03/17 16:22	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/03/17 16:22	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/03/17 16:22	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/03/17 16:22	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/03/17 16:22	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/03/17 16:22	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/17 16:22	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/03/17 16:22	1
Chloromethane	1.0	U *	1.0	0.35	ug/L			07/03/17 16:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/03/17 16:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/03/17 16:22	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/03/17 16:22	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/03/17 16:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/03/17 16:22	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/03/17 16:22	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/03/17 16:22	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/03/17 16:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/03/17 16:22	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/03/17 16:22	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/03/17 16:22	1
Styrene	1.0	U	1.0	0.73	ug/L			07/03/17 16:22	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/03/17 16:22	1
Toluene	1.0	U	1.0	0.51	ug/L			07/03/17 16:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/03/17 16:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/03/17 16:22	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/03/17 16:22	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/03/17 16:22	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/03/17 16:22	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/03/17 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*07/03/17 16:22*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*07/03/17 16:22*	*1*
Dibromofluoromethane (Surr)	*85*		*75 - 123*		*07/03/17 16:22*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*07/03/17 16:22*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/09/17 19:19	07/09/17 22:36	1
Perfluorohexanesulfonic acid (PFHxS)	**6.79**		2.00	0.87	ng/L		07/09/17 19:19	07/09/17 22:36	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/09/17 19:19	07/09/17 22:36	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/09/17 19:19	07/09/17 22:36	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/09/17 19:19	07/09/17 22:36	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/09/17 19:19	07/09/17 22:36	1

Client Sample ID: 4009-14

Date Collected: 06/23/17 12:45
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-3

Matrix: Water

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*101*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:36*	*1*
13C4-PFHpA	*122*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:36*	*1*
13C4 PFOA	*140*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:36*	*1*
13C4 PFOS	*117*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:36*	*1*
13C5 PFNA	*201*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:36*	*1*

Client Sample ID: 4009-22

Date Collected: 06/23/17 13:35
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.78**		0.40	0.20	ug/L			06/28/17 01:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 144*		*06/28/17 01:23*	*1*
4-Bromofluorobenzene	*100*		*72 - 133*		*06/28/17 01:23*	*1*

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	0.82	ug/L			07/04/17 01:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 01:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/17 01:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/04/17 01:56	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/04/17 01:56	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/04/17 01:56	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/04/17 01:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/04/17 01:56	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/04/17 01:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/04/17 01:56	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/04/17 01:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/04/17 01:56	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 01:56	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/04/17 01:56	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/04/17 01:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/04/17 01:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/04/17 01:56	1
2-Butanone (MEK)	**2.8**	**J**	10	1.3	ug/L			07/04/17 01:56	1
2-Hexanone	**1.5**	**J**	5.0	1.2	ug/L			07/04/17 01:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/04/17 01:56	1
Acetone	**9.8**	**J**	10	3.0	ug/L			07/04/17 01:56	1
Benzene	**1.1**		1.0	0.41	ug/L			07/04/17 01:56	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/04/17 01:56	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/04/17 01:56	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/04/17 01:56	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/04/17 01:56	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/04/17 01:56	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/04/17 01:56	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/17 01:56	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/04/17 01:56	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/04/17 01:56	1

Client Sample ID: 4009-22
Date Collected: 06/23/17 13:35
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/04/17 01:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/04/17 01:56	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/04/17 01:56	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/04/17 01:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/04/17 01:56	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/04/17 01:56	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/04/17 01:56	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/04/17 01:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/04/17 01:56	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/04/17 01:56	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/04/17 01:56	1
Styrene	1.0	U	1.0	0.73	ug/L			07/04/17 01:56	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/04/17 01:56	1
Toluene	**1.3**		1.0	0.51	ug/L			07/04/17 01:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/04/17 01:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/04/17 01:56	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/04/17 01:56	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/04/17 01:56	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/04/17 01:56	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/04/17 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*07/04/17 01:56*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*07/04/17 01:56*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*07/04/17 01:56*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*07/04/17 01:56*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/09/17 19:19	07/09/17 22:54	1
Perfluorohexanesulfonic acid (PFHxS)	**2.09**		2.00	0.87	ng/L		07/09/17 19:19	07/09/17 22:54	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/09/17 19:19	07/09/17 22:54	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/09/17 19:19	07/09/17 22:54	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/09/17 19:19	07/09/17 22:54	1
Perfluorononanoic acid (PFNA)	**3.57**		2.00	0.65	ng/L		07/09/17 19:19	07/09/17 22:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*83*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:54*	*1*
13C4-PFHpA	*86*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:54*	*1*
13C4 PFOA	*82*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:54*	*1*
13C4 PFOS	*98*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:54*	*1*
13C5 PFNA	*149*		*25 - 150*	*07/09/17 19:19*	*07/09/17 22:54*	*1*

Client Sample ID: 4009-12
Date Collected: 06/23/17 15:30
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.4**		0.40	0.20	ug/L			06/28/17 01:47	1

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

TestAmerica Job ID: 480-120133-1

Client Sample ID: 4009-12
Date Collected: 06/23/17 15:30
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		71 - 144		06/28/17 01:47	1
4-Bromofluorobenzene	101		72 - 133		06/28/17 01:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**430**		10	8.2	ug/L			07/04/17 02:19	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			07/04/17 02:19	10
1,1,2-Trichloro-1,2,2-trifluoroethane	**7.1**	**J**	10	3.1	ug/L			07/04/17 02:19	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			07/04/17 02:19	10
1,1-Dichloroethane	**30**		10	3.8	ug/L			07/04/17 02:19	10
1,1-Dichloroethene	**75**		10	2.9	ug/L			07/04/17 02:19	10
1,2,3-Trimethylbenzene	10	U	10	2.6	ug/L			07/04/17 02:19	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			07/04/17 02:19	10
1,2,4-Trimethylbenzene	10	U	10	7.5	ug/L			07/04/17 02:19	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			07/04/17 02:19	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			07/04/17 02:19	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			07/04/17 02:19	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			07/04/17 02:19	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			07/04/17 02:19	10
1,3,5-Trimethylbenzene	10	U	10	7.7	ug/L			07/04/17 02:19	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			07/04/17 02:19	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			07/04/17 02:19	10
2-Butanone (MEK)	100	U	100	13	ug/L			07/04/17 02:19	10
2-Hexanone	50	U	50	12	ug/L			07/04/17 02:19	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			07/04/17 02:19	10
Acetone	100	U	100	30	ug/L			07/04/17 02:19	10
Benzene	10	U	10	4.1	ug/L			07/04/17 02:19	10
Bromodichloromethane	10	U	10	3.9	ug/L			07/04/17 02:19	10
Bromoform	10	U	10	2.6	ug/L			07/04/17 02:19	10
Bromomethane	10	U	10	6.9	ug/L			07/04/17 02:19	10
Carbon disulfide	10	U	10	1.9	ug/L			07/04/17 02:19	10
Carbon tetrachloride	10	U	10	2.7	ug/L			07/04/17 02:19	10
Chlorobenzene	10	U	10	7.5	ug/L			07/04/17 02:19	10
Chloroethane	10	U	10	3.2	ug/L			07/04/17 02:19	10
Chloroform	10	U	10	3.4	ug/L			07/04/17 02:19	10
Chloromethane	10	U	10	3.5	ug/L			07/04/17 02:19	10
cis-1,2-Dichloroethene	**110**		10	8.1	ug/L			07/04/17 02:19	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			07/04/17 02:19	10
Cyclohexane	10	U	10	1.8	ug/L			07/04/17 02:19	10
Dibromochloromethane	10	U	10	3.2	ug/L			07/04/17 02:19	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			07/04/17 02:19	10
Ethylbenzene	10	U	10	7.4	ug/L			07/04/17 02:19	10
Isopropylbenzene	10	U	10	7.9	ug/L			07/04/17 02:19	10
Methyl acetate	25	U	25	13	ug/L			07/04/17 02:19	10
Methyl tert-butyl ether	10	U	10	1.6	ug/L			07/04/17 02:19	10
Methylcyclohexane	10	U	10	1.6	ug/L			07/04/17 02:19	10
Methylene Chloride	10	U	10	4.4	ug/L			07/04/17 02:19	10
Styrene	10	U	10	7.3	ug/L			07/04/17 02:19	10
Tetrachloroethene	10	U	10	3.6	ug/L			07/04/17 02:19	10

Client Sample ID: 4009-12

Date Collected: 06/23/17 15:30
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	10	U	10	5.1	ug/L			07/04/17 02:19	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			07/04/17 02:19	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			07/04/17 02:19	10
Trichloroethene	**100**		10	4.6	ug/L			07/04/17 02:19	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			07/04/17 02:19	10
Vinyl chloride	10	U	10	9.0	ug/L			07/04/17 02:19	10
Xylenes, Total	20	U	20	6.6	ug/L			07/04/17 02:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*07/04/17 02:19*	*10*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*07/04/17 02:19*	*10*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*07/04/17 02:19*	*10*
Toluene-d8 (Surr)	*91*		*80 - 120*		*07/04/17 02:19*	*10*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**2.26**		2.00	0.92	ng/L		07/09/17 19:19	07/09/17 23:12	1
Perfluorohexanesulfonic acid (PFHxS)	**3.16**		2.00	0.87	ng/L		07/09/17 19:19	07/09/17 23:12	1
Perfluoroheptanoic acid (PFHpA)	**2.51**		2.00	0.80	ng/L		07/09/17 19:19	07/09/17 23:12	1
Perfluorooctanoic acid (PFOA)	**6.76**		2.00	0.75	ng/L		07/09/17 19:19	07/09/17 23:12	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/09/17 19:19	07/09/17 23:12	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/09/17 19:19	07/09/17 23:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*97*		*25 - 150*	*07/09/17 19:19*	*07/09/17 23:12*	*1*
13C4-PFHpA	*107*		*25 - 150*	*07/09/17 19:19*	*07/09/17 23:12*	*1*
13C4 PFOA	*115*		*25 - 150*	*07/09/17 19:19*	*07/09/17 23:12*	*1*
13C4 PFOS	*109*		*25 - 150*	*07/09/17 19:19*	*07/09/17 23:12*	*1*
13C5 PFNA	*129*		*25 - 150*	*07/09/17 19:19*	*07/09/17 23:12*	*1*

Client Sample ID: TRIP BLANK

Date Collected: 06/23/17 00:00
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-6
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	1.0	U	1.0	0.82	ug/L			07/03/17 19:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 19:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/17 19:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/03/17 19:05	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/03/17 19:05	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/03/17 19:05	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/03/17 19:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/03/17 19:05	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/03/17 19:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/03/17 19:05	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/03/17 19:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/03/17 19:05	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 19:05	1

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

TestAmerica Job ID: 480-120133-1

Client Sample ID: TRIP BLANK
Date Collected: 06/23/17 00:00
Date Received: 06/24/17 02:30

Lab Sample ID: 480-120133-6
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	1.0	U	1.0	0.72	ug/L			07/03/17 19:05	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/03/17 19:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/03/17 19:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/03/17 19:05	1
2-Butanone (MEK)	10	U *	10	1.3	ug/L			07/03/17 19:05	1
2-Hexanone	5.0	U *	5.0	1.2	ug/L			07/03/17 19:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/03/17 19:05	1
Acetone	10	U	10	3.0	ug/L			07/03/17 19:05	1
Benzene	1.0	U	1.0	0.41	ug/L			07/03/17 19:05	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/03/17 19:05	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/03/17 19:05	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/03/17 19:05	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/03/17 19:05	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/03/17 19:05	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/03/17 19:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/17 19:05	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/03/17 19:05	1
Chloromethane	1.0	U *	1.0	0.35	ug/L			07/03/17 19:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/03/17 19:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/03/17 19:05	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/03/17 19:05	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/03/17 19:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/03/17 19:05	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/03/17 19:05	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/03/17 19:05	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/03/17 19:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/03/17 19:05	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/03/17 19:05	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/03/17 19:05	1
Styrene	1.0	U	1.0	0.73	ug/L			07/03/17 19:05	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/03/17 19:05	1
Toluene	1.0	U	1.0	0.51	ug/L			07/03/17 19:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/03/17 19:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/03/17 19:05	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/03/17 19:05	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/03/17 19:05	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/03/17 19:05	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/03/17 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*		*07/03/17 19:05*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*07/03/17 19:05*	*1*
Dibromofluoromethane (Surr)	*84*		*75 - 123*		*07/03/17 19:05*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*07/03/17 19:05*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-120133-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-120133-1	4009-28	91	90	85	91
480-120133-2	4009-15	92	87	86	91
480-120133-3	4009-14	89	87	85	92
480-120133-4	4009-22	97	93	93	92
480-120133-5	4009-12	95	90	92	91
480-120133-6	TRIP BLANK	90	89	84	90
LCS 480-365224/5	Lab Control Sample	89	92	77	92
LCS 480-365340/5	Lab Control Sample	99	91	93	92
MB 480-365224/8	Method Blank	92	90	85	92
MB 480-365340/7	Method Blank	98	90	94	91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		12DCE	BFB
Lab Sample ID	Client Sample ID	(71-144)	(72-133)
480-120133-1	4009-28	94	101
480-120133-2	4009-15	102	100
480-120133-3	4009-14	100	101
480-120133-4	4009-22	100	100
480-120133-5	4009-12	102	101
LCS 460-446232/3	Lab Control Sample	100	100
LCSD 460-446232/4	Lab Control Sample Dup	99	101
MB 460-446232/7	Method Blank	102	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene

Isotope Dilution Summary

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

TestAmerica Job ID: 480-120133-1

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		18O2 PFHxS	13C4-PFHpA	13C4 PFOA	13C4 PFOS	13C5 PFNA			
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)			
480-120133-1	4009-28	96	104	116	106	120			
480-120133-2	4009-15	97	112	124	116	156			
480-120133-3	4009-14	101	122	140	117	201			
480-120133-4	4009-22	83	86	82	98	149			
480-120133-5	4009-12	97	107	115	109	129			
LCS 320-173163/2-A	Lab Control Sample	100	105	121	110	125			
LCSD 320-173163/3-A	Lab Control Sample Dup	97	98	118	106	120			
MB 320-173163/1-A	Method Blank	96	106	118	107	122			

Surrogate Legend

18O2 PFHxS = 18O2 PFHxS
13C4-PFHpA = 13C4-PFHpA
13C4 PFOA = 13C4 PFOA
13C4 PFOS = 13C4 PFOS
13C5 PFNA = 13C5 PFNA

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

Lab Sample ID: MB 480-365224/8
Matrix: Water
Analysis Batch: 365224

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	0.82	ug/L			07/03/17 14:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 14:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/17 14:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/03/17 14:04	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/03/17 14:04	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/03/17 14:04	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/03/17 14:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/03/17 14:04	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/03/17 14:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/03/17 14:04	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/03/17 14:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/03/17 14:04	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 14:04	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/03/17 14:04	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/03/17 14:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/03/17 14:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/03/17 14:04	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/03/17 14:04	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/03/17 14:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/03/17 14:04	1
Acetone	10	U	10	3.0	ug/L			07/03/17 14:04	1
Benzene	1.0	U	1.0	0.41	ug/L			07/03/17 14:04	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/03/17 14:04	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/03/17 14:04	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/03/17 14:04	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/03/17 14:04	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/03/17 14:04	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/03/17 14:04	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/17 14:04	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/03/17 14:04	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/03/17 14:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/03/17 14:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/03/17 14:04	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/03/17 14:04	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/03/17 14:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/03/17 14:04	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/03/17 14:04	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/03/17 14:04	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/03/17 14:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/03/17 14:04	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/03/17 14:04	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/03/17 14:04	1
Styrene	1.0	U	1.0	0.73	ug/L			07/03/17 14:04	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/03/17 14:04	1
Toluene	1.0	U	1.0	0.51	ug/L			07/03/17 14:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/03/17 14:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/03/17 14:04	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/03/17 14:04	1

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

Lab Sample ID: MB 480-365224/8
Matrix: Water
Analysis Batch: 365224

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/03/17 14:04	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/03/17 14:04	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/03/17 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*07/03/17 14:04*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*07/03/17 14:04*	*1*
Dibromofluoromethane (Surr)	*85*		*75 - 123*		*07/03/17 14:04*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*07/03/17 14:04*	*1*

Lab Sample ID: LCS 480-365224/5
Matrix: Water
Analysis Batch: 365224

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	25.0	22.0		ug/L		88	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	21.4		ug/L		86	61 - 148
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	21.9		ug/L		88	77 - 120
1,1-Dichloroethene	25.0	20.4		ug/L		82	66 - 127
1,2,3-Trimethylbenzene	25.0	25.5		ug/L		102	78 - 120
1,2,4-Trichlorobenzene	25.0	22.6		ug/L		91	79 - 122
1,2,4-Trimethylbenzene	25.0	25.6		ug/L		103	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	27.4		ug/L		110	56 - 134
1,2-Dibromoethane	25.0	23.5		ug/L		94	77 - 120
1,2-Dichlorobenzene	25.0	23.6		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	21.6		ug/L		86	75 - 120
1,2-Dichloropropane	25.0	20.8		ug/L		83	76 - 120
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	77 - 121
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 120
2-Butanone (MEK)	125	196	*	ug/L		157	57 - 140
2-Hexanone	125	193	*	ug/L		154	65 - 127
4-Methyl-2-pentanone (MIBK)	125	134		ug/L		107	71 - 125
Acetone	125	111		ug/L		88	56 - 142
Benzene	25.0	21.2		ug/L		85	71 - 124
Bromodichloromethane	25.0	22.0		ug/L		88	80 - 122
Bromoform	25.0	22.7		ug/L		91	61 - 132
Bromomethane	25.0	23.1		ug/L		92	55 - 144
Carbon disulfide	25.0	21.8		ug/L		87	59 - 134
Carbon tetrachloride	25.0	21.3		ug/L		85	72 - 134
Chlorobenzene	25.0	23.1		ug/L		92	80 - 120
Chloroethane	25.0	22.8		ug/L		91	69 - 136
Chloroform	25.0	21.2		ug/L		85	73 - 127
Chloromethane	25.0	31.8	*	ug/L		127	68 - 124
cis-1,2-Dichloroethene	25.0	20.6		ug/L		82	74 - 124

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

Lab Sample ID: LCS 480-365224/5
Matrix: Water
Analysis Batch: 365224

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	22.4		ug/L		90	74 - 124
Cyclohexane	25.0	20.8		ug/L		83	59 - 135
Dibromochloromethane	25.0	25.6		ug/L		102	75 - 125
Dichlorodifluoromethane	25.0	23.5		ug/L		94	59 - 135
Ethylbenzene	25.0	24.0		ug/L		96	77 - 123
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
Methyl acetate	125	111		ug/L		89	74 - 133
Methyl tert-butyl ether	25.0	21.9		ug/L		88	77 - 120
Methylcyclohexane	25.0	21.3		ug/L		85	68 - 134
Methylene Chloride	25.0	21.8		ug/L		87	75 - 124
Styrene	25.0	23.1		ug/L		92	80 - 120
Tetrachloroethene	25.0	24.4		ug/L		98	74 - 122
Toluene	25.0	24.4		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	20.7		ug/L		83	73 - 127
trans-1,3-Dichloropropene	25.0	26.9		ug/L		107	80 - 120
Trichloroethene	25.0	20.9		ug/L		83	74 - 123
Trichlorofluoromethane	25.0	21.7		ug/L		87	62 - 150
Vinyl chloride	25.0	30.4		ug/L		121	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*77*		*75 - 123*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: MB 480-365340/7
Matrix: Water
Analysis Batch: 365340

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	0.82	ug/L			07/03/17 22:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 22:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/17 22:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/03/17 22:49	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/03/17 22:49	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/03/17 22:49	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/03/17 22:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/03/17 22:49	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/03/17 22:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/03/17 22:49	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/03/17 22:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/03/17 22:49	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 22:49	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/03/17 22:49	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/03/17 22:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/03/17 22:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/03/17 22:49	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/03/17 22:49	1

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

Lab Sample ID: MB 480-365340/7
Matrix: Water
Analysis Batch: 365340

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/03/17 22:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/03/17 22:49	1
Acetone	10	U	10	3.0	ug/L			07/03/17 22:49	1
Benzene	1.0	U	1.0	0.41	ug/L			07/03/17 22:49	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/03/17 22:49	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/03/17 22:49	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/03/17 22:49	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/03/17 22:49	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/03/17 22:49	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/03/17 22:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/17 22:49	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/03/17 22:49	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/03/17 22:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/03/17 22:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/03/17 22:49	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/03/17 22:49	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/03/17 22:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/03/17 22:49	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/03/17 22:49	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/03/17 22:49	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/03/17 22:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/03/17 22:49	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/03/17 22:49	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/03/17 22:49	1
Styrene	1.0	U	1.0	0.73	ug/L			07/03/17 22:49	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/03/17 22:49	1
Toluene	1.0	U	1.0	0.51	ug/L			07/03/17 22:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/03/17 22:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/03/17 22:49	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/03/17 22:49	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/03/17 22:49	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/03/17 22:49	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/03/17 22:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*07/03/17 22:49*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*07/03/17 22:49*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*07/03/17 22:49*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*07/03/17 22:49*	*1*

Lab Sample ID: LCS 480-365340/5
Matrix: Water
Analysis Batch: 365340

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	25.0	22.5		ug/L		90	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	76 - 120

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

Lab Sample ID: LCS 480-365340/5
Matrix: Water
Analysis Batch: 365340

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	20.3		ug/L		81	61 - 148
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	76 - 122
1,1-Dichloroethane	25.0	23.0		ug/L		92	77 - 120
1,1-Dichloroethene	25.0	20.2		ug/L		81	66 - 127
1,2,3-Trimethylbenzene	25.0	24.4		ug/L		98	78 - 120
1,2,4-Trichlorobenzene	25.0	26.2		ug/L		105	79 - 122
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	24.8		ug/L		99	56 - 134
1,2-Dibromoethane	25.0	24.2		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	23.8		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	24.0		ug/L		96	76 - 120
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	77 - 121
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 120
2-Butanone (MEK)	125	133		ug/L		107	57 - 140
2-Hexanone	125	131		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125
Acetone	125	124		ug/L		99	56 - 142
Benzene	25.0	22.3		ug/L		89	71 - 124
Bromodichloromethane	25.0	24.6		ug/L		99	80 - 122
Bromoform	25.0	24.6		ug/L		98	61 - 132
Bromomethane	25.0	18.0		ug/L		72	55 - 144
Carbon disulfide	25.0	20.0		ug/L		80	59 - 134
Carbon tetrachloride	25.0	20.9		ug/L		84	72 - 134
Chlorobenzene	25.0	22.5		ug/L		90	80 - 120
Chloroethane	25.0	21.3		ug/L		85	69 - 136
Chloroform	25.0	22.9		ug/L		92	73 - 127
Chloromethane	25.0	20.3		ug/L		81	68 - 124
cis-1,2-Dichloroethene	25.0	22.5		ug/L		90	74 - 124
cis-1,3-Dichloropropene	25.0	27.2		ug/L		109	74 - 124
Cyclohexane	25.0	20.3		ug/L		81	59 - 135
Dibromochloromethane	25.0	25.7		ug/L		103	75 - 125
Dichlorodifluoromethane	25.0	19.9		ug/L		79	59 - 135
Ethylbenzene	25.0	22.7		ug/L		91	77 - 123
Isopropylbenzene	25.0	23.7		ug/L		95	77 - 122
Methyl acetate	125	130		ug/L		104	74 - 133
Methyl tert-butyl ether	25.0	24.3		ug/L		97	77 - 120
Methylcyclohexane	25.0	20.5		ug/L		82	68 - 134
Methylene Chloride	25.0	20.9		ug/L		84	75 - 124
Styrene	25.0	23.7		ug/L		95	80 - 120
Tetrachloroethene	25.0	22.4		ug/L		89	74 - 122
Toluene	25.0	22.5		ug/L		90	80 - 122
trans-1,2-Dichloroethene	25.0	20.7		ug/L		83	73 - 127
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	80 - 120
Trichloroethene	25.0	21.8		ug/L		87	74 - 123
Trichlorofluoromethane	25.0	20.1		ug/L		80	62 - 150

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

Lab Sample ID: LCS 480-365340/5
Matrix: Water
Analysis Batch: 365340

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			25.0	20.3		ug/L		81	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*
Dibromofluoromethane (Surr)	*93*		*75 - 123*
Toluene-d8 (Surr)	*92*		*80 - 120*

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

Lab Sample ID: MB 460-446232/7
Matrix: Water
Analysis Batch: 446232

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/27/17 22:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 144*		*06/27/17 22:37*	*1*
4-Bromofluorobenzene	*101*		*72 - 133*		*06/27/17 22:37*	*1*

Lab Sample ID: LCS 460-446232/3
Matrix: Water
Analysis Batch: 446232

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	5.17		ug/L		103	66 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 144*
4-Bromofluorobenzene	*100*		*72 - 133*

Lab Sample ID: LCSD 460-446232/4
Matrix: Water
Analysis Batch: 446232

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
1,4-Dioxane			5.00	5.04		ug/L		101	66 - 135	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 144*
4-Bromofluorobenzene	*101*		*72 - 133*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Lab Sample ID: MB 320-173163/1-A
Matrix: Water
Analysis Batch: 173278

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/09/17 19:19	07/09/17 21:04	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/09/17 19:19	07/09/17 21:04	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/09/17 19:19	07/09/17 21:04	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/09/17 19:19	07/09/17 21:04	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/09/17 19:19	07/09/17 21:04	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/09/17 19:19	07/09/17 21:04	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*96*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:04*	*1*
13C4-PFHpA	*106*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:04*	*1*
13C4 PFOA	*118*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:04*	*1*
13C4 PFOS	*107*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:04*	*1*
13C5 PFNA	*122*		*25 - 150*	*07/09/17 19:19*	*07/09/17 21:04*	*1*

Lab Sample ID: LCS 320-173163/2-A
Matrix: Water
Analysis Batch: 173278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	19.49		ng/L		110	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	20.35		ng/L		112	73 - 157
Perfluoroheptanoic acid (PFHpA)	20.0	20.97		ng/L		105	71 - 138
Perfluorooctanoic acid (PFOA)	20.0	23.36		ng/L		117	70 - 140
Perfluorooctanesulfonic acid (PFOS)	18.6	20.72		ng/L		112	69 - 144
Perfluorononanoic acid (PFNA)	20.0	20.28		ng/L		101	73 - 147

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*100*		*25 - 150*
13C4-PFHpA	*105*		*25 - 150*
13C4 PFOA	*121*		*25 - 150*
13C4 PFOS	*110*		*25 - 150*
13C5 PFNA	*125*		*25 - 150*

Lab Sample ID: LCSD 320-173163/3-A
Matrix: Water
Analysis Batch: 173278

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)	17.7	19.44		ng/L		110	72 - 151	0	30
Perfluorohexanesulfonic acid (PFHxS)	18.2	20.13		ng/L		111	73 - 157	1	30
Perfluoroheptanoic acid (PFHpA)	20.0	21.13		ng/L		106	71 - 138	1	30
Perfluorooctanoic acid (PFOA)	20.0	23.12		ng/L		116	70 - 140	1	30
Perfluorooctanesulfonic acid (PFOS)	18.6	19.43		ng/L		105	69 - 144	6	30
Perfluorononanoic acid (PFNA)	20.0	20.80		ng/L		104	73 - 147	3	30

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

TestAmerica Job ID: 480-120133-1

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
18O2 PFHxS	97		25 - 150
13C4-PFHpA	98		25 - 150
13C4 PFOA	118		25 - 150
13C4 PFOS	106		25 - 150
13C5 PFNA	120		25 - 150

GC/MS VOA

Analysis Batch: 365224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120133-1	4009-28	Total/NA	Water	8260C	
480-120133-2	4009-15	Total/NA	Water	8260C	
480-120133-3	4009-14	Total/NA	Water	8260C	
480-120133-6	TRIP BLANK	Total/NA	Water	8260C	
MB 480-365224/8	Method Blank	Total/NA	Water	8260C	
LCS 480-365224/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 365340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120133-4	4009-22	Total/NA	Water	8260C	
480-120133-5	4009-12	Total/NA	Water	8260C	
MB 480-365340/7	Method Blank	Total/NA	Water	8260C	
LCS 480-365340/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 446232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120133-1	4009-28	Total/NA	Water	8260C SIM	
480-120133-2	4009-15	Total/NA	Water	8260C SIM	
480-120133-3	4009-14	Total/NA	Water	8260C SIM	
480-120133-4	4009-22	Total/NA	Water	8260C SIM	
480-120133-5	4009-12	Total/NA	Water	8260C SIM	
MB 460-446232/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-446232/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-446232/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

LCMS

Prep Batch: 173163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120133-1	4009-28	Total/NA	Water	PFAS Prep	
480-120133-2	4009-15	Total/NA	Water	PFAS Prep	
480-120133-3	4009-14	Total/NA	Water	PFAS Prep	
480-120133-4	4009-22	Total/NA	Water	PFAS Prep	
480-120133-5	4009-12	Total/NA	Water	PFAS Prep	
MB 320-173163/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-173163/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
LCSD 320-173163/3-A	Lab Control Sample Dup	Total/NA	Water	PFAS Prep	

Analysis Batch: 173278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120133-1	4009-28	Total/NA	Water	WS-LC-0025 At1	173163
480-120133-2	4009-15	Total/NA	Water	WS-LC-0025 At1	173163
480-120133-3	4009-14	Total/NA	Water	WS-LC-0025 At1	173163
480-120133-4	4009-22	Total/NA	Water	WS-LC-0025 At1	173163
480-120133-5	4009-12	Total/NA	Water	WS-LC-0025 At1	173163
MB 320-173163/1-A	Method Blank	Total/NA	Water	WS-LC-0025 At1	173163

LCMS (Continued)

Analysis Batch: 173278 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-173163/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 At1	173163
LCSD 320-173163/3-A	Lab Control Sample Dup	Total/NA	Water	WS-LC-0025 At1	173163

Lab Chronicle

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

TestAmerica Job ID: 480-120133-1

Client Sample ID: 4009-28

Lab Sample ID: 480-120133-1

Date Collected: 06/23/17 10:25

Matrix: Water

Date Received: 06/24/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365224	07/03/17 15:32	RRS	TAL BUF
Total/NA	Analysis	8260C SIM		1	446232	06/28/17 00:13	KLB	TAL EDI
Total/NA	Prep	PFAS Prep			173163	07/09/17 19:19	SER	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173278	07/09/17 21:59	SER	TAL SAC

Client Sample ID: 4009-15

Lab Sample ID: 480-120133-2

Date Collected: 06/23/17 10:55

Matrix: Water

Date Received: 06/24/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365224	07/03/17 15:57	RRS	TAL BUF
Total/NA	Analysis	8260C SIM		1	446232	06/28/17 00:37	KLB	TAL EDI
Total/NA	Prep	PFAS Prep			173163	07/09/17 19:19	SER	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173278	07/09/17 22:17	SER	TAL SAC

Client Sample ID: 4009-14

Lab Sample ID: 480-120133-3

Date Collected: 06/23/17 12:45

Matrix: Water

Date Received: 06/24/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365224	07/03/17 16:22	RRS	TAL BUF
Total/NA	Analysis	8260C SIM		1	446232	06/28/17 01:00	KLB	TAL EDI
Total/NA	Prep	PFAS Prep			173163	07/09/17 19:19	SER	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173278	07/09/17 22:36	SER	TAL SAC

Client Sample ID: 4009-22

Lab Sample ID: 480-120133-4

Date Collected: 06/23/17 13:35

Matrix: Water

Date Received: 06/24/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365340	07/04/17 01:56	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	446232	06/28/17 01:23	KLB	TAL EDI
Total/NA	Prep	PFAS Prep			173163	07/09/17 19:19	SER	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173278	07/09/17 22:54	SER	TAL SAC

Client Sample ID: 4009-12

Lab Sample ID: 480-120133-5

Date Collected: 06/23/17 15:30

Matrix: Water

Date Received: 06/24/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	365340	07/04/17 02:19	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	446232	06/28/17 01:47	KLB	TAL EDI

Lab Chronicle

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

TestAmerica Job ID: 480-120133-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			173163	07/09/17 19:19	SER	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173278	07/09/17 23:12	SER	TAL SAC

Client Sample ID: TRIP BLANK — **Lab Sample ID: 480-120133-6**

Date Collected: 06/23/17 00:00 — **Matrix: Water**

Date Received: 06/24/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365224	07/03/17 19:05	RRS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-120133-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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 Edison

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-18

Laboratory: TestAmerica Sacramento

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
Alaska (UST)	State Program	10	UST-055	12-18-17
Arizona	State Program	9	AZ0708	08-11-17
Arkansas DEQ	State Program	6	88-0691	06-17-18
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-17
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-18
Georgia	State Program	4	N/A	01-29-18
Hawaii	State Program	9	N/A	01-29-18
Illinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17
L-A-B	DoD ELAP		L2468	01-20-18
Louisiana	NELAP	6	30612	06-30-18
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-17
New Hampshire	NELAP	1	2997	04-18-18
New Jersey	NELAP	2	CA005	06-30-18
New York	NELAP	2	11666	04-01-18
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-18
Texas	NELAP	6	T104704399	05-31-18
US Fish & Wildlife	Federal		LE148388-0	10-31-17
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-18
Virginia	NELAP	3	460278	03-14-18
Washington	State Program	10	C581	05-05-18
West Virginia (DW)	State Program	3	9930C	12-31-17
Wyoming	State Program	8	8TMS-L	01-29-17 *

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

Method Summary

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

TestAmerica Job ID: 480-120133-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
WS-LC-0025 At1	Perfluorinated Alkyl Substances	TAL-SAC	TAL SAC

Protocol References:

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

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

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

TestAmerica Job ID: 480-120133-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-120133-1	4009-28	Water	06/23/17 10:25	06/24/17 02:30
480-120133-2	4009-15	Water	06/23/17 10:55	06/24/17 02:30
480-120133-3	4009-14	Water	06/23/17 12:45	06/24/17 02:30
480-120133-4	4009-22	Water	06/23/17 13:35	06/24/17 02:30
480-120133-5	4009-12	Water	06/23/17 15:30	06/24/17 02:30
480-120133-6	TRIP BLANK	Water	06/23/17 00:00	06/24/17 02:30

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-120133 COC

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/23/17	277806
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300		
City / **State** / **Zip Code**	**Site Contact** / **Lab Contact**		
Clifton Park / NY / 12065	Aubrey Thomas / Judy Stone		
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC - Standby Vestal (NY)			
Contract/Purchase Order/Quote No.			
Contract D007618 Project 00266401.0000			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	8260C - (NOD) TCL List VOA	PFAs - DI - PFAs UCMR List (6)	8260C_SIM - 1,4-Dioxane
4009-28	6/23/17	1025		X			2			5			3	2	2
4009-15	↓	1055		X			2			5			3	2	2
4009-14		1245		X			2			5			3	2	2
4009-22		1335		X			2			5			3	2	2
4009-12	↓	1530		X			2			5			3	2	2
Trip Blank	—	—		X						2			2		

RE
6-23-17

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Suzanne Ellsworth	6/23/17	1730	(SXP)	6/23/17	1730
2.	RE Fuglio, Syr	6-23-17	19:00	DHS 6-24-17 0220		
3.						

Comments
OFC: → SACRAMENTO FROM Syr. - RE

0.8 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/23/17	277806
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Clifton Park / NY / 12065	Aubrey Thomas	Judy Stone	
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC Standby Vesta (NY)			
Contract/Purchase Order/Quote No.			
Contract D007618 Project 00266401.0008			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	8260C - (NOD) TCL List VOA	PFAs - DL - PFAS UCMR List (6)	8260C - SIM + 1,4-Dioxane
4009-28	6/23/17	1025		X			2			5			3	2	2
4009-15		1055		X			2			5			3	2	2
4009-14		1245		X			2			5			3	2	2
4009-22		1335		X			2			5			3	2	2
4009-12	↓	1500		X			2			5			3	2	2
Trip Blank	—	—		X						2			2		

RE

6-23-17

480-120133 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
Suzanne Johnson	6/23/17	1730	(SXR)	6/23/17	1730
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
Reagan Lyn	6-23-17	1900	TAMS	6/24/17	935 1.1°C
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments

PFCs → Sacramento from Lyn. - RE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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

7/11/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-35723.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com	State of Origin: Florida	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-120133-1
Address: 777 New Durham Road,	Due Date Requested: 7/6/2017			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(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_SIM/5030C (MOD) Volatile SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
4009-28 (480-120133-1)	6/23/17	10:25 Eastern		Water			X	2	
4009-15 (480-120133-2)	6/23/17	10:55 Eastern		Water			X	2	
4009-14 (480-120133-3)	6/23/17	12:45 Eastern		Water			X	2	
4009-22 (480-120133-4)	6/23/17	13:35 Eastern		Water			X	2	
4009-12 (480-120133-5)	6/23/17	15:30 Eastern		Water			X	2	

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]	6/26/17 1300	TAL	[signature] UCAFedEx	6/27/17 0905	TAL
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.: 033823

Cooler Temperature(s) °C and Other Remarks: 2.5°C 2/28

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sam

480-120133 Field Sheet

Job:_____

Tracking #7346 0301 1880 P.O.

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes:_____

Therm. ID: AK-1 / AK-2 / HACCP /Other_____

Ice X Wet X Dry_____ Other_____

Cooler Custody Seal: seal

Sample Custody Seal: —

Cooler ID: —

Temp: Observed 1.1°C

Corrected: —

From: Temp Blank ☒ Sample ☐

NCM Filed: Yes ☐ No ☐

	Yes	No	NA
Perchlorate has headspace?	☐	☐	☒
CoC is complete w/o discrepancies?	☒	☐	☐
Samples received within holding time?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Cooler compromised/tampered with?	☐	☒	☐
Samples compromised/tampered with?	☐	☒	☐
COC and Samples w/o discrepancies?	☒	☐	☐
Sample containers have legible labels?	☒	☐	☐
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided.	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

Initials: AA Date: 6/24/17

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

INFOTRAC (800) 535-5053
TESTAMERICA (716) 691-2600

ORIGIN ID:SYRA (315) 431-0171
SYR SERVICE CENTER
TESTAMERICA
118 BOSS RD

SYRACUSE, NY 13211
UNITED STATES US

SHIP DATE: 23JUN17
ACTWGT: 12.00 LB MAN
CAD: 251798/CAFE3012

BILL RECIPIENT

TO SAMPLE RECIEVING
TESTAMERICA W. SACRAMENTO
880 RIVERSIDE PARKWAY

WEST SACRAMENTO CA 95605
(916) 373-5600
REF: ARCADIS 1COOLER

FedEx Express

TRK# 0201 7346 0301 1880

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO BLUA

95605
CA-US SMF

Part # 156149-434 Rev 04/13

CUSTODY SEAL
DATE
SIGNATURE
QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120133-1

Login Number: 120133

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120133-1

Login Number: 120133
List Number: 3
Creator: Armbruster, Chris

List Source: TestAmerica Edison
List Creation: 06/27/17 11:10 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	033823
Sample custody seals, if present, are intact.	N/A	
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	2.5°C IR8
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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120133-1

Login Number: 120133
List Number: 2
Creator: Edman, Connor M

List Source: TestAmerica Sacramento
List Creation: 06/24/17 02:38 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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?	N/A	
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 480-120192-1
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:
7/12/2017 3:05:41 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

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

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

LCMS

Qualifier	Qualifier Description
J	Indicates an estimated value.
U	Analyzed for but not detected.
*	MS or MSD is outside acceptance limits.
*	Duplicate RPD exceeds control 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: 480-120192-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-120192-1

Comments
No additional comments.

Receipt
The samples were received on 6/27/2017 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

GC/MS VOA
Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-365340 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

LCMS
Method(s) WS-LC-0025 At1: The matrix spike (MS) recovery and matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 320-172951 and analytical batch 320-173148 was outside control limits for Perfluorohexanesulfonic acid (PFHxS). Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits.

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

Organic Prep
Method(s) PFAS Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-172953.

Method(s) PFAS Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-172961.

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: 480-120192-1

Client Sample ID: 4009-9 — Lab Sample ID: 480-120192-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	12		1.0	0.81	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.43	J	1.0	0.16	ug/L	1		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.23	J	2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.01		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.49	J	2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	15.0		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	15.5		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	2.73		2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-10 — Lab Sample ID: 480-120192-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	4.85		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	17.9		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.30	J	2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	6.32		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	6.19		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-11 — Lab Sample ID: 480-120192-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.8		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1-Dichloroethane	3.1		1.0	0.38	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	4.8	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	76		10	3.0	ug/L	1		8260C	Total/NA
Benzene	13		1.0	0.41	ug/L	1		8260C	Total/NA
Carbon disulfide	0.76	J	1.0	0.19	ug/L	1		8260C	Total/NA
Toluene	0.80	J	1.0	0.51	ug/L	1		8260C	Total/NA
Vinyl chloride	1.4		1.0	0.90	ug/L	1		8260C	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	26.0		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.81	J	2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	2.94		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	3.83		2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-11A — Lab Sample ID: 480-120192-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.88		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

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

TestAmerica Job ID: 480-120192-1

Client Sample ID: 4009-11A (Continued) — Lab Sample ID: 480-120192-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	8.59		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	6.80		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-13 — Lab Sample ID: 480-120192-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	6.38		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	1.21	J	2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.81	J	2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-13A — Lab Sample ID: 480-120192-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	12.9		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.02		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.52		2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	5.63		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-120192-7

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-120192-1

Client Sample ID: 4009-9
Date Collected: 06/26/17 10:40
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/29/17 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*71 - 144*		*06/29/17 02:14*	*1*
4-Bromofluorobenzene	*93*		*72 - 133*		*06/29/17 02:14*	*1*

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	0.82	ug/L			07/04/17 03:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 03:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/17 03:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/04/17 03:51	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/04/17 03:51	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/04/17 03:51	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/04/17 03:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/04/17 03:51	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/04/17 03:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/04/17 03:51	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/04/17 03:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/04/17 03:51	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 03:51	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/04/17 03:51	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/04/17 03:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/04/17 03:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/04/17 03:51	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/04/17 03:51	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/04/17 03:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/04/17 03:51	1
Acetone	10	U	10	3.0	ug/L			07/04/17 03:51	1
Benzene	1.0	U	1.0	0.41	ug/L			07/04/17 03:51	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/04/17 03:51	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/04/17 03:51	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/04/17 03:51	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/04/17 03:51	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/04/17 03:51	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/04/17 03:51	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/17 03:51	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/04/17 03:51	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/04/17 03:51	1
cis-1,2-Dichloroethene	**12**		1.0	0.81	ug/L			07/04/17 03:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/04/17 03:51	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/04/17 03:51	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/04/17 03:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/04/17 03:51	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/04/17 03:51	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/04/17 03:51	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/04/17 03:51	1
Methyl tert-butyl ether	**0.43**	**J**	1.0	0.16	ug/L			07/04/17 03:51	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/04/17 03:51	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/04/17 03:51	1

Client Sample ID: 4009-9
Date Collected: 06/26/17 10:40
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.73	ug/L			07/04/17 03:51	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/04/17 03:51	1
Toluene	1.0	U	1.0	0.51	ug/L			07/04/17 03:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/04/17 03:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/04/17 03:51	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/04/17 03:51	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/04/17 03:51	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/04/17 03:51	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/04/17 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*07/04/17 03:51*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*07/04/17 03:51*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*07/04/17 03:51*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*07/04/17 03:51*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**1.23**	**J**	2.00	0.92	ng/L		07/07/17 11:27	07/08/17 17:03	1
Perfluorohexanesulfonic acid (PFHxS)	**2.01**		2.00	0.87	ng/L		07/07/17 11:27	07/08/17 17:03	1
Perfluoroheptanoic acid (PFHpA)	**1.49**	**J**	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 17:03	1
Perfluorooctanoic acid (PFOA)	**15.0**		2.00	0.75	ng/L		07/07/17 11:27	07/08/17 17:03	1
Perfluorooctanesulfonic acid (PFOS)	**15.5**		2.00	1.28	ng/L		07/07/17 11:27	07/08/17 17:03	1
Perfluorononanoic acid (PFNA)	**2.73**		2.00	0.65	ng/L		07/07/17 11:27	07/08/17 17:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*104*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:03*	*1*
13C4-PFHpA	*111*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:03*	*1*
13C4 PFOA	*89*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:03*	*1*
13C4 PFOS	*95*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:03*	*1*
13C5 PFNA	*67*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:03*	*1*

Client Sample ID: 4009-10
Date Collected: 06/26/17 10:35
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/29/17 02:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 144*		*06/29/17 02:37*	*1*
4-Bromofluorobenzene	*95*		*72 - 133*		*06/29/17 02:37*	*1*

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	0.82	ug/L			07/04/17 04:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 04:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/17 04:14	1

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

TestAmerica Job ID: 480-120192-1

Client Sample ID: 4009-10
Date Collected: 06/26/17 10:35
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/04/17 04:14	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/04/17 04:14	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/04/17 04:14	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/04/17 04:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/04/17 04:14	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/04/17 04:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/04/17 04:14	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/04/17 04:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/04/17 04:14	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 04:14	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/04/17 04:14	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/04/17 04:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/04/17 04:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/04/17 04:14	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/04/17 04:14	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/04/17 04:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/04/17 04:14	1
Acetone	10	U	10	3.0	ug/L			07/04/17 04:14	1
Benzene	1.0	U	1.0	0.41	ug/L			07/04/17 04:14	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/04/17 04:14	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/04/17 04:14	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/04/17 04:14	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/04/17 04:14	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/04/17 04:14	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/04/17 04:14	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/17 04:14	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/04/17 04:14	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/04/17 04:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/04/17 04:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/04/17 04:14	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/04/17 04:14	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/04/17 04:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/04/17 04:14	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/04/17 04:14	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/04/17 04:14	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/04/17 04:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/04/17 04:14	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/04/17 04:14	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/04/17 04:14	1
Styrene	1.0	U	1.0	0.73	ug/L			07/04/17 04:14	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/04/17 04:14	1
Toluene	1.0	U	1.0	0.51	ug/L			07/04/17 04:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/04/17 04:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/04/17 04:14	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/04/17 04:14	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/04/17 04:14	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/04/17 04:14	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/04/17 04:14	1

Client Sample ID: 4009-10

Date Collected: 06/26/17 10:35
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/04/17 04:14*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*07/04/17 04:14*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*07/04/17 04:14*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*07/04/17 04:14*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**4.85**		2.00	0.92	ng/L		07/07/17 11:27	07/08/17 17:22	1
Perfluorohexanesulfonic acid (PFHxS)	**17.9**		2.00	0.87	ng/L		07/07/17 11:27	07/08/17 17:22	1
Perfluoroheptanoic acid (PFHpA)	**1.30**	**J**	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 17:22	1
Perfluorooctanoic acid (PFOA)	**6.32**		2.00	0.75	ng/L		07/07/17 11:27	07/08/17 17:22	1
Perfluorooctanesulfonic acid (PFOS)	**6.19**		2.00	1.28	ng/L		07/07/17 11:27	07/08/17 17:22	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 17:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*102*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:22*	*1*
13C4-PFHpA	*108*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:22*	*1*
13C4 PFOA	*85*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:22*	*1*
13C4 PFOS	*89*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:22*	*1*
13C5 PFNA	*65*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:22*	*1*

Client Sample ID: 4009-11

Date Collected: 06/26/17 12:55
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		0.40	0.20	ug/L			06/29/17 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 144*		*06/29/17 03:00*	*1*
4-Bromofluorobenzene	*98*		*72 - 133*		*06/29/17 03:00*	*1*

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	0.82	ug/L			07/04/17 04:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 04:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/17 04:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/04/17 04:38	1
1,1-Dichloroethane	**3.1**		1.0	0.38	ug/L			07/04/17 04:38	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/04/17 04:38	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/04/17 04:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/04/17 04:38	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/04/17 04:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/04/17 04:38	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/04/17 04:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/04/17 04:38	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 04:38	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/04/17 04:38	1

Client Sample ID: 4009-11
Date Collected: 06/26/17 12:55
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/04/17 04:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/04/17 04:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/04/17 04:38	1
2-Butanone (MEK)	**4.8**	**J**	10	1.3	ug/L			07/04/17 04:38	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/04/17 04:38	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/04/17 04:38	1
Acetone	**76**		10	3.0	ug/L			07/04/17 04:38	1
Benzene	**13**		1.0	0.41	ug/L			07/04/17 04:38	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/04/17 04:38	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/04/17 04:38	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/04/17 04:38	1
Carbon disulfide	**0.76**	**J**	1.0	0.19	ug/L			07/04/17 04:38	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/04/17 04:38	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/04/17 04:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/17 04:38	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/04/17 04:38	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/04/17 04:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/04/17 04:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/04/17 04:38	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/04/17 04:38	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/04/17 04:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/04/17 04:38	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/04/17 04:38	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/04/17 04:38	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/04/17 04:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/04/17 04:38	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/04/17 04:38	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/04/17 04:38	1
Styrene	1.0	U	1.0	0.73	ug/L			07/04/17 04:38	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/04/17 04:38	1
Toluene	**0.80**	**J**	1.0	0.51	ug/L			07/04/17 04:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/04/17 04:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/04/17 04:38	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/04/17 04:38	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/04/17 04:38	1
Vinyl chloride	**1.4**		1.0	0.90	ug/L			07/04/17 04:38	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/04/17 04:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*07/04/17 04:38*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*07/04/17 04:38*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*07/04/17 04:38*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*07/04/17 04:38*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:27	07/08/17 17:58	1
Perfluorohexanesulfonic acid (PFHxS)	**26.0**		2.00	0.87	ng/L		07/07/17 11:27	07/08/17 17:58	1
Perfluoroheptanoic acid (PFHpA)	**0.81**	**J**	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 17:58	1

Client Sample ID: 4009-11
Date Collected: 06/26/17 12:55
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-3
Matrix: Water

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	2.94		2.00	0.75	ng/L		07/07/17 11:27	07/08/17 17:58	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:27	07/08/17 17:58	1
Perfluorononanoic acid (PFNA)	3.83		2.00	0.65	ng/L		07/07/17 11:27	07/08/17 17:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*98*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:58*	*1*
13C4-PFHpA	*108*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:58*	*1*
13C4 PFOA	*108*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:58*	*1*
13C4 PFOS	*100*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:58*	*1*
13C5 PFNA	*118*		*25 - 150*	*07/07/17 11:27*	*07/08/17 17:58*	*1*

Client Sample ID: 4009-11A
Date Collected: 06/26/17 12:40
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/29/17 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*71 - 144*		*06/29/17 03:22*	*1*
4-Bromofluorobenzene	*95*		*72 - 133*		*06/29/17 03:22*	*1*

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	0.82	ug/L			07/04/17 05:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 05:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/17 05:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/04/17 05:01	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/04/17 05:01	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/04/17 05:01	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/04/17 05:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/04/17 05:01	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/04/17 05:01	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/04/17 05:01	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/04/17 05:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/04/17 05:01	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 05:01	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/04/17 05:01	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/04/17 05:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/04/17 05:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/04/17 05:01	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/04/17 05:01	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/04/17 05:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/04/17 05:01	1
Acetone	10	U	10	3.0	ug/L			07/04/17 05:01	1
Benzene	1.0	U	1.0	0.41	ug/L			07/04/17 05:01	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/04/17 05:01	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/04/17 05:01	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/04/17 05:01	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/04/17 05:01	1

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

TestAmerica Job ID: 480-120192-1

Client Sample ID: 4009-11A
Date Collected: 06/26/17 12:40
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/04/17 05:01	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/04/17 05:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/17 05:01	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/04/17 05:01	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/04/17 05:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/04/17 05:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/04/17 05:01	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/04/17 05:01	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/04/17 05:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/04/17 05:01	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/04/17 05:01	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/04/17 05:01	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/04/17 05:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/04/17 05:01	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/04/17 05:01	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/04/17 05:01	1
Styrene	1.0	U	1.0	0.73	ug/L			07/04/17 05:01	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/04/17 05:01	1
Toluene	1.0	U	1.0	0.51	ug/L			07/04/17 05:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/04/17 05:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/04/17 05:01	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/04/17 05:01	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/04/17 05:01	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/04/17 05:01	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/04/17 05:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*07/04/17 05:01*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*07/04/17 05:01*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*07/04/17 05:01*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*07/04/17 05:01*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:27	07/08/17 18:54	1
Perfluorohexanesulfonic acid (PFHxS)	**2.88**		2.00	0.87	ng/L		07/07/17 11:27	07/08/17 18:54	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 18:54	1
Perfluorooctanoic acid (PFOA)	**8.59**		2.00	0.75	ng/L		07/07/17 11:27	07/08/17 18:54	1
Perfluorooctanesulfonic acid (PFOS)	**6.80**		2.00	1.28	ng/L		07/07/17 11:27	07/08/17 18:54	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 18:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*97*		*25 - 150*	*07/07/17 11:27*	*07/08/17 18:54*	*1*
13C4-PFHpA	*100*		*25 - 150*	*07/07/17 11:27*	*07/08/17 18:54*	*1*
13C4 PFOA	*89*		*25 - 150*	*07/07/17 11:27*	*07/08/17 18:54*	*1*
13C4 PFOS	*94*		*25 - 150*	*07/07/17 11:27*	*07/08/17 18:54*	*1*
13C5 PFNA	*75*		*25 - 150*	*07/07/17 11:27*	*07/08/17 18:54*	*1*

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

TestAmerica Job ID: 480-120192-1

Client Sample ID: 4009-13
Date Collected: 06/26/17 15:55
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/29/17 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 144*		*06/29/17 03:45*	*1*
4-Bromofluorobenzene	*98*		*72 - 133*		*06/29/17 03:45*	*1*

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	0.82	ug/L			07/04/17 05:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 05:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/17 05:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/04/17 05:24	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/04/17 05:24	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/04/17 05:24	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/04/17 05:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/04/17 05:24	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/04/17 05:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/04/17 05:24	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/04/17 05:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/04/17 05:24	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 05:24	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/04/17 05:24	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/04/17 05:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/04/17 05:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/04/17 05:24	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/04/17 05:24	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/04/17 05:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/04/17 05:24	1
Acetone	10	U	10	3.0	ug/L			07/04/17 05:24	1
Benzene	1.0	U	1.0	0.41	ug/L			07/04/17 05:24	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/04/17 05:24	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/04/17 05:24	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/04/17 05:24	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/04/17 05:24	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/04/17 05:24	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/04/17 05:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/17 05:24	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/04/17 05:24	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/04/17 05:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/04/17 05:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/04/17 05:24	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/04/17 05:24	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/04/17 05:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/04/17 05:24	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/04/17 05:24	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/04/17 05:24	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/04/17 05:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/04/17 05:24	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/04/17 05:24	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/04/17 05:24	1

Client Sample ID: 4009-13
Date Collected: 06/26/17 15:55
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.73	ug/L			07/04/17 05:24	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/04/17 05:24	1
Toluene	1.0	U	1.0	0.51	ug/L			07/04/17 05:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/04/17 05:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/04/17 05:24	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/04/17 05:24	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/04/17 05:24	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/04/17 05:24	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/04/17 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*07/04/17 05:24*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*07/04/17 05:24*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*07/04/17 05:24*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*07/04/17 05:24*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:35	07/07/17 18:43	1
Perfluorohexanesulfonic acid (PFHxS)	**6.38**		2.00	0.87	ng/L		07/07/17 11:35	07/07/17 18:43	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:35	07/07/17 18:43	1
Perfluorooctanoic acid (PFOA)	**1.21**	**J**	2.00	0.75	ng/L		07/07/17 11:35	07/07/17 18:43	1
Perfluorooctanesulfonic acid (PFOS)	**1.81**	**J**	2.00	1.28	ng/L		07/07/17 11:35	07/07/17 18:43	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:35	07/07/17 18:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*107*		*25 - 150*	*07/07/17 11:35*	*07/07/17 18:43*	*1*
13C4-PFHpA	*128*		*25 - 150*	*07/07/17 11:35*	*07/07/17 18:43*	*1*
13C4 PFOA	*107*		*25 - 150*	*07/07/17 11:35*	*07/07/17 18:43*	*1*
13C4 PFOS	*103*		*25 - 150*	*07/07/17 11:35*	*07/07/17 18:43*	*1*
13C5 PFNA	*111*		*25 - 150*	*07/07/17 11:35*	*07/07/17 18:43*	*1*

Client Sample ID: 4009-13A
Date Collected: 06/26/17 15:10
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/29/17 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*71 - 144*		*06/29/17 16:31*	*1*
4-Bromofluorobenzene	*104*		*72 - 133*		*06/29/17 16:31*	*1*

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	0.82	ug/L			07/04/17 05:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 05:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/17 05:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/04/17 05:47	1

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

TestAmerica Job ID: 480-120192-1

Client Sample ID: 4009-13A
Date Collected: 06/26/17 15:10
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/04/17 05:47	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/04/17 05:47	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/04/17 05:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/04/17 05:47	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/04/17 05:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/04/17 05:47	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/04/17 05:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/04/17 05:47	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 05:47	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/04/17 05:47	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/04/17 05:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/04/17 05:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/04/17 05:47	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/04/17 05:47	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/04/17 05:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/04/17 05:47	1
Acetone	10	U	10	3.0	ug/L			07/04/17 05:47	1
Benzene	1.0	U	1.0	0.41	ug/L			07/04/17 05:47	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/04/17 05:47	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/04/17 05:47	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/04/17 05:47	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/04/17 05:47	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/04/17 05:47	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/04/17 05:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/17 05:47	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/04/17 05:47	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/04/17 05:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/04/17 05:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/04/17 05:47	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/04/17 05:47	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/04/17 05:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/04/17 05:47	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/04/17 05:47	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/04/17 05:47	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/04/17 05:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/04/17 05:47	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/04/17 05:47	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/04/17 05:47	1
Styrene	1.0	U	1.0	0.73	ug/L			07/04/17 05:47	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/04/17 05:47	1
Toluene	1.0	U	1.0	0.51	ug/L			07/04/17 05:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/04/17 05:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/04/17 05:47	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/04/17 05:47	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/04/17 05:47	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/04/17 05:47	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/04/17 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/04/17 05:47*	*1*

Client Sample ID: 4009-13A — **Lab Sample ID: 480-120192-6**
Date Collected: 06/26/17 15:10 — **Matrix: Water**
Date Received: 06/27/17 02:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*07/04/17 05:47*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*07/04/17 05:47*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*07/04/17 05:47*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**12.9**		2.00	0.92	ng/L		07/07/17 11:31	07/08/17 04:12	1
Perfluorohexanesulfonic acid (PFHxS)	**2.02**		2.00	0.87	ng/L		07/07/17 11:31	07/08/17 04:12	1
Perfluoroheptanoic acid (PFHpA)	**2.52**		2.00	0.80	ng/L		07/07/17 11:31	07/08/17 04:12	1
Perfluorooctanoic acid (PFOA)	**5.63**		2.00	0.75	ng/L		07/07/17 11:31	07/08/17 04:12	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:31	07/08/17 04:12	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:31	07/08/17 04:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*109*		*25 - 150*	*07/07/17 11:31*	*07/08/17 04:12*	*1*
13C4-PFHpA	*120*		*25 - 150*	*07/07/17 11:31*	*07/08/17 04:12*	*1*
13C4 PFOA	*97*		*25 - 150*	*07/07/17 11:31*	*07/08/17 04:12*	*1*
13C4 PFOS	*99*		*25 - 150*	*07/07/17 11:31*	*07/08/17 04:12*	*1*
13C5 PFNA	*84*		*25 - 150*	*07/07/17 11:31*	*07/08/17 04:12*	*1*

Client Sample ID: TRIP BLANK — **Lab Sample ID: 480-120192-7**
Date Collected: 06/26/17 00:00 — **Matrix: Water**
Date Received: 06/27/17 02:00

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	0.82	ug/L			07/04/17 06:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 06:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/04/17 06:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/04/17 06:10	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/04/17 06:10	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/04/17 06:10	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/04/17 06:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/04/17 06:10	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/04/17 06:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/04/17 06:10	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/04/17 06:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/04/17 06:10	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/04/17 06:10	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/04/17 06:10	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/04/17 06:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/04/17 06:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/04/17 06:10	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/04/17 06:10	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/04/17 06:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/04/17 06:10	1
Acetone	10	U	10	3.0	ug/L			07/04/17 06:10	1
Benzene	1.0	U	1.0	0.41	ug/L			07/04/17 06:10	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/04/17 06:10	1

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

TestAmerica Job ID: 480-120192-1

Client Sample ID: TRIP BLANK
Date Collected: 06/26/17 00:00
Date Received: 06/27/17 02:00

Lab Sample ID: 480-120192-7
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	0.26	ug/L			07/04/17 06:10	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/04/17 06:10	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/04/17 06:10	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/04/17 06:10	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/04/17 06:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/04/17 06:10	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/04/17 06:10	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/04/17 06:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/04/17 06:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/04/17 06:10	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/04/17 06:10	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/04/17 06:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/04/17 06:10	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/04/17 06:10	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/04/17 06:10	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/04/17 06:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/04/17 06:10	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/04/17 06:10	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/04/17 06:10	1
Styrene	1.0	U	1.0	0.73	ug/L			07/04/17 06:10	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/04/17 06:10	1
Toluene	1.0	U	1.0	0.51	ug/L			07/04/17 06:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/04/17 06:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/04/17 06:10	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/04/17 06:10	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/04/17 06:10	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/04/17 06:10	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/04/17 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*07/04/17 06:10*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*07/04/17 06:10*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*07/04/17 06:10*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*07/04/17 06:10*	*1*

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-120192-1	4009-9	100	89	96	91
480-120192-2	4009-10	96	88	92	91
480-120192-3	4009-11	97	91	95	94
480-120192-3 MS	4009-11	98	93	96	93
480-120192-3 MSD	4009-11	100	92	90	94
480-120192-4	4009-11A	99	88	95	91
480-120192-5	4009-13	97	88	93	92
480-120192-6	4009-13A	96	86	94	90
480-120192-7	TRIP BLANK	102	88	97	92
LCS 480-365340/5	Lab Control Sample	99	91	93	92
MB 480-365340/7	Method Blank	98	90	94	91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	12DCE (71-144)	BFB (72-133)
480-120192-1	4009-9	121	93
480-120192-2	4009-10	114	95
480-120192-3	4009-11	94	98
480-120192-3 MS	4009-11	81	101
480-120192-3 MSD	4009-11	87	98
480-120192-4	4009-11A	121	95
480-120192-5	4009-13	110	98
480-120192-6	4009-13A	122	104
LCS 460-446492/4	Lab Control Sample	108	89
LCS 460-446603/3	Lab Control Sample	92	103
LCSD 460-446603/4	Lab Control Sample Dup	107	104
MB 460-446492/8	Method Blank	114	88
MB 460-446603/7	Method Blank	106	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene

Isotope Dilution Summary

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

TestAmerica Job ID: 480-120192-1

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		18O2 PFHxS	13C4-PFHpA	13C4 PFOA	13C4 PFOS	13C5 PFNA			
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)			
480-120192-1	4009-9	104	111	89	95	67			
480-120192-2	4009-10	102	108	85	89	65			
480-120192-3	4009-11	98	108	108	100	118			
480-120192-3 MS	4009-11	96	105	101	98	114			
480-120192-3 MSD	4009-11	100	109	102	99	119			
480-120192-4	4009-11A	97	100	89	94	75			
480-120192-5	4009-13	107	128	107	103	111			
480-120192-6	4009-13A	109	120	97	99	84			
LCS 320-172951/2-A	Lab Control Sample	107	116	96	99	85			
LCS 320-172953/2-A	Lab Control Sample	100	105	88	89	77			
LCS 320-172961/2-A	Lab Control Sample	110	114	87	97	69			
LCSD 320-172953/3-A	Lab Control Sample Dup	103	110	93	95	81			
LCSD 320-172961/3-A	Lab Control Sample Dup	107	110	87	95	68			
MB 320-172951/1-A	Method Blank	104	115	99	104	86			
MB 320-172953/1-A	Method Blank	104	112	94	97	81			
MB 320-172961/1-A	Method Blank	111	121	88	92	66			

Surrogate Legend

18O2 PFHxS = 18O2 PFHxS
13C4-PFHpA = 13C4-PFHpA
13C4 PFOA = 13C4 PFOA
13C4 PFOS = 13C4 PFOS
13C5 PFNA = 13C5 PFNA

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

Lab Sample ID: MB 480-365340/7
Matrix: Water
Analysis Batch: 365340

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	0.82	ug/L			07/03/17 22:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 22:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/03/17 22:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/03/17 22:49	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/03/17 22:49	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/03/17 22:49	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/03/17 22:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/03/17 22:49	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/03/17 22:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/03/17 22:49	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/03/17 22:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/03/17 22:49	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/03/17 22:49	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/03/17 22:49	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/03/17 22:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/03/17 22:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/03/17 22:49	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/03/17 22:49	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/03/17 22:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/03/17 22:49	1
Acetone	10	U	10	3.0	ug/L			07/03/17 22:49	1
Benzene	1.0	U	1.0	0.41	ug/L			07/03/17 22:49	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/03/17 22:49	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/03/17 22:49	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/03/17 22:49	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/03/17 22:49	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/03/17 22:49	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/03/17 22:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/03/17 22:49	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/03/17 22:49	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/03/17 22:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/03/17 22:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/03/17 22:49	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/03/17 22:49	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/03/17 22:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/03/17 22:49	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/03/17 22:49	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/03/17 22:49	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/03/17 22:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/03/17 22:49	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/03/17 22:49	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/03/17 22:49	1
Styrene	1.0	U	1.0	0.73	ug/L			07/03/17 22:49	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/03/17 22:49	1
Toluene	1.0	U	1.0	0.51	ug/L			07/03/17 22:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/03/17 22:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/03/17 22:49	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/03/17 22:49	1

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

Lab Sample ID: MB 480-365340/7
Matrix: Water
Analysis Batch: 365340

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/03/17 22:49	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/03/17 22:49	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/03/17 22:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*07/03/17 22:49*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*07/03/17 22:49*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*07/03/17 22:49*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*07/03/17 22:49*	*1*

Lab Sample ID: LCS 480-365340/5
Matrix: Water
Analysis Batch: 365340

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	25.0	22.5		ug/L		90	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	20.3		ug/L		81	61 - 148
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	76 - 122
1,1-Dichloroethane	25.0	23.0		ug/L		92	77 - 120
1,1-Dichloroethene	25.0	20.2		ug/L		81	66 - 127
1,2,3-Trimethylbenzene	25.0	24.4		ug/L		98	78 - 120
1,2,4-Trichlorobenzene	25.0	26.2		ug/L		105	79 - 122
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	24.8		ug/L		99	56 - 134
1,2-Dibromoethane	25.0	24.2		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	23.8		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	24.0		ug/L		96	76 - 120
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	77 - 121
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 120
2-Butanone (MEK)	125	133		ug/L		107	57 - 140
2-Hexanone	125	131		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125
Acetone	125	124		ug/L		99	56 - 142
Benzene	25.0	22.3		ug/L		89	71 - 124
Bromodichloromethane	25.0	24.6		ug/L		99	80 - 122
Bromoform	25.0	24.6		ug/L		98	61 - 132
Bromomethane	25.0	18.0		ug/L		72	55 - 144
Carbon disulfide	25.0	20.0		ug/L		80	59 - 134
Carbon tetrachloride	25.0	20.9		ug/L		84	72 - 134
Chlorobenzene	25.0	22.5		ug/L		90	80 - 120
Chloroethane	25.0	21.3		ug/L		85	69 - 136
Chloroform	25.0	22.9		ug/L		92	73 - 127
Chloromethane	25.0	20.3		ug/L		81	68 - 124
cis-1,2-Dichloroethene	25.0	22.5		ug/L		90	74 - 124

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

Lab Sample ID: LCS 480-365340/5
Matrix: Water
Analysis Batch: 365340

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	27.2		ug/L		109	74 - 124
Cyclohexane	25.0	20.3		ug/L		81	59 - 135
Dibromochloromethane	25.0	25.7		ug/L		103	75 - 125
Dichlorodifluoromethane	25.0	19.9		ug/L		79	59 - 135
Ethylbenzene	25.0	22.7		ug/L		91	77 - 123
Isopropylbenzene	25.0	23.7		ug/L		95	77 - 122
Methyl acetate	125	130		ug/L		104	74 - 133
Methyl tert-butyl ether	25.0	24.3		ug/L		97	77 - 120
Methylcyclohexane	25.0	20.5		ug/L		82	68 - 134
Methylene Chloride	25.0	20.9		ug/L		84	75 - 124
Styrene	25.0	23.7		ug/L		95	80 - 120
Tetrachloroethene	25.0	22.4		ug/L		89	74 - 122
Toluene	25.0	22.5		ug/L		90	80 - 122
trans-1,2-Dichloroethene	25.0	20.7		ug/L		83	73 - 127
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	80 - 120
Trichloroethene	25.0	21.8		ug/L		87	74 - 123
Trichlorofluoromethane	25.0	20.1		ug/L		80	62 - 150
Vinyl chloride	25.0	20.3		ug/L		81	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*
Dibromofluoromethane (Surr)	*93*		*75 - 123*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: 480-120192-3 MS
Matrix: Water
Analysis Batch: 365340

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	1.0	U	25.0	25.5		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	1.0	U	25.0	25.4		ug/L		102	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	25.0	21.0		ug/L		84	61 - 148
1,1,2-Trichloroethane	1.0	U	25.0	23.5		ug/L		94	76 - 122
1,1-Dichloroethane	3.1		25.0	26.3		ug/L		93	77 - 120
1,1-Dichloroethene	1.0	U	25.0	22.2		ug/L		89	66 - 127
1,2,3-Trimethylbenzene	1.0	U	25.0	25.2		ug/L		101	78 - 120
1,2,4-Trichlorobenzene	1.0	U	25.0	24.3		ug/L		97	79 - 122
1,2,4-Trimethylbenzene	1.0	U	25.0	24.4		ug/L		97	76 - 121
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	26.7		ug/L		107	56 - 134
1,2-Dibromoethane	1.0	U	25.0	23.2		ug/L		93	77 - 120
1,2-Dichlorobenzene	1.0	U	25.0	24.3		ug/L		97	80 - 124
1,2-Dichloroethane	1.0	U	25.0	22.5		ug/L		90	75 - 120
1,2-Dichloropropane	1.0	U	25.0	23.8		ug/L		95	76 - 120
1,3,5-Trimethylbenzene	1.0	U	25.0	24.5		ug/L		98	77 - 121
1,3-Dichlorobenzene	1.0	U	25.0	23.7		ug/L		95	77 - 120
1,4-Dichlorobenzene	1.0	U	25.0	23.1		ug/L		93	78 - 124

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

Lab Sample ID: 480-120192-3 MS
Matrix: Water
Analysis Batch: 365340

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
2-Butanone (MEK)	4.8	J	125	255	*	ug/L		200	57 - 140
2-Hexanone	5.0	U	125	142		ug/L		113	65 - 127
4-Methyl-2-pentanone (MIBK)	5.0	U	125	144		ug/L		115	71 - 125
Acetone	76		125	202		ug/L		101	56 - 142
Benzene	13		25.0	33.5		ug/L		84	71 - 124
Bromodichloromethane	1.0	U	25.0	23.9		ug/L		96	80 - 122
Bromoform	1.0	U	25.0	21.8		ug/L		87	61 - 132
Bromomethane	1.0	U	25.0	20.3		ug/L		81	55 - 144
Carbon disulfide	0.76	J	25.0	24.2		ug/L		94	59 - 134
Carbon tetrachloride	1.0	U	25.0	19.5		ug/L		78	72 - 134
Chlorobenzene	1.0	U	25.0	22.2		ug/L		89	80 - 120
Chloroethane	1.0	U	25.0	27.9		ug/L		112	69 - 136
Chloroform	1.0	U	25.0	23.1		ug/L		93	73 - 127
Chloromethane	1.0	U	25.0	20.0		ug/L		80	68 - 124
cis-1,2-Dichloroethene	1.0	U	25.0	23.0		ug/L		92	74 - 124
cis-1,3-Dichloropropene	1.0	U	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	1.0	U	25.0	21.7		ug/L		87	59 - 135
Dibromochloromethane	1.0	U	25.0	23.8		ug/L		95	75 - 125
Dichlorodifluoromethane	1.0	U	25.0	23.1		ug/L		92	59 - 135
Ethylbenzene	1.0	U	25.0	22.7		ug/L		91	77 - 123
Isopropylbenzene	1.0	U	25.0	23.9		ug/L		95	77 - 122
Methyl acetate	2.5	U	125	147		ug/L		117	74 - 133
Methyl tert-butyl ether	1.0	U	25.0	23.3		ug/L		93	77 - 120
Methylcyclohexane	1.0	U	25.0	22.5		ug/L		90	68 - 134
Methylene Chloride	1.0	U	25.0	21.6		ug/L		86	75 - 124
Styrene	1.0	U	25.0	23.2		ug/L		93	80 - 120
Tetrachloroethene	1.0	U	25.0	21.9		ug/L		88	74 - 122
Toluene	0.80	J	25.0	23.4		ug/L		91	80 - 122
trans-1,2-Dichloroethene	1.0	U	25.0	22.0		ug/L		88	73 - 127
trans-1,3-Dichloropropene	1.0	U	25.0	22.9		ug/L		92	80 - 120
Trichloroethene	1.0	U	25.0	23.2		ug/L		93	74 - 123
Trichlorofluoromethane	1.0	U	25.0	24.0		ug/L		96	62 - 150
Vinyl chloride	1.4		25.0	24.9		ug/L		94	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*
Toluene-d8 (Surr)	*93*		*80 - 120*

Lab Sample ID: 480-120192-3 MSD
Matrix: Water
Analysis Batch: 365340

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	1.0	U	25.0	24.2		ug/L		97	73 - 126	5	15
1,1,2,2-Tetrachloroethane	1.0	U	25.0	24.8		ug/L		99	76 - 120	3	15

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

Lab Sample ID: 480-120192-3 MSD
Matrix: Water
Analysis Batch: 365340

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
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	25.0	19.7		ug/L		79	61 - 148	6	20
1,1,2-Trichloroethane	1.0	U	25.0	22.9		ug/L		92	76 - 122	3	15
1,1-Dichloroethane	3.1		25.0	25.0		ug/L		88	77 - 120	5	20
1,1-Dichloroethene	1.0	U	25.0	19.3		ug/L		77	66 - 127	14	16
1,2,3-Trimethylbenzene	1.0	U	25.0	24.5		ug/L		98	78 - 120	3	20
1,2,4-Trichlorobenzene	1.0	U	25.0	24.7		ug/L		99	79 - 122	2	20
1,2,4-Trimethylbenzene	1.0	U	25.0	24.4		ug/L		98	76 - 121	0	20
1,2-Dibromo-3-Chloropropane	1.0	U	25.0	28.8		ug/L		115	56 - 134	8	15
1,2-Dibromoethane	1.0	U	25.0	23.7		ug/L		95	77 - 120	2	15
1,2-Dichlorobenzene	1.0	U	25.0	23.1		ug/L		92	80 - 124	5	20
1,2-Dichloroethane	1.0	U	25.0	21.8		ug/L		87	75 - 120	3	20
1,2-Dichloropropane	1.0	U	25.0	21.7		ug/L		87	76 - 120	9	20
1,3,5-Trimethylbenzene	1.0	U	25.0	24.3		ug/L		97	77 - 121	1	20
1,3-Dichlorobenzene	1.0	U	25.0	22.8		ug/L		91	77 - 120	4	20
1,4-Dichlorobenzene	1.0	U	25.0	22.4		ug/L		89	78 - 124	3	20
2-Butanone (MEK)	4.8	J	125	247	*	ug/L		193	57 - 140	3	20
2-Hexanone	5.0	U	125	143		ug/L		115	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	5.0	U	125	145		ug/L		116	71 - 125	1	35
Acetone	76		125	192		ug/L		93	56 - 142	5	15
Benzene	13		25.0	32.2		ug/L		78	71 - 124	4	13
Bromodichloromethane	1.0	U	25.0	22.4		ug/L		90	80 - 122	7	15
Bromoform	1.0	U	25.0	23.0		ug/L		92	61 - 132	6	15
Bromomethane	1.0	U	25.0	21.6		ug/L		86	55 - 144	7	15
Carbon disulfide	0.76	J	25.0	22.5		ug/L		87	59 - 134	7	15
Carbon tetrachloride	1.0	U	25.0	18.9		ug/L		76	72 - 134	3	15
Chlorobenzene	1.0	U	25.0	22.6		ug/L		90	80 - 120	2	25
Chloroethane	1.0	U	25.0	25.3		ug/L		101	69 - 136	10	15
Chloroform	1.0	U	25.0	22.1		ug/L		88	73 - 127	5	20
Chloromethane	1.0	U	25.0	19.1		ug/L		76	68 - 124	5	15
cis-1,2-Dichloroethene	1.0	U	25.0	21.9		ug/L		88	74 - 124	5	15
cis-1,3-Dichloropropene	1.0	U	25.0	22.7		ug/L		91	74 - 124	7	15
Cyclohexane	1.0	U	25.0	20.2		ug/L		81	59 - 135	7	20
Dibromochloromethane	1.0	U	25.0	24.0		ug/L		96	75 - 125	1	15
Dichlorodifluoromethane	1.0	U	25.0	21.8		ug/L		87	59 - 135	6	20
Ethylbenzene	1.0	U	25.0	22.7		ug/L		91	77 - 123	0	15
Isopropylbenzene	1.0	U	25.0	23.5		ug/L		94	77 - 122	1	20
Methyl acetate	2.5	U	125	141		ug/L		113	74 - 133	4	20
Methyl tert-butyl ether	1.0	U	25.0	22.1		ug/L		88	77 - 120	5	37
Methylcyclohexane	1.0	U	25.0	21.0		ug/L		84	68 - 134	7	20
Methylene Chloride	1.0	U	25.0	20.2		ug/L		81	75 - 124	6	15
Styrene	1.0	U	25.0	22.8		ug/L		91	80 - 120	2	20
Tetrachloroethene	1.0	U	25.0	21.0		ug/L		84	74 - 122	4	20
Toluene	0.80	J	25.0	23.2		ug/L		90	80 - 122	1	15
trans-1,2-Dichloroethene	1.0	U	25.0	20.6		ug/L		82	73 - 127	7	20
trans-1,3-Dichloropropene	1.0	U	25.0	22.3		ug/L		89	80 - 120	3	15
Trichloroethene	1.0	U	25.0	22.1		ug/L		89	74 - 123	5	16
Trichlorofluoromethane	1.0	U	25.0	22.2		ug/L		89	62 - 150	8	20

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

Lab Sample ID: 480-120192-3 MSD
Matrix: Water
Analysis Batch: 365340

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	1.4		25.0	24.4		ug/L		92	65 - 133	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*90*		*75 - 123*
Toluene-d8 (Surr)	*94*		*80 - 120*

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

Lab Sample ID: MB 460-446492/8
Matrix: Water
Analysis Batch: 446492

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/28/17 21:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 144*		*06/28/17 21:41*	*1*
4-Bromofluorobenzene	*88*		*72 - 133*		*06/28/17 21:41*	*1*

Lab Sample ID: LCS 460-446492/4
Matrix: Water
Analysis Batch: 446492

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	5.05		ug/L		101	66 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 144*
4-Bromofluorobenzene	*89*		*72 - 133*

Lab Sample ID: 480-120192-3 MS
Matrix: Water
Analysis Batch: 446492

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		
1,4-Dioxane	3.8		5.00	9.08		ug/L		105	66 - 135		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*71 - 144*
4-Bromofluorobenzene	*101*		*72 - 133*

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

Lab Sample ID: 480-120192-3 MSD — **Client Sample ID: 4009-11**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 446492

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	3.8		5.00	8.85		ug/L		101	66 - 135	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*71 - 144*
4-Bromofluorobenzene	*98*		*72 - 133*

Lab Sample ID: MB 460-446603/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 446603

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			06/29/17 09:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 144*		*06/29/17 09:41*	*1*
4-Bromofluorobenzene	*98*		*72 - 133*		*06/29/17 09:41*	*1*

Lab Sample ID: LCS 460-446603/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 446603

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	5.48		ug/L		110	66 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*71 - 144*
4-Bromofluorobenzene	*103*		*72 - 133*

Lab Sample ID: LCSD 460-446603/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 446603

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	5.00	5.15		ug/L		103	66 - 135	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 144*
4-Bromofluorobenzene	*104*		*72 - 133*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Lab Sample ID: MB 320-172951/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173148 — **Prep Batch: 172951**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:27	07/08/17 11:14	1

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-172951/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173148 — **Prep Batch: 172951**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 11:14	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*104*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*
13C4-PFHpA	*115*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*
13C4 PFOA	*99*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*
13C4 PFOS	*104*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*
13C5 PFNA	*86*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*

Lab Sample ID: LCS 320-172951/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173148 — **Prep Batch: 172951**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	20.71		ng/L		117	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	19.25		ng/L		106	73 - 157
Perfluoroheptanoic acid (PFHpA)	20.0	21.85		ng/L		109	71 - 138
Perfluorooctanoic acid (PFOA)	20.0	21.83		ng/L		109	70 - 140
Perfluorooctanesulfonic acid (PFOS)	18.6	19.56		ng/L		105	69 - 144
Perfluorononanoic acid (PFNA)	20.0	21.75		ng/L		109	73 - 147

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*107*		*25 - 150*
13C4-PFHpA	*116*		*25 - 150*
13C4 PFOA	*96*		*25 - 150*
13C4 PFOS	*99*		*25 - 150*
13C5 PFNA	*85*		*25 - 150*

Lab Sample ID: 480-120192-3 MS — **Client Sample ID: 4009-11**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173148 — **Prep Batch: 172951**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	2.00	U	15.0	18.34		ng/L		123	55 - 147
Perfluorohexanesulfonic acid (PFHxS)	26.0		15.4	58.88	*	ng/L		213	58 - 138
Perfluoroheptanoic acid (PFHpA)	0.81	J	16.9	21.45		ng/L		122	63 - 135
Perfluorooctanoic acid (PFOA)	2.94		16.9	22.04		ng/L		113	63 - 141
Perfluorooctanesulfonic acid (PFOS)	2.00	U	15.7	21.90		ng/L		139	47 - 162
Perfluorononanoic acid (PFNA)	3.83		16.9	23.75		ng/L		118	71 - 140

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
18O2 PFHxS	96		25 - 150
13C4-PFHpA	105		25 - 150
13C4 PFOA	101		25 - 150
13C4 PFOS	98		25 - 150
13C5 PFNA	114		25 - 150

Lab Sample ID: 480-120192-3 MSD — **Client Sample ID: 4009-11**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173148 — **Prep Batch: 172951**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)	2.00	U	14.9	17.44		ng/L		117	55 - 147	5	30
Perfluorohexanesulfonic acid (PFHxS)	26.0		15.3	40.03	*	ng/L		92	58 - 138	38	30
Perfluoroheptanoic acid (PFHpA)	0.81	J	16.8	21.49		ng/L		123	63 - 135	0	30
Perfluorooctanoic acid (PFOA)	2.94		16.8	21.18		ng/L		108	63 - 141	4	30
Perfluorooctanesulfonic acid (PFOS)	2.00	U	15.6	20.11		ng/L		129	47 - 162	9	30
Perfluorononanoic acid (PFNA)	3.83		16.8	23.57		ng/L		117	71 - 140	1	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
18O2 PFHxS	100		25 - 150
13C4-PFHpA	109		25 - 150
13C4 PFOA	102		25 - 150
13C4 PFOS	99		25 - 150
13C5 PFNA	119		25 - 150

Lab Sample ID: MB 320-172953/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173148 — **Prep Batch: 172953**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:31	07/08/17 03:17	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/07/17 11:31	07/08/17 03:17	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:31	07/08/17 03:17	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/07/17 11:31	07/08/17 03:17	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:31	07/08/17 03:17	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:31	07/08/17 03:17	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	104		25 - 150	07/07/17 11:31	07/08/17 03:17	1
13C4-PFHpA	112		25 - 150	07/07/17 11:31	07/08/17 03:17	1
13C4 PFOA	94		25 - 150	07/07/17 11:31	07/08/17 03:17	1
13C4 PFOS	97		25 - 150	07/07/17 11:31	07/08/17 03:17	1
13C5 PFNA	81		25 - 150	07/07/17 11:31	07/08/17 03:17	1

Lab Sample ID: LCS 320-172953/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173148 — **Prep Batch: 172953**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	20.85		ng/L		118	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	19.83		ng/L		109	73 - 157

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-172953/2-A
Matrix: Water
Analysis Batch: 173148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172953

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA)	20.0	23.93		ng/L		120	71 - 138
Perfluorooctanoic acid (PFOA)	20.0	22.37		ng/L		112	70 - 140
Perfluorooctanesulfonic acid (PFOS)	18.6	20.07		ng/L		108	69 - 144
Perfluorononanoic acid (PFNA)	20.0	22.77		ng/L		114	73 - 147

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*100*		*25 - 150*
13C4-PFHpA	*105*		*25 - 150*
13C4 PFOA	*88*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
13C5 PFNA	*77*		*25 - 150*

Lab Sample ID: LCSD 320-172953/3-A
Matrix: Water
Analysis Batch: 173148

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172953

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)	17.7	19.73		ng/L		112	72 - 151	6	30
Perfluorohexanesulfonic acid (PFHxS)	18.2	18.44		ng/L		101	73 - 157	7	30
Perfluoroheptanoic acid (PFHpA)	20.0	21.55		ng/L		108	71 - 138	10	30
Perfluorooctanoic acid (PFOA)	20.0	21.23		ng/L		106	70 - 140	5	30
Perfluorooctanesulfonic acid (PFOS)	18.6	18.39		ng/L		99	69 - 144	9	30
Perfluorononanoic acid (PFNA)	20.0	22.15		ng/L		111	73 - 147	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
18O2 PFHxS	*103*		*25 - 150*
13C4-PFHpA	*110*		*25 - 150*
13C4 PFOA	*93*		*25 - 150*
13C4 PFOS	*95*		*25 - 150*
13C5 PFNA	*81*		*25 - 150*

Lab Sample ID: MB 320-172961/1-A
Matrix: Water
Analysis Batch: 173090

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:35	07/07/17 17:29	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/07/17 11:35	07/07/17 17:29	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:35	07/07/17 17:29	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/07/17 11:35	07/07/17 17:29	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:35	07/07/17 17:29	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:35	07/07/17 17:29	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*111*		*25 - 150*	*07/07/17 11:35*	*07/07/17 17:29*	*1*
13C4-PFHpA	*121*		*25 - 150*	*07/07/17 11:35*	*07/07/17 17:29*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-172961/1-A
Matrix: Water
Analysis Batch: 173090

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172961

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	88		25 - 150	07/07/17 11:35	07/07/17 17:29	1
13C4 PFOS	92		25 - 150	07/07/17 11:35	07/07/17 17:29	1
13C5 PFNA	66		25 - 150	07/07/17 11:35	07/07/17 17:29	1

Lab Sample ID: LCS 320-172961/2-A
Matrix: Water
Analysis Batch: 173090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	21.69		ng/L		123	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	18.82		ng/L		103	73 - 157
Perfluoroheptanoic acid (PFHpA)	20.0	21.88		ng/L		109	71 - 138
Perfluorooctanoic acid (PFOA)	20.0	21.38		ng/L		107	70 - 140
Perfluorooctanesulfonic acid (PFOS)	18.6	18.68		ng/L		101	69 - 144
Perfluorononanoic acid (PFNA)	20.0	21.20		ng/L		106	73 - 147

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
18O2 PFHxS	110		25 - 150
13C4-PFHpA	114		25 - 150
13C4 PFOA	87		25 - 150
13C4 PFOS	97		25 - 150
13C5 PFNA	69		25 - 150

Lab Sample ID: LCSD 320-172961/3-A
Matrix: Water
Analysis Batch: 173090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172961

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)	17.7	22.76		ng/L		129	72 - 151	5	30
Perfluorohexanesulfonic acid (PFHxS)	18.2	20.00		ng/L		110	73 - 157	6	30
Perfluoroheptanoic acid (PFHpA)	20.0	23.78		ng/L		119	71 - 138	8	30
Perfluorooctanoic acid (PFOA)	20.0	22.59		ng/L		113	70 - 140	5	30
Perfluorooctanesulfonic acid (PFOS)	18.6	19.88		ng/L		107	69 - 144	6	30
Perfluorononanoic acid (PFNA)	20.0	22.38		ng/L		112	73 - 147	5	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
18O2 PFHxS	107		25 - 150
13C4-PFHpA	110		25 - 150
13C4 PFOA	87		25 - 150
13C4 PFOS	95		25 - 150
13C5 PFNA	68		25 - 150

GC/MS VOA

Analysis Batch: 365340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120192-1	4009-9	Total/NA	Water	8260C	
480-120192-2	4009-10	Total/NA	Water	8260C	
480-120192-3	4009-11	Total/NA	Water	8260C	
480-120192-4	4009-11A	Total/NA	Water	8260C	
480-120192-5	4009-13	Total/NA	Water	8260C	
480-120192-6	4009-13A	Total/NA	Water	8260C	
480-120192-7	TRIP BLANK	Total/NA	Water	8260C	
MB 480-365340/7	Method Blank	Total/NA	Water	8260C	
LCS 480-365340/5	Lab Control Sample	Total/NA	Water	8260C	
480-120192-3 MS	4009-11	Total/NA	Water	8260C	
480-120192-3 MSD	4009-11	Total/NA	Water	8260C	

Analysis Batch: 446492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120192-1	4009-9	Total/NA	Water	8260C SIM	
480-120192-2	4009-10	Total/NA	Water	8260C SIM	
480-120192-3	4009-11	Total/NA	Water	8260C SIM	
480-120192-4	4009-11A	Total/NA	Water	8260C SIM	
480-120192-5	4009-13	Total/NA	Water	8260C SIM	
MB 460-446492/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-446492/4	Lab Control Sample	Total/NA	Water	8260C SIM	
480-120192-3 MS	4009-11	Total/NA	Water	8260C SIM	
480-120192-3 MSD	4009-11	Total/NA	Water	8260C SIM	

Analysis Batch: 446603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120192-6	4009-13A	Total/NA	Water	8260C SIM	
MB 460-446603/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-446603/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-446603/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

LCMS

Prep Batch: 172951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120192-1	4009-9	Total/NA	Water	PFAS Prep	
480-120192-2	4009-10	Total/NA	Water	PFAS Prep	
480-120192-3	4009-11	Total/NA	Water	PFAS Prep	
480-120192-4	4009-11A	Total/NA	Water	PFAS Prep	
MB 320-172951/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-172951/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
480-120192-3 MS	4009-11	Total/NA	Water	PFAS Prep	
480-120192-3 MSD	4009-11	Total/NA	Water	PFAS Prep	

Prep Batch: 172953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120192-6	4009-13A	Total/NA	Water	PFAS Prep	
MB 320-172953/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-172953/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
LCSD 320-172953/3-A	Lab Control Sample Dup	Total/NA	Water	PFAS Prep	

LCMS (Continued)

Prep Batch: 172961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120192-5	4009-13	Total/NA	Water	PFAS Prep	
MB 320-172961/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-172961/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	
LCSD 320-172961/3-A	Lab Control Sample Dup	Total/NA	Water	PFAS Prep	

Analysis Batch: 173090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120192-5	4009-13	Total/NA	Water	WS-LC-0025 At1	172961
MB 320-172961/1-A	Method Blank	Total/NA	Water	WS-LC-0025 At1	172961
LCS 320-172961/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 At1	172961
LCSD 320-172961/3-A	Lab Control Sample Dup	Total/NA	Water	WS-LC-0025 At1	172961

Analysis Batch: 173148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120192-1	4009-9	Total/NA	Water	WS-LC-0025 At1	172951
480-120192-2	4009-10	Total/NA	Water	WS-LC-0025 At1	172951
480-120192-3	4009-11	Total/NA	Water	WS-LC-0025 At1	172951
480-120192-4	4009-11A	Total/NA	Water	WS-LC-0025 At1	172951
480-120192-6	4009-13A	Total/NA	Water	WS-LC-0025 At1	172953
MB 320-172951/1-A	Method Blank	Total/NA	Water	WS-LC-0025 At1	172951
MB 320-172953/1-A	Method Blank	Total/NA	Water	WS-LC-0025 At1	172953
LCS 320-172951/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 At1	172951
LCS 320-172953/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 At1	172953
LCSD 320-172953/3-A	Lab Control Sample Dup	Total/NA	Water	WS-LC-0025 At1	172953
480-120192-3 MS	4009-11	Total/NA	Water	WS-LC-0025 At1	172951
480-120192-3 MSD	4009-11	Total/NA	Water	WS-LC-0025 At1	172951

Lab Chronicle

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

TestAmerica Job ID: 480-120192-1

Client Sample ID: 4009-9

Lab Sample ID: 480-120192-1

Date Collected: 06/26/17 10:40

Matrix: Water

Date Received: 06/27/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365340	07/04/17 03:51	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	446492	06/29/17 02:14	DAS	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 17:03	SER	TAL SAC

Client Sample ID: 4009-10

Lab Sample ID: 480-120192-2

Date Collected: 06/26/17 10:35

Matrix: Water

Date Received: 06/27/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365340	07/04/17 04:14	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	446492	06/29/17 02:37	DAS	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 17:22	SER	TAL SAC

Client Sample ID: 4009-11

Lab Sample ID: 480-120192-3

Date Collected: 06/26/17 12:55

Matrix: Water

Date Received: 06/27/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365340	07/04/17 04:38	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	446492	06/29/17 03:00	DAS	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 17:58	SER	TAL SAC

Client Sample ID: 4009-11A

Lab Sample ID: 480-120192-4

Date Collected: 06/26/17 12:40

Matrix: Water

Date Received: 06/27/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365340	07/04/17 05:01	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	446492	06/29/17 03:22	DAS	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 18:54	SER	TAL SAC

Client Sample ID: 4009-13

Lab Sample ID: 480-120192-5

Date Collected: 06/26/17 15:55

Matrix: Water

Date Received: 06/27/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365340	07/04/17 05:24	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	446492	06/29/17 03:45	DAS	TAL EDI

Lab Chronicle

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

TestAmerica Job ID: 480-120192-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			172961	07/07/17 11:35	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173090	07/07/17 18:43	SER	TAL SAC

Client Sample ID: 4009-13A

Lab Sample ID: 480-120192-6

Date Collected: 06/26/17 15:10

Matrix: Water

Date Received: 06/27/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365340	07/04/17 05:47	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	446603	06/29/17 16:31	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			172953	07/07/17 11:31	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 04:12	SER	TAL SAC

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-120192-7

Date Collected: 06/26/17 00:00

Matrix: Water

Date Received: 06/27/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365340	07/04/17 06:10	NEA	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-120192-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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 Edison

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-18

Laboratory: TestAmerica Sacramento

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	11666	04-01-18

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

Analysis Method	Prep Method	Matrix	Analyte
WS-LC-0025 At1	PFAS Prep	Water	Perfluorobutanesulfonic acid (PFBS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluoroheptanoic acid (PFHpA)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorohexanesulfonic acid (PFHxS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorononanoic acid (PFNA)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorooctanesulfonic acid (PFOS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorooctanoic acid (PFOA)

Method Summary

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

TestAmerica Job ID: 480-120192-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
WS-LC-0025 At1	Perfluorinated Alkyl Substances	TAL-SAC	TAL SAC

Protocol References:

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

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

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

TestAmerica Job ID: 480-120192-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-120192-1	4009-9	Water	06/26/17 10:40	06/27/17 02:00
480-120192-2	4009-10	Water	06/26/17 10:35	06/27/17 02:00
480-120192-3	4009-11	Water	06/26/17 12:55	06/27/17 02:00
480-120192-4	4009-11A	Water	06/26/17 12:40	06/27/17 02:00
480-120192-5	4009-13	Water	06/26/17 15:55	06/27/17 02:00
480-120192-6	4009-13A	Water	06/26/17 15:10	06/27/17 02:00
480-120192-7	TRIP BLANK	Water	06/26/17 00:00	06/27/17 02:00

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-120192 COC

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/26/17	277808
Address: 855 Route 146 Suite 210	Telephone Number (Area Code)/Fax Number: 518-250-7300	Lab Number	Page 1 of 1
City: Clifton Park / State: NY / Zip Code: 12065	Site Contact: Aubrey Thomas	Lab Contact: Judy Stone	
Project Name and Location (State): NYSDEC Stanley Vestal (NY)	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: Contract D007618 Project 002606401.0002			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260C - (MOD) TCL List WQA	PFAs - DI - PFAs (UCMR Lst (6))	8260C - SIM 1,4-Dioxane	Special Instructions/ Conditions of Receipt
4009-9	6/26/17	1040		X			2			5			3	2	2	
4009-10		1035		X			2			5			3	2	2	
4009-11		1255		X			6			15			9	6	6	(MS/MSD)
4009-11A		1240		X			2			5			3	2	2	
4009-13		1555		X			2			5			3	2	2	
4009-13A		1510		X			2			5			3	2	2	
Trip Blank	—	—		X						2			2			

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Suzie Ellsworth	6/26/17	1817	SIR	6/26/17	1817
2.				TRD	6-27-17	0200
3.						

Comments

1.0 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/26/17	277808
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300		
City / **State** / **Zip Code**	**Site Contact** / **Lab Contact**		
Clifton Park / NY / 12065	Aubrey Thomas / Judy Stone		
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC Stanley Vestal (NY)			
Contract/Purchase Order/Quote No.			
Contract D007618 Project 0026d0401.0000			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	8260C - (MOD) TCL List VOA	PFAS - DI - PFAS (UCMR List (6))	8260C - SIM 1,4-Dioxane	Special Instructions/ Conditions of Receipt
4009-9	6/26/17	1040		X			2			5			3	2	2	
4009-10		1035		X			2			5			3	2	2	
4009-11		1255		X			6			15			9	6	6	(MS/MSD)
4009-11A		1240		X			2			5			3	2	2	
4009-13		1555		X			2			5			3	2	2	
4009-13A	↓	1510		X			2			5			3	2	2	
Trip Blank	—	—		X						2			2			

480-120192 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time
1. Relinquished By: Suzie Ellsworth	6/26/17	1817
1. Received By: SRB	6/26/17	1817
2. Relinquished By:		
2. Received By: TAMS 1.2°C	6/27/17	900
3. Relinquished By:		
3. Received By:		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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

7/12/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-35726.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-120192-1
Address: 777 New Durham Road,	Due Date Requested: 7/10/2017			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
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 - 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_SIM/5030C (MOD) Volatile SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
4009-9 (480-120192-1)	6/26/17	10:40 Eastern		Water			X	2	
4009-10 (480-120192-2)	6/26/17	10:35 Eastern		Water			X	2	
4009-11 (480-120192-3)	6/26/17	12:55 Eastern		Water			X	2	
4009-11 (480-120192-3MS)	6/26/17	12:55 Eastern	MS	Water			X	2	
4009-11 (480-120192-3MSD)	6/26/17	12:55 Eastern	MSD	Water			X	2	
4009-11A (480-120192-4)	6/26/17	12:40 Eastern		Water			X	2	
4009-13 (480-120192-5)	6/26/17	15:55 Eastern		Water			X	2	
4009-13A (480-120192-6)	6/26/17	15:10 Eastern		Water			X	2	

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:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: [signature]	6/27/17 1600	TAS	[signature] via FedEx	6/28/17 0940	TAL-BUF
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes ☐ No	Custody Seal No.: 033812	Cooler Temperature(s) °C and Other Remarks: 2.3°C IR8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

S. 480-120192 Field Sheet

Job:_____

Tracking #_____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes:_____

Therm. ID: AK-1 / AK-2 / HACCP /Other_____

Ice_____ Wet_____ Dry_____ Other_____

Cooler Custody Seal: _____

Sample Custody Seal: _____

Cooler ID:_____

Temp: Observed_____

Corrected: _____

From: Temp Blank ☐ Sample ☐

NCM Filed: Yes ☐ No ☐

	Yes	No	NA
Perchlorate has headspace?	☐	☐	☐
CoC is complete w/o discrepancies?	☐	☐	☐
Samples received within holding time?	☐	☐	☐
Sample preservatives verified?	☐	☐	☐
Cooler compromised/tampered with?	☐	☐	☐
Samples compromised/tampered with?	☐	☐	☐
COC and Samples w/o discrepancies?	☐	☐	☐
Sample containers have legible labels?	☐	☐	☐
Containers are not broken or leaking?	☐	☐	☐
Sample date/times are provided.	☐	☐	☐
Appropriate containers are used?	☐	☐	☐
Sample bottles are completely filled?	☐	☐	☐
Zero headspace?*	☐	☐	☐
Multiphasic samples are not present?	☐	☐	☐

Initials:_____ Date:_____

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")


INFOTRAC (800) 535-5053
TESTAMERICA (716) 691-2600

ORIGIN ID:SYRA (315) 431-0171
SYR SERVICE CENTER
TESTAMERICA
118 BOSS RD
SYRACUSE, NY 13211
UNITED STATES US

SHIP DATE: 26JUN17
ACTWGT: 20.00 LB MAN
CAD: 251798/CAFE3012

BILL SENDER

TO SAMPLE RECIEVING
TESTAMERICA W. SACRAMENTO
880 RIVERSIDE PARKWAY

WEST SACRAMENTO CA 95605
(916) 373-5600
REF: ARCADIS VESTAL PFCS

FedEx Express

TUE - 27 JUN 3:00P
STANDARD OVERNIGHT

TRK# 0201 7346 0301 1890

XH BLUA

95605
CA-US SMF



Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120192-1

Login Number: 120192

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120192-1

Login Number: 120192
List Number: 3
Creator: Armbruster, Chris

List Source: TestAmerica Edison
List Creation: 06/28/17 01:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	033812
Sample custody seals, if present, are intact.	N/A	
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	2.3°C IR8
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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120192-1

Login Number: 120192
List Number: 2
Creator: Aguayo, Alonso

List Source: TestAmerica Sacramento
List Creation: 06/27/17 04:28 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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?	N/A	
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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: 480-120243-1
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:
7/19/2017 3:34:48 PM

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

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

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

LCMS

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

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: 480-120243-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-120243-1

Receipt
The samples were received on 6/28/2017 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

GC/MS VOA
Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 4009-27S (480-120243-1), 4009-29S (480-120243-4) and 4009-29I (480-120243-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-365728 recovered outside acceptance criteria, low biased, for 1,2-Dichloroethane, 4-Methyl-2-pentanone (MIBK) and 2-Butanone (MEK). A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported. The following samples are impacted: 4009-27S (480-120243-1), 4009-27I (480-120243-2), 4009-27D (480-120243-3), 4009-29S (480-120243-4), 4009-29I (480-120243-5) and TRIP BLANK (480-120243-7).

Method(s) 8260C: The following volatile sample was analyzed with significant headspace in the sample vial: 4009-29D (480-120243-6). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-366068 recovered outside acceptance criteria, low biased, for 1,2-Dichloroethane and 4-Methyl-2-pentanone (MIBK). A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported. The following sample is impacted: 4009-29D (480-120243-6).

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

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

Organic Prep
Method(s) PFAS Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-174304.

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: 480-120243-1

Client Sample ID: 4009-27S — Lab Sample ID: 480-120243-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.73		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1,1-Trichloroethane	45		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	2.0		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	4.0		2.0	0.58	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	19		2.0	1.6	ug/L	2		8260C	Total/NA
Trichloroethene	20		2.0	0.92	ug/L	2		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.87	J	2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.12	J	2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.63	J	2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	3.43		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-27I — Lab Sample ID: 480-120243-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.21	J	0.40	0.20	ug/L	1		8260C SIM	Total/NA
Trichloroethene	1.5		1.0	0.46	ug/L	1		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.18		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.86	J	2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	3.79		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-27D — Lab Sample ID: 480-120243-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	4.51		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.14		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-29S — Lab Sample ID: 480-120243-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1,1-Trichloroethane	460		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	44		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	30		10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	190		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	100		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	52		10	9.0	ug/L	10		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.57		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.63		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.62	J	2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	6.28		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 480-120243-1

Client Sample ID: 4009-29S (Continued) — Lab Sample ID: 480-120243-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	2.73		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-29I — Lab Sample ID: 480-120243-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.9		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1,1-Trichloroethane	1100		20	16	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	75		20	7.6	ug/L	20		8260C	Total/NA
1,1-Dichloroethene	72		20	5.8	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	360		20	16	ug/L	20		8260C	Total/NA
Trichloroethene	340		20	9.2	ug/L	20		8260C	Total/NA
Vinyl chloride	110		20	18	ug/L	20		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.50		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.51		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.81	J	2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	8.48		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.26		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	0.69	J	2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-29D — Lab Sample ID: 480-120243-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	200		4.0	2.0	ug/L	10		8260C SIM	Total/NA
1,1,1-Trichloroethane	9.7		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	3.0		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.65	J	1.0	0.29	ug/L	1		8260C	Total/NA
Chloroethane	1.3		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	4.4		1.0	0.81	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.97	J	1.0	0.16	ug/L	1		8260C	Total/NA
Methylene Chloride	0.45	J	1.0	0.44	ug/L	1		8260C	Total/NA
Trichloroethene	2.5		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	5.0		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-120243-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-27S
Date Collected: 06/27/17 13:35
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.73**		0.40	0.20	ug/L			07/03/17 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 144*		*07/03/17 20:46*	*1*
4-Bromofluorobenzene	*97*		*72 - 133*		*07/03/17 20:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**45**		2.0	1.6	ug/L			07/06/17 22:42	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.42	ug/L			07/06/17 22:42	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.62	ug/L			07/06/17 22:42	2
1,1,2-Trichloroethane	2.0	U	2.0	0.46	ug/L			07/06/17 22:42	2
1,1-Dichloroethane	**2.0**		2.0	0.76	ug/L			07/06/17 22:42	2
1,1-Dichloroethene	**4.0**		2.0	0.58	ug/L			07/06/17 22:42	2
1,2,3-Trimethylbenzene	2.0	U	2.0	0.52	ug/L			07/06/17 22:42	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.82	ug/L			07/06/17 22:42	2
1,2,4-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			07/06/17 22:42	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.78	ug/L			07/06/17 22:42	2
1,2-Dibromoethane	2.0	U	2.0	1.5	ug/L			07/06/17 22:42	2
1,2-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			07/06/17 22:42	2
1,2-Dichloroethane	2.0	U	2.0	0.42	ug/L			07/06/17 22:42	2
1,2-Dichloropropane	2.0	U	2.0	1.4	ug/L			07/06/17 22:42	2
1,3,5-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			07/06/17 22:42	2
1,3-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			07/06/17 22:42	2
1,4-Dichlorobenzene	2.0	U	2.0	1.7	ug/L			07/06/17 22:42	2
2-Butanone (MEK)	20	U	20	2.6	ug/L			07/06/17 22:42	2
2-Hexanone	10	U	10	2.5	ug/L			07/06/17 22:42	2
4-Methyl-2-pentanone (MIBK)	10	U	10	4.2	ug/L			07/06/17 22:42	2
Acetone	20	U	20	6.0	ug/L			07/06/17 22:42	2
Benzene	2.0	U	2.0	0.82	ug/L			07/06/17 22:42	2
Bromodichloromethane	2.0	U	2.0	0.78	ug/L			07/06/17 22:42	2
Bromoform	2.0	U	2.0	0.52	ug/L			07/06/17 22:42	2
Bromomethane	2.0	U	2.0	1.4	ug/L			07/06/17 22:42	2
Carbon disulfide	2.0	U	2.0	0.38	ug/L			07/06/17 22:42	2
Carbon tetrachloride	2.0	U	2.0	0.54	ug/L			07/06/17 22:42	2
Chlorobenzene	2.0	U	2.0	1.5	ug/L			07/06/17 22:42	2
Chloroethane	2.0	U	2.0	0.64	ug/L			07/06/17 22:42	2
Chloroform	2.0	U	2.0	0.68	ug/L			07/06/17 22:42	2
Chloromethane	2.0	U	2.0	0.70	ug/L			07/06/17 22:42	2
cis-1,2-Dichloroethene	**19**		2.0	1.6	ug/L			07/06/17 22:42	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.72	ug/L			07/06/17 22:42	2
Cyclohexane	2.0	U	2.0	0.36	ug/L			07/06/17 22:42	2
Dibromochloromethane	2.0	U	2.0	0.64	ug/L			07/06/17 22:42	2
Dichlorodifluoromethane	2.0	U	2.0	1.4	ug/L			07/06/17 22:42	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			07/06/17 22:42	2
Isopropylbenzene	2.0	U	2.0	1.6	ug/L			07/06/17 22:42	2
Methyl acetate	5.0	U	5.0	2.6	ug/L			07/06/17 22:42	2
Methyl tert-butyl ether	2.0	U	2.0	0.32	ug/L			07/06/17 22:42	2
Methylcyclohexane	2.0	U	2.0	0.32	ug/L			07/06/17 22:42	2
Methylene Chloride	2.0	U	2.0	0.88	ug/L			07/06/17 22:42	2

Client Sample ID: 4009-27S

Date Collected: 06/27/17 13:35
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	2.0	U	2.0	1.5	ug/L			07/06/17 22:42	2
Tetrachloroethene	2.0	U	2.0	0.72	ug/L			07/06/17 22:42	2
Toluene	2.0	U	2.0	1.0	ug/L			07/06/17 22:42	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.8	ug/L			07/06/17 22:42	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.74	ug/L			07/06/17 22:42	2
Trichloroethene	**20**		2.0	0.92	ug/L			07/06/17 22:42	2
Trichlorofluoromethane	2.0	U	2.0	1.8	ug/L			07/06/17 22:42	2
Vinyl chloride	2.0	U	2.0	1.8	ug/L			07/06/17 22:42	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			07/06/17 22:42	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*77 - 120*		*07/06/17 22:42*	*2*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*07/06/17 22:42*	*2*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*07/06/17 22:42*	*2*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/06/17 22:42*	*2*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**1.87**	**J**	2.00	0.92	ng/L		07/10/17 15:14	07/12/17 12:00	1
Perfluorohexanesulfonic acid (PFHxS)	**1.12**	**J**	2.00	0.87	ng/L		07/10/17 15:14	07/12/17 12:00	1
Perfluoroheptanoic acid (PFHpA)	**1.63**	**J**	2.00	0.80	ng/L		07/10/17 15:14	07/12/17 12:00	1
Perfluorooctanoic acid (PFOA)	**3.43**		2.00	0.75	ng/L		07/10/17 15:14	07/12/17 12:00	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/10/17 15:14	07/12/17 12:00	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/10/17 15:14	07/12/17 12:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*96*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:00*	*1*
13C4-PFHpA	*91*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:00*	*1*
13C4 PFOA	*103*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:00*	*1*
13C4 PFOS	*103*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:00*	*1*
13C5 PFNA	*100*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:00*	*1*

Client Sample ID: 4009-27I

Date Collected: 06/27/17 12:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.21**	**J**	0.40	0.20	ug/L			07/03/17 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 144*		*07/03/17 21:10*	*1*
4-Bromofluorobenzene	*95*		*72 - 133*		*07/03/17 21:10*	*1*

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	0.82	ug/L			07/06/17 23:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/06/17 23:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/06/17 23:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/06/17 23:06	1

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

TestAmerica Job ID: 480-120243-1

Client Sample ID: 4009-27I
Date Collected: 06/27/17 12:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/06/17 23:06	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/06/17 23:06	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/06/17 23:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/06/17 23:06	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/06/17 23:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/06/17 23:06	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/06/17 23:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/06/17 23:06	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/06/17 23:06	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/06/17 23:06	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/06/17 23:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/06/17 23:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/06/17 23:06	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/06/17 23:06	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/06/17 23:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/06/17 23:06	1
Acetone	10	U	10	3.0	ug/L			07/06/17 23:06	1
Benzene	1.0	U	1.0	0.41	ug/L			07/06/17 23:06	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/06/17 23:06	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/06/17 23:06	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/06/17 23:06	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/06/17 23:06	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/06/17 23:06	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/06/17 23:06	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/06/17 23:06	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/06/17 23:06	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/06/17 23:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/06/17 23:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/06/17 23:06	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/06/17 23:06	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/06/17 23:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/06/17 23:06	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/06/17 23:06	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/06/17 23:06	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/06/17 23:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/06/17 23:06	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/06/17 23:06	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/06/17 23:06	1
Styrene	1.0	U	1.0	0.73	ug/L			07/06/17 23:06	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/06/17 23:06	1
Toluene	1.0	U	1.0	0.51	ug/L			07/06/17 23:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/06/17 23:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/06/17 23:06	1
Trichloroethene	**1.5**		1.0	0.46	ug/L			07/06/17 23:06	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/06/17 23:06	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/06/17 23:06	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/06/17 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*77 - 120*		*07/06/17 23:06*	*1*

Client Sample ID: 4009-27I

Date Collected: 06/27/17 12:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-2

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*07/06/17 23:06*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*07/06/17 23:06*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/06/17 23:06*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**2.18**		2.00	0.92	ng/L		07/10/17 15:14	07/12/17 12:19	1
Perfluorohexanesulfonic acid (PFHxS)	**1.86**	**J**	2.00	0.87	ng/L		07/10/17 15:14	07/12/17 12:19	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/10/17 15:14	07/12/17 12:19	1
Perfluorooctanoic acid (PFOA)	**3.79**		2.00	0.75	ng/L		07/10/17 15:14	07/12/17 12:19	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/10/17 15:14	07/12/17 12:19	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/10/17 15:14	07/12/17 12:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*96*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:19*	*1*
13C4-PFHpA	*91*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:19*	*1*
13C4 PFOA	*105*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:19*	*1*
13C4 PFOS	*105*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:19*	*1*
13C5 PFNA	*101*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:19*	*1*

Client Sample ID: 4009-27D

Date Collected: 06/27/17 13:30
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			07/03/17 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*71 - 144*		*07/03/17 21:34*	*1*
4-Bromofluorobenzene	*95*		*72 - 133*		*07/03/17 21:34*	*1*

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	0.82	ug/L			07/06/17 23:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/06/17 23:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/06/17 23:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/06/17 23:30	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/06/17 23:30	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/06/17 23:30	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/06/17 23:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/06/17 23:30	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/06/17 23:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/06/17 23:30	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/06/17 23:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/06/17 23:30	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/06/17 23:30	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/06/17 23:30	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/06/17 23:30	1

Client Sample ID: 4009-27D
Date Collected: 06/27/17 13:30
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/06/17 23:30	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/06/17 23:30	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/06/17 23:30	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/06/17 23:30	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/06/17 23:30	1
Acetone	10	U	10	3.0	ug/L			07/06/17 23:30	1
Benzene	1.0	U	1.0	0.41	ug/L			07/06/17 23:30	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/06/17 23:30	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/06/17 23:30	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/06/17 23:30	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/06/17 23:30	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/06/17 23:30	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/06/17 23:30	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/06/17 23:30	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/06/17 23:30	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/06/17 23:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/06/17 23:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/06/17 23:30	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/06/17 23:30	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/06/17 23:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/06/17 23:30	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/06/17 23:30	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/06/17 23:30	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/06/17 23:30	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/06/17 23:30	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/06/17 23:30	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/06/17 23:30	1
Styrene	1.0	U	1.0	0.73	ug/L			07/06/17 23:30	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/06/17 23:30	1
Toluene	1.0	U	1.0	0.51	ug/L			07/06/17 23:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/06/17 23:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/06/17 23:30	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/06/17 23:30	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/06/17 23:30	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/06/17 23:30	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/06/17 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*77 - 120*		*07/06/17 23:30*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*07/06/17 23:30*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*07/06/17 23:30*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/06/17 23:30*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**4.51**		2.00	0.92	ng/L		07/10/17 15:14	07/12/17 12:37	1
Perfluorohexanesulfonic acid (PFHxS)	**3.14**		2.00	0.87	ng/L		07/10/17 15:14	07/12/17 12:37	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/10/17 15:14	07/12/17 12:37	1

Client Sample ID: 4009-27D

Date Collected: 06/27/17 13:30
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-3

Matrix: Water

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/10/17 15:14	07/12/17 12:37	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/10/17 15:14	07/12/17 12:37	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/10/17 15:14	07/12/17 12:37	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*97*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:37*	*1*
13C4-PFHpA	*91*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:37*	*1*
13C4 PFOA	*104*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:37*	*1*
13C4 PFOS	*107*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:37*	*1*
13C5 PFNA	*103*		*25 - 150*	*07/10/17 15:14*	*07/12/17 12:37*	*1*

Client Sample ID: 4009-29S

Date Collected: 06/27/17 10:25
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.4**		0.40	0.20	ug/L			07/04/17 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 144*		*07/04/17 11:03*	*1*
4-Bromofluorobenzene	*97*		*72 - 133*		*07/04/17 11:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**460**		10	8.2	ug/L			07/06/17 23:53	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			07/06/17 23:53	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	3.1	ug/L			07/06/17 23:53	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			07/06/17 23:53	10
1,1-Dichloroethane	**44**		10	3.8	ug/L			07/06/17 23:53	10
1,1-Dichloroethene	**30**		10	2.9	ug/L			07/06/17 23:53	10
1,2,3-Trimethylbenzene	10	U	10	2.6	ug/L			07/06/17 23:53	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			07/06/17 23:53	10
1,2,4-Trimethylbenzene	10	U	10	7.5	ug/L			07/06/17 23:53	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			07/06/17 23:53	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			07/06/17 23:53	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			07/06/17 23:53	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			07/06/17 23:53	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			07/06/17 23:53	10
1,3,5-Trimethylbenzene	10	U	10	7.7	ug/L			07/06/17 23:53	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			07/06/17 23:53	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			07/06/17 23:53	10
2-Butanone (MEK)	100	U	100	13	ug/L			07/06/17 23:53	10
2-Hexanone	50	U	50	12	ug/L			07/06/17 23:53	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			07/06/17 23:53	10
Acetone	100	U	100	30	ug/L			07/06/17 23:53	10
Benzene	10	U	10	4.1	ug/L			07/06/17 23:53	10
Bromodichloromethane	10	U	10	3.9	ug/L			07/06/17 23:53	10
Bromoform	10	U	10	2.6	ug/L			07/06/17 23:53	10
Bromomethane	10	U	10	6.9	ug/L			07/06/17 23:53	10
Carbon disulfide	10	U	10	1.9	ug/L			07/06/17 23:53	10

Client Sample ID: 4009-29S
Date Collected: 06/27/17 10:25
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	10	U	10	2.7	ug/L			07/06/17 23:53	10
Chlorobenzene	10	U	10	7.5	ug/L			07/06/17 23:53	10
Chloroethane	10	U	10	3.2	ug/L			07/06/17 23:53	10
Chloroform	10	U	10	3.4	ug/L			07/06/17 23:53	10
Chloromethane	10	U	10	3.5	ug/L			07/06/17 23:53	10
cis-1,2-Dichloroethene	**190**		10	8.1	ug/L			07/06/17 23:53	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			07/06/17 23:53	10
Cyclohexane	10	U	10	1.8	ug/L			07/06/17 23:53	10
Dibromochloromethane	10	U	10	3.2	ug/L			07/06/17 23:53	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			07/06/17 23:53	10
Ethylbenzene	10	U	10	7.4	ug/L			07/06/17 23:53	10
Isopropylbenzene	10	U	10	7.9	ug/L			07/06/17 23:53	10
Methyl acetate	25	U	25	13	ug/L			07/06/17 23:53	10
Methyl tert-butyl ether	10	U	10	1.6	ug/L			07/06/17 23:53	10
Methylcyclohexane	10	U	10	1.6	ug/L			07/06/17 23:53	10
Methylene Chloride	10	U	10	4.4	ug/L			07/06/17 23:53	10
Styrene	10	U	10	7.3	ug/L			07/06/17 23:53	10
Tetrachloroethene	10	U	10	3.6	ug/L			07/06/17 23:53	10
Toluene	10	U	10	5.1	ug/L			07/06/17 23:53	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			07/06/17 23:53	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			07/06/17 23:53	10
Trichloroethene	**100**		10	4.6	ug/L			07/06/17 23:53	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			07/06/17 23:53	10
Vinyl chloride	**52**		10	9.0	ug/L			07/06/17 23:53	10
Xylenes, Total	20	U	20	6.6	ug/L			07/06/17 23:53	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*77 - 120*		*07/06/17 23:53*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*07/06/17 23:53*	*10*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*07/06/17 23:53*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/06/17 23:53*	*10*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**2.57**		2.00	0.92	ng/L		07/10/17 15:14	07/12/17 13:14	1
Perfluorohexanesulfonic acid (PFHxS)	**2.63**		2.00	0.87	ng/L		07/10/17 15:14	07/12/17 13:14	1
Perfluoroheptanoic acid (PFHpA)	**1.62**	**J**	2.00	0.80	ng/L		07/10/17 15:14	07/12/17 13:14	1
Perfluorooctanoic acid (PFOA)	**6.28**		2.00	0.75	ng/L		07/10/17 15:14	07/12/17 13:14	1
Perfluorooctanesulfonic acid (PFOS)	**2.73**		2.00	1.28	ng/L		07/10/17 15:14	07/12/17 13:14	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/10/17 15:14	07/12/17 13:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*99*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:14*	*1*
13C4-PFHpA	*93*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:14*	*1*
13C4 PFOA	*106*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:14*	*1*
13C4 PFOS	*112*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:14*	*1*
13C5 PFNA	*114*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:14*	*1*

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

TestAmerica Job ID: 480-120243-1

Client Sample ID: 4009-29I
Date Collected: 06/27/17 12:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.9**		0.40	0.20	ug/L			07/04/17 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 144*		*07/04/17 11:26*	*1*
4-Bromofluorobenzene	*95*		*72 - 133*		*07/04/17 11:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1100**		20	16	ug/L			07/07/17 00:17	20
1,1,2,2-Tetrachloroethane	20	U	20	4.2	ug/L			07/07/17 00:17	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20	U	20	6.2	ug/L			07/07/17 00:17	20
1,1,2-Trichloroethane	20	U	20	4.6	ug/L			07/07/17 00:17	20
1,1-Dichloroethane	**75**		20	7.6	ug/L			07/07/17 00:17	20
1,1-Dichloroethene	**72**		20	5.8	ug/L			07/07/17 00:17	20
1,2,3-Trimethylbenzene	20	U	20	5.2	ug/L			07/07/17 00:17	20
1,2,4-Trichlorobenzene	20	U	20	8.2	ug/L			07/07/17 00:17	20
1,2,4-Trimethylbenzene	20	U	20	15	ug/L			07/07/17 00:17	20
1,2-Dibromo-3-Chloropropane	20	U	20	7.8	ug/L			07/07/17 00:17	20
1,2-Dibromoethane	20	U	20	15	ug/L			07/07/17 00:17	20
1,2-Dichlorobenzene	20	U	20	16	ug/L			07/07/17 00:17	20
1,2-Dichloroethane	20	U	20	4.2	ug/L			07/07/17 00:17	20
1,2-Dichloropropane	20	U	20	14	ug/L			07/07/17 00:17	20
1,3,5-Trimethylbenzene	20	U	20	15	ug/L			07/07/17 00:17	20
1,3-Dichlorobenzene	20	U	20	16	ug/L			07/07/17 00:17	20
1,4-Dichlorobenzene	20	U	20	17	ug/L			07/07/17 00:17	20
2-Butanone (MEK)	200	U	200	26	ug/L			07/07/17 00:17	20
2-Hexanone	100	U	100	25	ug/L			07/07/17 00:17	20
4-Methyl-2-pentanone (MIBK)	100	U	100	42	ug/L			07/07/17 00:17	20
Acetone	200	U	200	60	ug/L			07/07/17 00:17	20
Benzene	20	U	20	8.2	ug/L			07/07/17 00:17	20
Bromodichloromethane	20	U	20	7.8	ug/L			07/07/17 00:17	20
Bromoform	20	U	20	5.2	ug/L			07/07/17 00:17	20
Bromomethane	20	U	20	14	ug/L			07/07/17 00:17	20
Carbon disulfide	20	U	20	3.8	ug/L			07/07/17 00:17	20
Carbon tetrachloride	20	U	20	5.4	ug/L			07/07/17 00:17	20
Chlorobenzene	20	U	20	15	ug/L			07/07/17 00:17	20
Chloroethane	20	U	20	6.4	ug/L			07/07/17 00:17	20
Chloroform	20	U	20	6.8	ug/L			07/07/17 00:17	20
Chloromethane	20	U	20	7.0	ug/L			07/07/17 00:17	20
cis-1,2-Dichloroethene	**360**		20	16	ug/L			07/07/17 00:17	20
cis-1,3-Dichloropropene	20	U	20	7.2	ug/L			07/07/17 00:17	20
Cyclohexane	20	U	20	3.6	ug/L			07/07/17 00:17	20
Dibromochloromethane	20	U	20	6.4	ug/L			07/07/17 00:17	20
Dichlorodifluoromethane	20	U	20	14	ug/L			07/07/17 00:17	20
Ethylbenzene	20	U	20	15	ug/L			07/07/17 00:17	20
Isopropylbenzene	20	U	20	16	ug/L			07/07/17 00:17	20
Methyl acetate	50	U	50	26	ug/L			07/07/17 00:17	20
Methyl tert-butyl ether	20	U	20	3.2	ug/L			07/07/17 00:17	20
Methylcyclohexane	20	U	20	3.2	ug/L			07/07/17 00:17	20
Methylene Chloride	20	U	20	8.8	ug/L			07/07/17 00:17	20

Client Sample ID: 4009-29I

Date Collected: 06/27/17 12:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	20	U	20	15	ug/L			07/07/17 00:17	20
Tetrachloroethene	20	U	20	7.2	ug/L			07/07/17 00:17	20
Toluene	20	U	20	10	ug/L			07/07/17 00:17	20
trans-1,2-Dichloroethene	20	U	20	18	ug/L			07/07/17 00:17	20
trans-1,3-Dichloropropene	20	U	20	7.4	ug/L			07/07/17 00:17	20
Trichloroethene	**340**		20	9.2	ug/L			07/07/17 00:17	20
Trichlorofluoromethane	20	U	20	18	ug/L			07/07/17 00:17	20
Vinyl chloride	**110**		20	18	ug/L			07/07/17 00:17	20
Xylenes, Total	40	U	40	13	ug/L			07/07/17 00:17	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*77 - 120*		*07/07/17 00:17*	*20*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*07/07/17 00:17*	*20*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*07/07/17 00:17*	*20*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/07/17 00:17*	*20*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**2.50**		2.00	0.92	ng/L		07/10/17 15:14	07/12/17 13:32	1
Perfluorohexanesulfonic acid (PFHxS)	**3.51**		2.00	0.87	ng/L		07/10/17 15:14	07/12/17 13:32	1
Perfluoroheptanoic acid (PFHpA)	**1.81**	**J**	2.00	0.80	ng/L		07/10/17 15:14	07/12/17 13:32	1
Perfluorooctanoic acid (PFOA)	**8.48**		2.00	0.75	ng/L		07/10/17 15:14	07/12/17 13:32	1
Perfluorooctanesulfonic acid (PFOS)	**7.26**		2.00	1.28	ng/L		07/10/17 15:14	07/12/17 13:32	1
Perfluorononanoic acid (PFNA)	**0.69**	**J**	2.00	0.65	ng/L		07/10/17 15:14	07/12/17 13:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*103*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:32*	*1*
13C4-PFHpA	*95*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:32*	*1*
13C4 PFOA	*106*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:32*	*1*
13C4 PFOS	*112*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:32*	*1*
13C5 PFNA	*103*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:32*	*1*

Client Sample ID: 4009-29D

Date Collected: 06/27/17 10:10
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**200**		4.0	2.0	ug/L			07/05/17 11:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*71 - 144*		*07/05/17 11:42*	*10*
4-Bromofluorobenzene	*97*		*72 - 133*		*07/05/17 11:42*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**9.7**		1.0	0.82	ug/L			07/10/17 15:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/10/17 15:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/10/17 15:56	1

Client Sample ID: 4009-29D
Date Collected: 06/27/17 10:10
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/10/17 15:56	1
1,1-Dichloroethane	**3.0**		1.0	0.38	ug/L			07/10/17 15:56	1
1,1-Dichloroethene	**0.65**	**J**	1.0	0.29	ug/L			07/10/17 15:56	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/10/17 15:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/10/17 15:56	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/10/17 15:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/10/17 15:56	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/10/17 15:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/10/17 15:56	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/10/17 15:56	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/10/17 15:56	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/10/17 15:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/10/17 15:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/10/17 15:56	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/10/17 15:56	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/10/17 15:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/10/17 15:56	1
Acetone	10	U	10	3.0	ug/L			07/10/17 15:56	1
Benzene	1.0	U	1.0	0.41	ug/L			07/10/17 15:56	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/10/17 15:56	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/10/17 15:56	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/10/17 15:56	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/10/17 15:56	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/10/17 15:56	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/10/17 15:56	1
Chloroethane	**1.3**		1.0	0.32	ug/L			07/10/17 15:56	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/10/17 15:56	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/10/17 15:56	1
cis-1,2-Dichloroethene	**4.4**		1.0	0.81	ug/L			07/10/17 15:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/10/17 15:56	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/10/17 15:56	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/10/17 15:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/10/17 15:56	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/10/17 15:56	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/10/17 15:56	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/10/17 15:56	1
Methyl tert-butyl ether	**0.97**	**J**	1.0	0.16	ug/L			07/10/17 15:56	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/10/17 15:56	1
Methylene Chloride	**0.45**	**J**	1.0	0.44	ug/L			07/10/17 15:56	1
Styrene	1.0	U	1.0	0.73	ug/L			07/10/17 15:56	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/10/17 15:56	1
Toluene	1.0	U	1.0	0.51	ug/L			07/10/17 15:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/10/17 15:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/10/17 15:56	1
Trichloroethene	**2.5**		1.0	0.46	ug/L			07/10/17 15:56	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/10/17 15:56	1
Vinyl chloride	**5.0**		1.0	0.90	ug/L			07/10/17 15:56	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/10/17 15:56	1

Client Sample ID: 4009-29D

Date Collected: 06/27/17 10:10
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*77 - 120*		*07/10/17 15:56*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*07/10/17 15:56*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*07/10/17 15:56*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/10/17 15:56*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/10/17 15:14	07/12/17 13:50	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/10/17 15:14	07/12/17 13:50	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/10/17 15:14	07/12/17 13:50	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/10/17 15:14	07/12/17 13:50	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/10/17 15:14	07/12/17 13:50	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/10/17 15:14	07/12/17 13:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*104*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:50*	*1*
13C4-PFHpA	*102*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:50*	*1*
13C4 PFOA	*114*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:50*	*1*
13C4 PFOS	*116*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:50*	*1*
13C5 PFNA	*118*		*25 - 150*	*07/10/17 15:14*	*07/12/17 13:50*	*1*

Client Sample ID: TRIP BLANK

Date Collected: 06/27/17 00:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-7

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	0.82	ug/L			07/07/17 01:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 01:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/07/17 01:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/07/17 01:05	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/07/17 01:05	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/07/17 01:05	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/07/17 01:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/07/17 01:05	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/07/17 01:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/07/17 01:05	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/07/17 01:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/07/17 01:05	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 01:05	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/07/17 01:05	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/07/17 01:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/07/17 01:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/07/17 01:05	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/07/17 01:05	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/07/17 01:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/07/17 01:05	1
Acetone	10	U	10	3.0	ug/L			07/07/17 01:05	1
Benzene	1.0	U	1.0	0.41	ug/L			07/07/17 01:05	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/07/17 01:05	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/07/17 01:05	1

Client Sample ID: TRIP BLANK
Date Collected: 06/27/17 00:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	0.69	ug/L			07/07/17 01:05	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/07/17 01:05	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/07/17 01:05	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/07/17 01:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/07/17 01:05	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/07/17 01:05	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/07/17 01:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/07/17 01:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/07/17 01:05	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/07/17 01:05	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/07/17 01:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/07/17 01:05	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/07/17 01:05	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/07/17 01:05	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/07/17 01:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/07/17 01:05	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/07/17 01:05	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/07/17 01:05	1
Styrene	1.0	U	1.0	0.73	ug/L			07/07/17 01:05	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/07/17 01:05	1
Toluene	1.0	U	1.0	0.51	ug/L			07/07/17 01:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/07/17 01:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/07/17 01:05	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/07/17 01:05	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/07/17 01:05	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/07/17 01:05	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/07/17 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*77 - 120*		*07/07/17 01:05*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*07/07/17 01:05*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*07/07/17 01:05*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/07/17 01:05*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-120243-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-120243-1	4009-27S	84	96	95	96
480-120243-2	4009-27I	86	97	92	97
480-120243-3	4009-27D	87	101	94	98
480-120243-4	4009-29S	84	97	93	98
480-120243-5	4009-29I	86	98	95	99
480-120243-6	4009-29D	84	96	92	97
480-120243-7	TRIP BLANK	84	97	92	97
LCS 480-365728/5	Lab Control Sample	84	97	95	97
LCS 480-366068/5	Lab Control Sample	86	98	93	96
MB 480-365728/8	Method Blank	84	96	91	97
MB 480-366068/7	Method Blank	85	100	93	97

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	12DCE (71-144)	BFB (72-133)
480-120243-1	4009-27S	111	97
480-120243-2	4009-27I	107	95
480-120243-3	4009-27D	113	95
480-120243-4	4009-29S	106	97
480-120243-5	4009-29I	105	95
480-120243-6	4009-29D	104	97
LCS 460-447341/4	Lab Control Sample	112	97
LCS 460-447515/3	Lab Control Sample	108	96
LCS 460-447586/3	Lab Control Sample	103	96
LCSD 460-447341/5	Lab Control Sample Dup	113	100
LCSD 460-447515/4	Lab Control Sample Dup	112	97
LCSD 460-447586/4	Lab Control Sample Dup	106	95
MB 460-447341/8	Method Blank	111	96
MB 460-447515/7	Method Blank	107	96
MB 460-447586/7	Method Blank	109	96

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene

Isotope Dilution Summary

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

TestAmerica Job ID: 480-120243-1

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	3O2 PFHx (25-150)	3C4-PFHp (25-150)	3C4 PFO/ (25-150)	3C4 PFO((25-150)	3C5 PFN/ (25-150)			
480-120243-1	4009-27S	96	91	103	103	100			
480-120243-2	4009-27I	96	91	105	105	101			
480-120243-3	4009-27D	97	91	104	107	103			
480-120243-4	4009-29S	99	93	106	112	114			
480-120243-5	4009-29I	103	95	106	112	103			
480-120243-6	4009-29D	104	102	114	116	118			
LCS 320-173334/2-A	Lab Control Sample	88	79	94	97	88			
MB 320-173334/1-A	Method Blank	96	90	104	107	99			

Surrogate Legend

18O2 PFHxS = 18O2 PFHxS
13C4-PFHpA = 13C4-PFHpA
13C4 PFOA = 13C4 PFOA
13C4 PFOS = 13C4 PFOS
13C5 PFNA = 13C5 PFNA

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

Lab Sample ID: MB 480-365728/8
Matrix: Water
Analysis Batch: 365728

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	0.82	ug/L			07/06/17 22:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/06/17 22:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/06/17 22:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/06/17 22:08	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/06/17 22:08	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/06/17 22:08	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/06/17 22:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/06/17 22:08	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/06/17 22:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/06/17 22:08	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/06/17 22:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/06/17 22:08	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/06/17 22:08	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/06/17 22:08	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/06/17 22:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/06/17 22:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/06/17 22:08	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/06/17 22:08	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/06/17 22:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/06/17 22:08	1
Acetone	10	U	10	3.0	ug/L			07/06/17 22:08	1
Benzene	1.0	U	1.0	0.41	ug/L			07/06/17 22:08	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/06/17 22:08	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/06/17 22:08	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/06/17 22:08	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/06/17 22:08	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/06/17 22:08	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/06/17 22:08	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/06/17 22:08	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/06/17 22:08	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/06/17 22:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/06/17 22:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/06/17 22:08	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/06/17 22:08	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/06/17 22:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/06/17 22:08	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/06/17 22:08	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/06/17 22:08	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/06/17 22:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/06/17 22:08	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/06/17 22:08	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/06/17 22:08	1
Styrene	1.0	U	1.0	0.73	ug/L			07/06/17 22:08	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/06/17 22:08	1
Toluene	1.0	U	1.0	0.51	ug/L			07/06/17 22:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/06/17 22:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/06/17 22:08	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/06/17 22:08	1

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

Lab Sample ID: MB 480-365728/8
Matrix: Water
Analysis Batch: 365728

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/06/17 22:08	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/06/17 22:08	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/06/17 22:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*77 - 120*		*07/06/17 22:08*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*07/06/17 22:08*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*07/06/17 22:08*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/06/17 22:08*	*1*

Lab Sample ID: LCS 480-365728/5
Matrix: Water
Analysis Batch: 365728

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	25.0	22.4		ug/L		90	73 - 126
1,1,2,2-Tetrachloroethane	25.0	20.2		ug/L		81	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.1		ug/L		88	61 - 148
1,1,2-Trichloroethane	25.0	21.2		ug/L		85	76 - 122
1,1-Dichloroethane	25.0	22.2		ug/L		89	77 - 120
1,1-Dichloroethene	25.0	20.7		ug/L		83	66 - 127
1,2,3-Trimethylbenzene	25.0	23.1		ug/L		93	78 - 120
1,2,4-Trichlorobenzene	25.0	22.1		ug/L		88	79 - 122
1,2,4-Trimethylbenzene	25.0	22.7		ug/L		91	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	21.0		ug/L		84	56 - 134
1,2-Dibromoethane	25.0	20.6		ug/L		82	77 - 120
1,2-Dichlorobenzene	25.0	21.4		ug/L		86	80 - 124
1,2-Dichloroethane	25.0	19.4		ug/L		78	75 - 120
1,2-Dichloropropane	25.0	21.5		ug/L		86	76 - 120
1,3,5-Trimethylbenzene	25.0	23.0		ug/L		92	77 - 121
1,3-Dichlorobenzene	25.0	21.7		ug/L		87	77 - 120
1,4-Dichlorobenzene	25.0	22.0		ug/L		88	80 - 120
2-Butanone (MEK)	125	110		ug/L		88	57 - 140
2-Hexanone	125	103		ug/L		83	65 - 127
4-Methyl-2-pentanone (MIBK)	125	98.7		ug/L		79	71 - 125
Acetone	125	112		ug/L		89	56 - 142
Benzene	25.0	22.4		ug/L		89	71 - 124
Bromodichloromethane	25.0	22.8		ug/L		91	80 - 122
Bromoform	25.0	24.7		ug/L		99	61 - 132
Bromomethane	25.0	22.7		ug/L		91	55 - 144
Carbon disulfide	25.0	20.5		ug/L		82	59 - 134
Carbon tetrachloride	25.0	23.4		ug/L		93	72 - 134
Chlorobenzene	25.0	22.3		ug/L		89	80 - 120
Chloroethane	25.0	23.5		ug/L		94	69 - 136
Chloroform	25.0	21.2		ug/L		85	73 - 127
Chloromethane	25.0	24.6		ug/L		99	68 - 124
cis-1,2-Dichloroethene	25.0	22.0		ug/L		88	74 - 124

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

Lab Sample ID: LCS 480-365728/5
Matrix: Water
Analysis Batch: 365728

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	25.0	22.0		ug/L		88	59 - 135
Dibromochloromethane	25.0	23.3		ug/L		93	75 - 125
Dichlorodifluoromethane	25.0	29.1		ug/L		116	59 - 135
Ethylbenzene	25.0	22.0		ug/L		88	77 - 123
Isopropylbenzene	25.0	22.8		ug/L		91	77 - 122
Methyl acetate	125	92.2		ug/L		74	74 - 133
Methyl tert-butyl ether	25.0	21.0		ug/L		84	77 - 120
Methylcyclohexane	25.0	22.2		ug/L		89	68 - 134
Methylene Chloride	25.0	20.1		ug/L		81	75 - 124
Styrene	25.0	22.3		ug/L		89	80 - 120
Tetrachloroethene	25.0	24.5		ug/L		98	74 - 122
Toluene	25.0	22.2		ug/L		89	80 - 122
trans-1,2-Dichloroethene	25.0	22.3		ug/L		89	73 - 127
trans-1,3-Dichloropropene	25.0	23.3		ug/L		93	80 - 120
Trichloroethene	25.0	21.5		ug/L		86	74 - 123
Trichlorofluoromethane	25.0	22.5		ug/L		90	62 - 150
Vinyl chloride	25.0	25.3		ug/L		101	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 480-366068/7
Matrix: Water
Analysis Batch: 366068

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	0.82	ug/L			07/10/17 15:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/10/17 15:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/10/17 15:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/10/17 15:27	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/10/17 15:27	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/10/17 15:27	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/10/17 15:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/10/17 15:27	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/10/17 15:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/10/17 15:27	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/10/17 15:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/10/17 15:27	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/10/17 15:27	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/10/17 15:27	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/10/17 15:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/10/17 15:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/10/17 15:27	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/10/17 15:27	1

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

Lab Sample ID: MB 480-366068/7
Matrix: Water
Analysis Batch: 366068

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/10/17 15:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/10/17 15:27	1
Acetone	10	U	10	3.0	ug/L			07/10/17 15:27	1
Benzene	1.0	U	1.0	0.41	ug/L			07/10/17 15:27	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/10/17 15:27	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/10/17 15:27	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/10/17 15:27	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/10/17 15:27	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/10/17 15:27	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/10/17 15:27	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/10/17 15:27	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/10/17 15:27	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/10/17 15:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/10/17 15:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/10/17 15:27	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/10/17 15:27	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/10/17 15:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/10/17 15:27	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/10/17 15:27	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/10/17 15:27	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/10/17 15:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/10/17 15:27	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/10/17 15:27	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/10/17 15:27	1
Styrene	1.0	U	1.0	0.73	ug/L			07/10/17 15:27	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/10/17 15:27	1
Toluene	1.0	U	1.0	0.51	ug/L			07/10/17 15:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/10/17 15:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/10/17 15:27	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/10/17 15:27	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/10/17 15:27	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/10/17 15:27	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/10/17 15:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*77 - 120*		*07/10/17 15:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*07/10/17 15:27*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*07/10/17 15:27*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/10/17 15:27*	*1*

Lab Sample ID: LCS 480-366068/5
Matrix: Water
Analysis Batch: 366068

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	25.0	24.4		ug/L		98	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	76 - 120

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

Lab Sample ID: LCS 480-366068/5
Matrix: Water
Analysis Batch: 366068

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.6		ug/L		98	61 - 148
1,1,2-Trichloroethane	25.0	23.0		ug/L		92	76 - 122
1,1-Dichloroethane	25.0	23.2		ug/L		93	77 - 120
1,1-Dichloroethene	25.0	23.9		ug/L		95	66 - 127
1,2,3-Trimethylbenzene	25.0	25.1		ug/L		100	78 - 120
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	79 - 122
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	22.8		ug/L		91	56 - 134
1,2-Dibromoethane	25.0	22.9		ug/L		92	77 - 120
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	80 - 124
1,2-Dichloroethane	25.0	20.1		ug/L		80	75 - 120
1,2-Dichloropropane	25.0	23.9		ug/L		96	76 - 120
1,3,5-Trimethylbenzene	25.0	25.4		ug/L		102	77 - 121
1,3-Dichlorobenzene	25.0	23.9		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 120
2-Butanone (MEK)	125	127		ug/L		101	57 - 140
2-Hexanone	125	109		ug/L		88	65 - 127
4-Methyl-2-pentanone (MIBK)	125	104		ug/L		83	71 - 125
Acetone	125	132		ug/L		106	56 - 142
Benzene	25.0	24.3		ug/L		97	71 - 124
Bromodichloromethane	25.0	25.1		ug/L		100	80 - 122
Bromoform	25.0	29.9		ug/L		120	61 - 132
Bromomethane	25.0	20.9		ug/L		84	55 - 144
Carbon disulfide	25.0	23.5		ug/L		94	59 - 134
Carbon tetrachloride	25.0	26.3		ug/L		105	72 - 134
Chlorobenzene	25.0	23.9		ug/L		96	80 - 120
Chloroethane	25.0	22.8		ug/L		91	69 - 136
Chloroform	25.0	22.7		ug/L		91	73 - 127
Chloromethane	25.0	20.7		ug/L		83	68 - 124
cis-1,2-Dichloroethene	25.0	23.8		ug/L		95	74 - 124
cis-1,3-Dichloropropene	25.0	27.0		ug/L		108	74 - 124
Cyclohexane	25.0	24.5		ug/L		98	59 - 135
Dibromochloromethane	25.0	27.2		ug/L		109	75 - 125
Dichlorodifluoromethane	25.0	18.8		ug/L		75	59 - 135
Ethylbenzene	25.0	24.4		ug/L		98	77 - 123
Isopropylbenzene	25.0	24.9		ug/L		100	77 - 122
Methyl acetate	125	98.8		ug/L		79	74 - 133
Methyl tert-butyl ether	25.0	22.0		ug/L		88	77 - 120
Methylcyclohexane	25.0	24.6		ug/L		98	68 - 134
Methylene Chloride	25.0	21.6		ug/L		87	75 - 124
Styrene	25.0	24.7		ug/L		99	80 - 120
Tetrachloroethene	25.0	27.3		ug/L		109	74 - 122
Toluene	25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	73 - 127
trans-1,3-Dichloropropene	25.0	26.3		ug/L		105	80 - 120
Trichloroethene	25.0	23.5		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	21.8		ug/L		87	62 - 150

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

Lab Sample ID: LCS 480-366068/5
Matrix: Water
Analysis Batch: 366068

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			25.0	22.4		ug/L		90	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*93*		*75 - 123*
Toluene-d8 (Surr)	*96*		*80 - 120*

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

Lab Sample ID: MB 460-447341/8
Matrix: Water
Analysis Batch: 447341

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			07/03/17 14:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 144*		*07/03/17 14:06*	*1*
4-Bromofluorobenzene	*96*		*72 - 133*		*07/03/17 14:06*	*1*

Lab Sample ID: LCS 460-447341/4
Matrix: Water
Analysis Batch: 447341

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.82		ug/L		96	66 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 144*
4-Bromofluorobenzene	*97*		*72 - 133*

Lab Sample ID: LCSD 460-447341/5
Matrix: Water
Analysis Batch: 447341

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
1,4-Dioxane			5.00	4.85		ug/L		97	66 - 135	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*71 - 144*
4-Bromofluorobenzene	*100*		*72 - 133*

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

Lab Sample ID: MB 460-447515/7
Matrix: Water
Analysis Batch: 447515

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			07/04/17 09:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 144*		*07/04/17 09:52*	*1*
4-Bromofluorobenzene	*96*		*72 - 133*		*07/04/17 09:52*	*1*

Lab Sample ID: LCS 460-447515/3
Matrix: Water
Analysis Batch: 447515

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.72		ug/L		94	66 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 144*
4-Bromofluorobenzene	*96*		*72 - 133*

Lab Sample ID: LCSD 460-447515/4
Matrix: Water
Analysis Batch: 447515

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
1,4-Dioxane			5.00	4.44		ug/L		89	66 - 135	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 144*
4-Bromofluorobenzene	*97*		*72 - 133*

Lab Sample ID: MB 460-447586/7
Matrix: Water
Analysis Batch: 447586

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			07/05/17 09:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 144*		*07/05/17 09:44*	*1*
4-Bromofluorobenzene	*96*		*72 - 133*		*07/05/17 09:44*	*1*

Lab Sample ID: LCS 460-447586/3
Matrix: Water
Analysis Batch: 447586

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.74		ug/L		95	66 - 135		

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

Lab Sample ID: LCS 460-447586/3
Matrix: Water
Analysis Batch: 447586

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 144*
4-Bromofluorobenzene	*96*		*72 - 133*

Lab Sample ID: LCSD 460-447586/4
Matrix: Water
Analysis Batch: 447586

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
1,4-Dioxane	5.00	4.71		ug/L		94	66 - 135	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 144*
4-Bromofluorobenzene	*95*		*72 - 133*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Lab Sample ID: MB 320-173334/1-A
Matrix: Water
Analysis Batch: 173795

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/10/17 15:14	07/12/17 06:30	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/10/17 15:14	07/12/17 06:30	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/10/17 15:14	07/12/17 06:30	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/10/17 15:14	07/12/17 06:30	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/10/17 15:14	07/12/17 06:30	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/10/17 15:14	07/12/17 06:30	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*96*		*25 - 150*	*07/10/17 15:14*	*07/12/17 06:30*	*1*
13C4-PFHpA	*90*		*25 - 150*	*07/10/17 15:14*	*07/12/17 06:30*	*1*
13C4 PFOA	*104*		*25 - 150*	*07/10/17 15:14*	*07/12/17 06:30*	*1*
13C4 PFOS	*107*		*25 - 150*	*07/10/17 15:14*	*07/12/17 06:30*	*1*
13C5 PFNA	*99*		*25 - 150*	*07/10/17 15:14*	*07/12/17 06:30*	*1*

Lab Sample ID: LCS 320-173334/2-A
Matrix: Water
Analysis Batch: 173795

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	20.72		ng/L		117	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	21.44		ng/L		118	73 - 157
Perfluoroheptanoic acid (PFHpA)	20.0	21.93		ng/L		110	71 - 138
Perfluorooctanoic acid (PFOA)	20.0	24.42		ng/L		122	70 - 140
Perfluorooctanesulfonic acid (PFOS)	18.6	21.85		ng/L		118	69 - 144

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-173334/2-A
Matrix: Water
Analysis Batch: 173795

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173334

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorononanoic acid (PFNA)			20.0	23.02		ng/L		115	73 - 147		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*88*		*25 - 150*
13C4-PFHpA	*79*		*25 - 150*
13C4 PFOA	*94*		*25 - 150*
13C4 PFOS	*97*		*25 - 150*
13C5 PFNA	*88*		*25 - 150*

GC/MS VOA

Analysis Batch: 365728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120243-1	4009-27S	Total/NA	Water	8260C	
480-120243-2	4009-27I	Total/NA	Water	8260C	
480-120243-3	4009-27D	Total/NA	Water	8260C	
480-120243-4	4009-29S	Total/NA	Water	8260C	
480-120243-5	4009-29I	Total/NA	Water	8260C	
480-120243-7	TRIP BLANK	Total/NA	Water	8260C	
MB 480-365728/8	Method Blank	Total/NA	Water	8260C	
LCS 480-365728/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 366068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120243-6	4009-29D	Total/NA	Water	8260C	
MB 480-366068/7	Method Blank	Total/NA	Water	8260C	
LCS 480-366068/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 447341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120243-1	4009-27S	Total/NA	Water	8260C SIM	
480-120243-2	4009-27I	Total/NA	Water	8260C SIM	
480-120243-3	4009-27D	Total/NA	Water	8260C SIM	
MB 460-447341/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-447341/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-447341/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 447515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120243-4	4009-29S	Total/NA	Water	8260C SIM	
480-120243-5	4009-29I	Total/NA	Water	8260C SIM	
MB 460-447515/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-447515/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-447515/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 447586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120243-6	4009-29D	Total/NA	Water	8260C SIM	
MB 460-447586/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-447586/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-447586/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

LCMS

Prep Batch: 173334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120243-1	4009-27S	Total/NA	Water	PFAS Prep	
480-120243-2	4009-27I	Total/NA	Water	PFAS Prep	
480-120243-3	4009-27D	Total/NA	Water	PFAS Prep	
480-120243-4	4009-29S	Total/NA	Water	PFAS Prep	
480-120243-5	4009-29I	Total/NA	Water	PFAS Prep	
480-120243-6	4009-29D	Total/NA	Water	PFAS Prep	
MB 320-173334/1-A	Method Blank	Total/NA	Water	PFAS Prep	

LCMS (Continued)

Prep Batch: 173334 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-173334/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	

Analysis Batch: 173795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120243-1	4009-27S	Total/NA	Water	WS-LC-0025 At1	173334
480-120243-2	4009-27I	Total/NA	Water	WS-LC-0025 At1	173334
480-120243-3	4009-27D	Total/NA	Water	WS-LC-0025 At1	173334
480-120243-4	4009-29S	Total/NA	Water	WS-LC-0025 At1	173334
480-120243-5	4009-29I	Total/NA	Water	WS-LC-0025 At1	173334
480-120243-6	4009-29D	Total/NA	Water	WS-LC-0025 At1	173334
MB 320-173334/1-A	Method Blank	Total/NA	Water	WS-LC-0025 At1	173334
LCS 320-173334/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 At1	173334

Lab Chronicle

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

TestAmerica Job ID: 480-120243-1

Client Sample ID: 4009-27S
Date Collected: 06/27/17 13:35
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	365728	07/06/17 22:42	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 20:46	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			173334	07/10/17 15:14	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173795	07/12/17 12:00	SER	TAL SAC

Client Sample ID: 4009-27I
Date Collected: 06/27/17 12:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365728	07/06/17 23:06	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 21:10	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			173334	07/10/17 15:14	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173795	07/12/17 12:19	SER	TAL SAC

Client Sample ID: 4009-27D
Date Collected: 06/27/17 13:30
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365728	07/06/17 23:30	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 21:34	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			173334	07/10/17 15:14	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173795	07/12/17 12:37	SER	TAL SAC

Client Sample ID: 4009-29S
Date Collected: 06/27/17 10:25
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	365728	07/06/17 23:53	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447515	07/04/17 11:03	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			173334	07/10/17 15:14	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173795	07/12/17 13:14	SER	TAL SAC

Client Sample ID: 4009-29I
Date Collected: 06/27/17 12:00
Date Received: 06/28/17 02:00

Lab Sample ID: 480-120243-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	365728	07/07/17 00:17	JAS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447515	07/04/17 11:26	SZD	TAL EDI

Lab Chronicle

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

TestAmerica Job ID: 480-120243-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFAS Prep			173334	07/10/17 15:14	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173795	07/12/17 13:32	SER	TAL SAC

Client Sample ID: 4009-29D

Lab Sample ID: 480-120243-6

Date Collected: 06/27/17 10:10

Matrix: Water

Date Received: 06/28/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	366068	07/10/17 15:56	RRS	TAL BUF
Total/NA	Analysis	8260C SIM		10	447586	07/05/17 11:42	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			173334	07/10/17 15:14	TON	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173795	07/12/17 13:50	SER	TAL SAC

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-120243-7

Date Collected: 06/27/17 00:00

Matrix: Water

Date Received: 06/28/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365728	07/07/17 01:05	JAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-120243-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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 Edison

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-18

Laboratory: TestAmerica Sacramento

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	11666	04-01-18

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

Analysis Method	Prep Method	Matrix	Analyte
WS-LC-0025 At1	PFAS Prep	Water	Perfluorobutanesulfonic acid (PFBS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluoroheptanoic acid (PFHpA)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorohexanesulfonic acid (PFHxS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorononanoic acid (PFNA)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorooctanesulfonic acid (PFOS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorooctanoic acid (PFOA)

Method Summary

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

TestAmerica Job ID: 480-120243-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
WS-LC-0025 At1	Perfluorinated Alkyl Substances	TAL-SAC	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

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

TestAmerica Job ID: 480-120243-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-120243-1	4009-27S	Water	06/27/17 13:35	06/28/17 02:00
480-120243-2	4009-27I	Water	06/27/17 12:00	06/28/17 02:00
480-120243-3	4009-27D	Water	06/27/17 13:30	06/28/17 02:00
480-120243-4	4009-29S	Water	06/27/17 10:25	06/28/17 02:00
480-120243-5	4009-29I	Water	06/27/17 12:00	06/28/17 02:00
480-120243-6	4009-29D	Water	06/27/17 10:10	06/28/17 02:00
480-120243-7	TRIP BLANK	Water	06/27/17 00:00	06/28/17 02:00

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-120243 COC

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/27/17	277807
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	**Analysis (Attach list if more space is needed)**
Clifton Park / NY / 12065	Aubrey Thomas	Judy Stone	
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC Standby Vestal (NY)			
Contract/Purchase Order/Quote No.			
Contract D007618 Project 00266401.0009			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	8260C - (MOD) TCL List VOA	PFAs_DI - PFAs UCMR List (6)	8260 - C_SIM 1,4-Dioxane	
4009-27S	6/27/17	1335		X			2			5			3	2	2	
4009-27I		1200		X			2			5			3	2	2	
4009-27D		1330		X			2			5			3	2	2	
4009-29S		1025		X			2			5			3	2	2	
4009-29I		1200		X			2			5			3	2	2	
4009-29D		1010		X			2			5			3	2	2	
Trip Blank	—	—		X									2			

RE
6-27-17

Special Instructions/ Conditions of Receipt

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
Suzanne Olsson	6/27/17	17:00	Rehrlich, Syr	6-27-17	17:00
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
Rehrlich	6-27-17	19:00	TAS 6-28-17	0200	
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments
PFCs → Sacramento from Syr. —RE

1.1 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/27/17	277807
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Clifton Park / NY / 12065	Aubrey Thomas	Judy Stone	
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC Standby Vestal (NY)			
Contract/Purchase Order/Quote No.			
Contract D007618 Project 00266401.0009			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

480-120243 Chain of Custody

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	8260C-(MOD) TCL List+VOA	PFAs_DI-PFAs UCMR List(6)	8260_C_SIM 1,4-Dioxane
4009-29S	6/27/17	1335		X			2			5			3	2	2
4009-27I		1200		X			2			5			3	2	2
4009-27D		1330		X			2			5			3	2	2
4009-29S		1025		X			2			5			3	2	2
4009-29I		1200		X			2			5			3	2	2
4009-29D		1010		X			2			5			3	2	2
Trip Blank	—	—		X									2		

RE

6-27-17

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Serge Dellarocca	6/27/17	17:00	1. Received By: Renglish, SyR	6-27-17	17:00
2. Relinquished By: RENglish	6-27-17	19:00	2. Received By: TAMS 0.6°C	6/28/17	930
3. Relinquished By:			3. Received By:		

Comments
PFCs → Sacramento from Syr. - RE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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 (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-35767.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-120243-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/11/2017			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817	PO #:			
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	WO #:			
Email:	Project #: 48005198			
Project Name: NYSDEC-Standby VESTAL	SSOW#:			
Site:				

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:

Analysis Requested

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_SIM/5030C (MOD) Volatile SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
4009-27S (480-120243-1)	6/27/17	13:35 Eastern		Water			X	2	
4009-27I (480-120243-2)	6/27/17	12:00 Eastern		Water			X	2	
4009-27D (480-120243-3)	6/27/17	13:30 Eastern		Water			X	2	
4009-29S (480-120243-4)	6/27/17	10:25 Eastern		Water			X	2	
4009-29I (480-120243-5)	6/27/17	12:00 Eastern		Water			X	2	
4009-29D (480-120243-6)	6/27/17	10:10 Eastern		Water			X	2	

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]	6/28/17 1600	TAB	[signature] via FedEx	6/29/17 1010	TAL
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.: 033818	Cooler Temperature(s) °C and Other Remarks: 1.2°C DR8

7/19/2017

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120243-1

Login Number: 120243

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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.	True	arcadis
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120243-1

Login Number: 120243
List Number: 3
Creator: Armbruster, Chris

List Source: TestAmerica Edison
List Creation: 06/29/17 11:18 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	033818
Sample custody seals, if present, are intact.	N/A	
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	1.2°C IR8
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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120243-1

Login Number: 120243
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 06/28/17 03:15 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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	0.8
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?	False	Not requested on COC.
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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: 480-120330-1
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:
7/14/2017 11:39:07 AM

Judy Stone, Senior Project Manager
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

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

TestAmerica Job ID: 480-120330-1

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.
E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
B	The analyte was found in an associated blank, as well as in the sample.

LCMS

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)

Job ID: 480-120330-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-120330-1

Receipt
The samples were received on 6/29/2017 2:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

GC/MS VOA
Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-365748 recovered outside control limits for the following analyte: Tetrachloroethene. The analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 4009-7 (480-120330-1), 4009-8 (480-120330-2), 4009-26 (480-120330-3) and DUP2 (480-120330-4).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 4009-8 (480-120330-2), 4009-26 (480-120330-3) and DUP2 (480-120330-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-365816 recovered above the upper control limit for 2-Hexanone and Methylcyclohexane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 4009-8 (480-120330-2), 4009-26 (480-120330-3), TRIP BLANK (480-120330-5), EQUIPMENT BLANK 1 (480-120330-6), EQUIPMENT BLANK 2 (480-120330-7) and EQUIPMENT BLANK 3 (480-120330-8).

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

LCMS
Method(s) WS-LC-0025 At1: The continuing calibration verification (CCV) associated with batch 320-173693 recovered above the upper control limit for Perfluorobutanesulfonic acid (PFBS). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) WS-LC-0025 At1: Due to an autosampler error, the nominal injection volume was not analyzed for the CCV analyzed on 07/12/2017. As a result, all of the labeled analytes (IDA) were outside of the control limits; however all target analytes were in control in the CCV except for the high recovery of Perfluorobutanesulfonic acid (PFBS). The preceding and subsequent CCVs were analyzed at the nominal injection volume and were in control for all analytes. The associated field samples were non-detect (ND) for target analytes and had all IDA values within control limits. There is no adverse impact upon the data.

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

Organic Prep
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: 480-120330-1

Client Sample ID: 4009-7 — Lab Sample ID: 480-120330-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.73		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1-Dichloroethane	1.1		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.34	J	1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	3.7	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	0.45	J	1.0	0.41	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	48		1.0	0.81	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.29	J	1.0	0.16	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.62	J	1.0	0.16	ug/L	1		8260C	Total/NA
Trichloroethene	2.0		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	10		1.0	0.90	ug/L	1		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	10.2		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	9.75		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.02		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	6.18		2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: 4009-8 — Lab Sample ID: 480-120330-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1,1-Trichloroethane	1200	E	10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	86		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	38		10	2.9	ug/L	10		8260C	Total/NA
Chloroethane	16		10	3.2	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	260		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	220		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	15		10	9.0	ug/L	10		8260C	Total/NA
1,1,1-Trichloroethane - DL	1500		25	21	ug/L	25		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	12	J	25	7.8	ug/L	25		8260C	Total/NA
1,1-Dichloroethane - DL	110		25	9.5	ug/L	25		8260C	Total/NA
1,1-Dichloroethene - DL	61		25	7.3	ug/L	25		8260C	Total/NA
Chloroethane - DL	21	J	25	8.0	ug/L	25		8260C	Total/NA
cis-1,2-Dichloroethene - DL	300		25	20	ug/L	25		8260C	Total/NA
Methylene Chloride - DL	11	J	25	11	ug/L	25		8260C	Total/NA
Trichloroethene - DL	240		25	12	ug/L	25		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.22		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.02		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.68	J	2.00	0.80	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	12.7		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.51		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	1.06	J	2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 480-120330-1

Client Sample ID: 4009-26 — Lab Sample ID: 480-120330-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.7		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1,1-Trichloroethane	410	E	2.0	1.6	ug/L	2		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	5.6		2.0	0.62	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	46		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	18		2.0	0.58	ug/L	2		8260C	Total/NA
Benzene	0.89	J	2.0	0.82	ug/L	2		8260C	Total/NA
Chloroethane	3.0		2.0	0.64	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	140		2.0	1.6	ug/L	2		8260C	Total/NA
Dichlorodifluoromethane	2.1		2.0	1.4	ug/L	2		8260C	Total/NA
Methyl tert-butyl ether	0.37	J	2.0	0.32	ug/L	2		8260C	Total/NA
Methylcyclohexane	0.43	J	2.0	0.32	ug/L	2		8260C	Total/NA
Methylene Chloride	1.0	J B	2.0	0.88	ug/L	2		8260C	Total/NA
Tetrachloroethene	1.3	J *	2.0	0.72	ug/L	2		8260C	Total/NA
Trichloroethene	69		2.0	0.92	ug/L	2		8260C	Total/NA
Vinyl chloride	10		2.0	1.8	ug/L	2		8260C	Total/NA
1,1,1-Trichloroethane - DL	410		10	8.2	ug/L	10		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	7.0	J	10	3.1	ug/L	10		8260C	Total/NA
1,1-Dichloroethane - DL	45		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene - DL	12		10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene - DL	140		10	8.1	ug/L	10		8260C	Total/NA
Methylene Chloride - DL	4.5	J	10	4.4	ug/L	10		8260C	Total/NA
Trichloroethene - DL	67		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride - DL	10		10	9.0	ug/L	10		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.36		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.37		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	9.62		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	8.44		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	1.14	J	2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: DUP2 — Lab Sample ID: 480-120330-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.8		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1,1-Trichloroethane	380		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	43		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	17		10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	130		10	8.1	ug/L	10		8260C	Total/NA
Methylcyclohexane	1.8	J	10	1.6	ug/L	10		8260C	Total/NA
Trichloroethene	67		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	9.1	J	10	9.0	ug/L	10		8260C	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.49		2.00	0.92	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.28		2.00	0.87	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorooctanoic acid (PFOA)	9.58		2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 480-120330-1

Client Sample ID: DUP2 (Continued) — Lab Sample ID: 480-120330-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	8.10		2.00	1.28	ng/L	1		WS-LC-0025 At1	Total/NA
Perfluorononanoic acid (PFNA)	1.05	J	2.00	0.65	ng/L	1		WS-LC-0025 At1	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-120330-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	0.25	J B	1.0	0.16	ug/L	1		8260C	Total/NA

Client Sample ID: EQUIPMENT BLANK 1 — Lab Sample ID: 480-120330-6

No Detections.

Client Sample ID: EQUIPMENT BLANK 2 — Lab Sample ID: 480-120330-7

No Detections.

Client Sample ID: EQUIPMENT BLANK 3 — Lab Sample ID: 480-120330-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.77	J	2.00	0.75	ng/L	1		WS-LC-0025 At1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-7

Date Collected: 06/28/17 12:20
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.73**		0.40	0.20	ug/L			07/03/17 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 144*		*07/03/17 18:25*	*1*
4-Bromofluorobenzene	*118*		*72 - 133*		*07/03/17 18:25*	*1*

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	0.82	ug/L			07/07/17 05:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 05:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/07/17 05:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/07/17 05:24	1
1,1-Dichloroethane	**1.1**		1.0	0.38	ug/L			07/07/17 05:24	1
1,1-Dichloroethene	**0.34**	**J**	1.0	0.29	ug/L			07/07/17 05:24	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/07/17 05:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/07/17 05:24	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/07/17 05:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/07/17 05:24	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/07/17 05:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/07/17 05:24	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 05:24	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/07/17 05:24	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/07/17 05:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/07/17 05:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/07/17 05:24	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/07/17 05:24	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/07/17 05:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/07/17 05:24	1
Acetone	**3.7**	**J**	10	3.0	ug/L			07/07/17 05:24	1
Benzene	**0.45**	**J**	1.0	0.41	ug/L			07/07/17 05:24	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/07/17 05:24	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/07/17 05:24	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/07/17 05:24	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/07/17 05:24	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/07/17 05:24	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/07/17 05:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/07/17 05:24	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/07/17 05:24	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/07/17 05:24	1
cis-1,2-Dichloroethene	**48**		1.0	0.81	ug/L			07/07/17 05:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/07/17 05:24	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/07/17 05:24	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/07/17 05:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/07/17 05:24	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/07/17 05:24	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/07/17 05:24	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/07/17 05:24	1
Methyl tert-butyl ether	**0.29**	**J**	1.0	0.16	ug/L			07/07/17 05:24	1
Methylcyclohexane	**0.62**	**J**	1.0	0.16	ug/L			07/07/17 05:24	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/07/17 05:24	1

Client Sample ID: 4009-7

Date Collected: 06/28/17 12:20
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.73	ug/L			07/07/17 05:24	1
Tetrachloroethene	1.0	U *	1.0	0.36	ug/L			07/07/17 05:24	1
Toluene	1.0	U	1.0	0.51	ug/L			07/07/17 05:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/07/17 05:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/07/17 05:24	1
Trichloroethene	**2.0**		1.0	0.46	ug/L			07/07/17 05:24	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/07/17 05:24	1
Vinyl chloride	**10**		1.0	0.90	ug/L			07/07/17 05:24	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/07/17 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/07/17 05:24*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*07/07/17 05:24*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*07/07/17 05:24*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/07/17 05:24*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**10.2**		2.00	0.92	ng/L		07/07/17 11:27	07/08/17 12:09	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/07/17 11:27	07/08/17 12:09	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 12:09	1
Perfluorooctanoic acid (PFOA)	**9.75**		2.00	0.75	ng/L		07/07/17 11:27	07/08/17 12:09	1
Perfluorooctanesulfonic acid (PFOS)	**7.02**		2.00	1.28	ng/L		07/07/17 11:27	07/08/17 12:09	1
Perfluorononanoic acid (PFNA)	**6.18**		2.00	0.65	ng/L		07/07/17 11:27	07/08/17 12:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*82*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:09*	*1*
13C4-PFHpA	*67*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:09*	*1*
13C4 PFOA	*64*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:09*	*1*
13C4 PFOS	*82*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:09*	*1*
13C5 PFNA	*66*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:09*	*1*

Client Sample ID: 4009-8

Date Collected: 06/28/17 10:05
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.8**		0.40	0.20	ug/L			07/03/17 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 144*		*07/03/17 18:49*	*1*
4-Bromofluorobenzene	*97*		*72 - 133*		*07/03/17 18:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1200**	**E**	10	8.2	ug/L			07/07/17 05:51	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			07/07/17 05:51	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	3.1	ug/L			07/07/17 05:51	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			07/07/17 05:51	10

Client Sample ID: 4009-8
Date Collected: 06/28/17 10:05
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**86**		10	3.8	ug/L			07/07/17 05:51	10
1,1-Dichloroethene	**38**		10	2.9	ug/L			07/07/17 05:51	10
1,2,3-Trimethylbenzene	10	U	10	2.6	ug/L			07/07/17 05:51	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			07/07/17 05:51	10
1,2,4-Trimethylbenzene	10	U	10	7.5	ug/L			07/07/17 05:51	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			07/07/17 05:51	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			07/07/17 05:51	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			07/07/17 05:51	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			07/07/17 05:51	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			07/07/17 05:51	10
1,3,5-Trimethylbenzene	10	U	10	7.7	ug/L			07/07/17 05:51	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			07/07/17 05:51	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			07/07/17 05:51	10
2-Butanone (MEK)	100	U	100	13	ug/L			07/07/17 05:51	10
2-Hexanone	50	U	50	12	ug/L			07/07/17 05:51	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			07/07/17 05:51	10
Acetone	100	U	100	30	ug/L			07/07/17 05:51	10
Benzene	10	U	10	4.1	ug/L			07/07/17 05:51	10
Bromodichloromethane	10	U	10	3.9	ug/L			07/07/17 05:51	10
Bromoform	10	U	10	2.6	ug/L			07/07/17 05:51	10
Bromomethane	10	U	10	6.9	ug/L			07/07/17 05:51	10
Carbon disulfide	10	U	10	1.9	ug/L			07/07/17 05:51	10
Carbon tetrachloride	10	U	10	2.7	ug/L			07/07/17 05:51	10
Chlorobenzene	10	U	10	7.5	ug/L			07/07/17 05:51	10
Chloroethane	**16**		10	3.2	ug/L			07/07/17 05:51	10
Chloroform	10	U	10	3.4	ug/L			07/07/17 05:51	10
Chloromethane	10	U	10	3.5	ug/L			07/07/17 05:51	10
cis-1,2-Dichloroethene	**260**		10	8.1	ug/L			07/07/17 05:51	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			07/07/17 05:51	10
Cyclohexane	10	U	10	1.8	ug/L			07/07/17 05:51	10
Dibromochloromethane	10	U	10	3.2	ug/L			07/07/17 05:51	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			07/07/17 05:51	10
Ethylbenzene	10	U	10	7.4	ug/L			07/07/17 05:51	10
Isopropylbenzene	10	U	10	7.9	ug/L			07/07/17 05:51	10
Methyl acetate	25	U	25	13	ug/L			07/07/17 05:51	10
Methyl tert-butyl ether	10	U	10	1.6	ug/L			07/07/17 05:51	10
Methylcyclohexane	10	U	10	1.6	ug/L			07/07/17 05:51	10
Methylene Chloride	10	U	10	4.4	ug/L			07/07/17 05:51	10
Styrene	10	U	10	7.3	ug/L			07/07/17 05:51	10
Tetrachloroethene	10	U *	10	3.6	ug/L			07/07/17 05:51	10
Toluene	10	U	10	5.1	ug/L			07/07/17 05:51	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			07/07/17 05:51	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			07/07/17 05:51	10
Trichloroethene	**220**		10	4.6	ug/L			07/07/17 05:51	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			07/07/17 05:51	10
Vinyl chloride	**15**		10	9.0	ug/L			07/07/17 05:51	10
Xylenes, Total	20	U	20	6.6	ug/L			07/07/17 05:51	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/07/17 05:51*	*10*

Client Sample ID: 4009-8
Date Collected: 06/28/17 10:05
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-2
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*07/07/17 05:51*	*10*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*07/07/17 05:51*	*10*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/07/17 05:51*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1500**		25	21	ug/L			07/07/17 15:26	25
1,1,2,2-Tetrachloroethane	25	U	25	5.3	ug/L			07/07/17 15:26	25
1,1,2-Trichloro-1,2,2-trifluoroethane	**12**	**J**	25	7.8	ug/L			07/07/17 15:26	25
1,1,2-Trichloroethane	25	U	25	5.8	ug/L			07/07/17 15:26	25
1,1-Dichloroethane	**110**		25	9.5	ug/L			07/07/17 15:26	25
1,1-Dichloroethene	**61**		25	7.3	ug/L			07/07/17 15:26	25
1,2,3-Trimethylbenzene	25	U	25	6.5	ug/L			07/07/17 15:26	25
1,2,4-Trichlorobenzene	25	U	25	10	ug/L			07/07/17 15:26	25
1,2,4-Trimethylbenzene	25	U	25	19	ug/L			07/07/17 15:26	25
1,2-Dibromo-3-Chloropropane	25	U	25	9.8	ug/L			07/07/17 15:26	25
1,2-Dibromoethane	25	U	25	18	ug/L			07/07/17 15:26	25
1,2-Dichlorobenzene	25	U	25	20	ug/L			07/07/17 15:26	25
1,2-Dichloroethane	25	U	25	5.3	ug/L			07/07/17 15:26	25
1,2-Dichloropropane	25	U	25	18	ug/L			07/07/17 15:26	25
1,3,5-Trimethylbenzene	25	U	25	19	ug/L			07/07/17 15:26	25
1,3-Dichlorobenzene	25	U	25	20	ug/L			07/07/17 15:26	25
1,4-Dichlorobenzene	25	U	25	21	ug/L			07/07/17 15:26	25
2-Butanone (MEK)	250	U	250	33	ug/L			07/07/17 15:26	25
2-Hexanone	130	U	130	31	ug/L			07/07/17 15:26	25
4-Methyl-2-pentanone (MIBK)	130	U	130	53	ug/L			07/07/17 15:26	25
Acetone	250	U	250	75	ug/L			07/07/17 15:26	25
Benzene	25	U	25	10	ug/L			07/07/17 15:26	25
Bromodichloromethane	25	U	25	9.8	ug/L			07/07/17 15:26	25
Bromoform	25	U	25	6.5	ug/L			07/07/17 15:26	25
Bromomethane	25	U	25	17	ug/L			07/07/17 15:26	25
Carbon disulfide	25	U	25	4.8	ug/L			07/07/17 15:26	25
Carbon tetrachloride	25	U	25	6.8	ug/L			07/07/17 15:26	25
Chlorobenzene	25	U	25	19	ug/L			07/07/17 15:26	25
Chloroethane	**21**	**J**	25	8.0	ug/L			07/07/17 15:26	25
Chloroform	25	U	25	8.5	ug/L			07/07/17 15:26	25
Chloromethane	25	U	25	8.8	ug/L			07/07/17 15:26	25
cis-1,2-Dichloroethene	**300**		25	20	ug/L			07/07/17 15:26	25
cis-1,3-Dichloropropene	25	U	25	9.0	ug/L			07/07/17 15:26	25
Cyclohexane	25	U	25	4.5	ug/L			07/07/17 15:26	25
Dibromochloromethane	25	U	25	8.0	ug/L			07/07/17 15:26	25
Dichlorodifluoromethane	25	U	25	17	ug/L			07/07/17 15:26	25
Ethylbenzene	25	U	25	19	ug/L			07/07/17 15:26	25
Isopropylbenzene	25	U	25	20	ug/L			07/07/17 15:26	25
Methyl acetate	63	U	63	33	ug/L			07/07/17 15:26	25
Methyl tert-butyl ether	25	U	25	4.0	ug/L			07/07/17 15:26	25
Methylcyclohexane	25	U	25	4.0	ug/L			07/07/17 15:26	25
Methylene Chloride	**11**	**J**	25	11	ug/L			07/07/17 15:26	25

Client Sample ID: 4009-8

Date Collected: 06/28/17 10:05
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	25	U	25	18	ug/L			07/07/17 15:26	25
Tetrachloroethene	25	U	25	9.0	ug/L			07/07/17 15:26	25
Toluene	25	U	25	13	ug/L			07/07/17 15:26	25
trans-1,2-Dichloroethene	25	U	25	23	ug/L			07/07/17 15:26	25
trans-1,3-Dichloropropene	25	U	25	9.3	ug/L			07/07/17 15:26	25
Trichloroethene	**240**		25	12	ug/L			07/07/17 15:26	25
Trichlorofluoromethane	25	U	25	22	ug/L			07/07/17 15:26	25
Vinyl chloride	25	U	25	23	ug/L			07/07/17 15:26	25
Xylenes, Total	50	U	50	17	ug/L			07/07/17 15:26	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*07/07/17 15:26*	*25*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*07/07/17 15:26*	*25*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*07/07/17 15:26*	*25*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/07/17 15:26*	*25*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**3.22**		2.00	0.92	ng/L		07/07/17 11:27	07/08/17 12:28	1
Perfluorohexanesulfonic acid (PFHxS)	**5.02**		2.00	0.87	ng/L		07/07/17 11:27	07/08/17 12:28	1
Perfluoroheptanoic acid (PFHpA)	**1.68**	**J**	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 12:28	1
Perfluorooctanoic acid (PFOA)	**12.7**		2.00	0.75	ng/L		07/07/17 11:27	07/08/17 12:28	1
Perfluorooctanesulfonic acid (PFOS)	**9.51**		2.00	1.28	ng/L		07/07/17 11:27	07/08/17 12:28	1
Perfluorononanoic acid (PFNA)	**1.06**	**J**	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 12:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*103*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:28*	*1*
13C4-PFHpA	*109*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:28*	*1*
13C4 PFOA	*88*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:28*	*1*
13C4 PFOS	*99*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:28*	*1*
13C5 PFNA	*78*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:28*	*1*

Client Sample ID: 4009-26

Date Collected: 06/28/17 09:55
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		0.40	0.20	ug/L			07/03/17 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*71 - 144*		*07/03/17 19:12*	*1*
4-Bromofluorobenzene	*123*		*72 - 133*		*07/03/17 19:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**410**	**E**	2.0	1.6	ug/L			07/07/17 06:18	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.42	ug/L			07/07/17 06:18	2

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

TestAmerica Job ID: 480-120330-1

Client Sample ID: 4009-26
Date Collected: 06/28/17 09:55
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	**5.6**		2.0	0.62	ug/L			07/07/17 06:18	2
1,1,2-Trichloroethane	2.0	U	2.0	0.46	ug/L			07/07/17 06:18	2
1,1-Dichloroethane	**46**		2.0	0.76	ug/L			07/07/17 06:18	2
1,1-Dichloroethene	**18**		2.0	0.58	ug/L			07/07/17 06:18	2
1,2,3-Trimethylbenzene	2.0	U	2.0	0.52	ug/L			07/07/17 06:18	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.82	ug/L			07/07/17 06:18	2
1,2,4-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			07/07/17 06:18	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.78	ug/L			07/07/17 06:18	2
1,2-Dibromoethane	2.0	U	2.0	1.5	ug/L			07/07/17 06:18	2
1,2-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			07/07/17 06:18	2
1,2-Dichloroethane	2.0	U	2.0	0.42	ug/L			07/07/17 06:18	2
1,2-Dichloropropane	2.0	U	2.0	1.4	ug/L			07/07/17 06:18	2
1,3,5-Trimethylbenzene	2.0	U	2.0	1.5	ug/L			07/07/17 06:18	2
1,3-Dichlorobenzene	2.0	U	2.0	1.6	ug/L			07/07/17 06:18	2
1,4-Dichlorobenzene	2.0	U	2.0	1.7	ug/L			07/07/17 06:18	2
2-Butanone (MEK)	20	U	20	2.6	ug/L			07/07/17 06:18	2
2-Hexanone	10	U	10	2.5	ug/L			07/07/17 06:18	2
4-Methyl-2-pentanone (MIBK)	10	U	10	4.2	ug/L			07/07/17 06:18	2
Acetone	20	U	20	6.0	ug/L			07/07/17 06:18	2
Benzene	**0.89**	**J**	2.0	0.82	ug/L			07/07/17 06:18	2
Bromodichloromethane	2.0	U	2.0	0.78	ug/L			07/07/17 06:18	2
Bromoform	2.0	U	2.0	0.52	ug/L			07/07/17 06:18	2
Bromomethane	2.0	U	2.0	1.4	ug/L			07/07/17 06:18	2
Carbon disulfide	2.0	U	2.0	0.38	ug/L			07/07/17 06:18	2
Carbon tetrachloride	2.0	U	2.0	0.54	ug/L			07/07/17 06:18	2
Chlorobenzene	2.0	U	2.0	1.5	ug/L			07/07/17 06:18	2
Chloroethane	**3.0**		2.0	0.64	ug/L			07/07/17 06:18	2
Chloroform	2.0	U	2.0	0.68	ug/L			07/07/17 06:18	2
Chloromethane	2.0	U	2.0	0.70	ug/L			07/07/17 06:18	2
cis-1,2-Dichloroethene	**140**		2.0	1.6	ug/L			07/07/17 06:18	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.72	ug/L			07/07/17 06:18	2
Cyclohexane	2.0	U	2.0	0.36	ug/L			07/07/17 06:18	2
Dibromochloromethane	2.0	U	2.0	0.64	ug/L			07/07/17 06:18	2
Dichlorodifluoromethane	**2.1**		2.0	1.4	ug/L			07/07/17 06:18	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			07/07/17 06:18	2
Isopropylbenzene	2.0	U	2.0	1.6	ug/L			07/07/17 06:18	2
Methyl acetate	5.0	U	5.0	2.6	ug/L			07/07/17 06:18	2
Methyl tert-butyl ether	**0.37**	**J**	2.0	0.32	ug/L			07/07/17 06:18	2
Methylcyclohexane	**0.43**	**J**	2.0	0.32	ug/L			07/07/17 06:18	2
Methylene Chloride	**1.0**	**J B**	2.0	0.88	ug/L			07/07/17 06:18	2
Styrene	2.0	U	2.0	1.5	ug/L			07/07/17 06:18	2
Tetrachloroethene	**1.3**	**J ***	2.0	0.72	ug/L			07/07/17 06:18	2
Toluene	2.0	U	2.0	1.0	ug/L			07/07/17 06:18	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.8	ug/L			07/07/17 06:18	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.74	ug/L			07/07/17 06:18	2
Trichloroethene	**69**		2.0	0.92	ug/L			07/07/17 06:18	2
Trichlorofluoromethane	2.0	U	2.0	1.8	ug/L			07/07/17 06:18	2
Vinyl chloride	**10**		2.0	1.8	ug/L			07/07/17 06:18	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			07/07/17 06:18	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*07/07/17 06:18*	*2*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*07/07/17 06:18*	*2*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*07/07/17 06:18*	*2*
Toluene-d8 (Surr)	*95*		*80 - 120*		*07/07/17 06:18*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**410**		10	8.2	ug/L			07/07/17 15:54	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			07/07/17 15:54	10
1,1,2-Trichloro-1,2,2-trifluoroethane	**7.0**	**J**	10	3.1	ug/L			07/07/17 15:54	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			07/07/17 15:54	10
1,1-Dichloroethane	**45**		10	3.8	ug/L			07/07/17 15:54	10
1,1-Dichloroethene	**12**		10	2.9	ug/L			07/07/17 15:54	10
1,2,3-Trimethylbenzene	10	U	10	2.6	ug/L			07/07/17 15:54	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			07/07/17 15:54	10
1,2,4-Trimethylbenzene	10	U	10	7.5	ug/L			07/07/17 15:54	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			07/07/17 15:54	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			07/07/17 15:54	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			07/07/17 15:54	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			07/07/17 15:54	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			07/07/17 15:54	10
1,3,5-Trimethylbenzene	10	U	10	7.7	ug/L			07/07/17 15:54	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			07/07/17 15:54	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			07/07/17 15:54	10
2-Butanone (MEK)	100	U	100	13	ug/L			07/07/17 15:54	10
2-Hexanone	50	U	50	12	ug/L			07/07/17 15:54	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			07/07/17 15:54	10
Acetone	100	U	100	30	ug/L			07/07/17 15:54	10
Benzene	10	U	10	4.1	ug/L			07/07/17 15:54	10
Bromodichloromethane	10	U	10	3.9	ug/L			07/07/17 15:54	10
Bromoform	10	U	10	2.6	ug/L			07/07/17 15:54	10
Bromomethane	10	U	10	6.9	ug/L			07/07/17 15:54	10
Carbon disulfide	10	U	10	1.9	ug/L			07/07/17 15:54	10
Carbon tetrachloride	10	U	10	2.7	ug/L			07/07/17 15:54	10
Chlorobenzene	10	U	10	7.5	ug/L			07/07/17 15:54	10
Chloroethane	10	U	10	3.2	ug/L			07/07/17 15:54	10
Chloroform	10	U	10	3.4	ug/L			07/07/17 15:54	10
Chloromethane	10	U	10	3.5	ug/L			07/07/17 15:54	10
cis-1,2-Dichloroethene	**140**		10	8.1	ug/L			07/07/17 15:54	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			07/07/17 15:54	10
Cyclohexane	10	U	10	1.8	ug/L			07/07/17 15:54	10
Dibromochloromethane	10	U	10	3.2	ug/L			07/07/17 15:54	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			07/07/17 15:54	10
Ethylbenzene	10	U	10	7.4	ug/L			07/07/17 15:54	10
Isopropylbenzene	10	U	10	7.9	ug/L			07/07/17 15:54	10
Methyl acetate	25	U	25	13	ug/L			07/07/17 15:54	10
Methyl tert-butyl ether	10	U	10	1.6	ug/L			07/07/17 15:54	10
Methylcyclohexane	10	U	10	1.6	ug/L			07/07/17 15:54	10
Methylene Chloride	**4.5**	**J**	10	4.4	ug/L			07/07/17 15:54	10
Styrene	10	U	10	7.3	ug/L			07/07/17 15:54	10
Tetrachloroethene	10	U	10	3.6	ug/L			07/07/17 15:54	10
Toluene	10	U	10	5.1	ug/L			07/07/17 15:54	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			07/07/17 15:54	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			07/07/17 15:54	10

Client Sample ID: 4009-26

Date Collected: 06/28/17 09:55
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**67**		10	4.6	ug/L			07/07/17 15:54	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			07/07/17 15:54	10
Vinyl chloride	**10**		10	9.0	ug/L			07/07/17 15:54	10
Xylenes, Total	20	U	20	6.6	ug/L			07/07/17 15:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*07/07/17 15:54*	*10*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*07/07/17 15:54*	*10*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*07/07/17 15:54*	*10*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/07/17 15:54*	*10*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**3.36**		2.00	0.92	ng/L		07/07/17 11:27	07/08/17 12:46	1
Perfluorohexanesulfonic acid (PFHxS)	**4.37**		2.00	0.87	ng/L		07/07/17 11:27	07/08/17 12:46	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 12:46	1
Perfluorooctanoic acid (PFOA)	**9.62**		2.00	0.75	ng/L		07/07/17 11:27	07/08/17 12:46	1
Perfluorooctanesulfonic acid (PFOS)	**8.44**		2.00	1.28	ng/L		07/07/17 11:27	07/08/17 12:46	1
Perfluorononanoic acid (PFNA)	**1.14**	**J**	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 12:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*108*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:46*	*1*
13C4-PFHpA	*113*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:46*	*1*
13C4 PFOA	*92*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:46*	*1*
13C4 PFOS	*102*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:46*	*1*
13C5 PFNA	*76*		*25 - 150*	*07/07/17 11:27*	*07/08/17 12:46*	*1*

Client Sample ID: DUP2

Date Collected: 06/28/17 00:00
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		0.40	0.20	ug/L			07/03/17 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 144*		*07/03/17 19:36*	*1*
4-Bromofluorobenzene	*122*		*72 - 133*		*07/03/17 19:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**380**		10	8.2	ug/L			07/07/17 06:45	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			07/07/17 06:45	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	3.1	ug/L			07/07/17 06:45	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			07/07/17 06:45	10
1,1-Dichloroethane	**43**		10	3.8	ug/L			07/07/17 06:45	10
1,1-Dichloroethene	**17**		10	2.9	ug/L			07/07/17 06:45	10
1,2,3-Trimethylbenzene	10	U	10	2.6	ug/L			07/07/17 06:45	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			07/07/17 06:45	10

Client Sample ID: DUP2
Date Collected: 06/28/17 00:00
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-4
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-Trimethylbenzene	10	U	10	7.5	ug/L			07/07/17 06:45	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			07/07/17 06:45	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			07/07/17 06:45	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			07/07/17 06:45	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			07/07/17 06:45	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			07/07/17 06:45	10
1,3,5-Trimethylbenzene	10	U	10	7.7	ug/L			07/07/17 06:45	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			07/07/17 06:45	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			07/07/17 06:45	10
2-Butanone (MEK)	100	U	100	13	ug/L			07/07/17 06:45	10
2-Hexanone	50	U	50	12	ug/L			07/07/17 06:45	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			07/07/17 06:45	10
Acetone	100	U	100	30	ug/L			07/07/17 06:45	10
Benzene	10	U	10	4.1	ug/L			07/07/17 06:45	10
Bromodichloromethane	10	U	10	3.9	ug/L			07/07/17 06:45	10
Bromoform	10	U	10	2.6	ug/L			07/07/17 06:45	10
Bromomethane	10	U	10	6.9	ug/L			07/07/17 06:45	10
Carbon disulfide	10	U	10	1.9	ug/L			07/07/17 06:45	10
Carbon tetrachloride	10	U	10	2.7	ug/L			07/07/17 06:45	10
Chlorobenzene	10	U	10	7.5	ug/L			07/07/17 06:45	10
Chloroethane	10	U	10	3.2	ug/L			07/07/17 06:45	10
Chloroform	10	U	10	3.4	ug/L			07/07/17 06:45	10
Chloromethane	10	U	10	3.5	ug/L			07/07/17 06:45	10
cis-1,2-Dichloroethene	**130**		10	8.1	ug/L			07/07/17 06:45	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			07/07/17 06:45	10
Cyclohexane	10	U	10	1.8	ug/L			07/07/17 06:45	10
Dibromochloromethane	10	U	10	3.2	ug/L			07/07/17 06:45	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			07/07/17 06:45	10
Ethylbenzene	10	U	10	7.4	ug/L			07/07/17 06:45	10
Isopropylbenzene	10	U	10	7.9	ug/L			07/07/17 06:45	10
Methyl acetate	25	U	25	13	ug/L			07/07/17 06:45	10
Methyl tert-butyl ether	10	U	10	1.6	ug/L			07/07/17 06:45	10
Methylcyclohexane	**1.8**	**J**	10	1.6	ug/L			07/07/17 06:45	10
Methylene Chloride	10	U	10	4.4	ug/L			07/07/17 06:45	10
Styrene	10	U	10	7.3	ug/L			07/07/17 06:45	10
Tetrachloroethene	10	U *	10	3.6	ug/L			07/07/17 06:45	10
Toluene	10	U	10	5.1	ug/L			07/07/17 06:45	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			07/07/17 06:45	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			07/07/17 06:45	10
Trichloroethene	**67**		10	4.6	ug/L			07/07/17 06:45	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			07/07/17 06:45	10
Vinyl chloride	**9.1**	**J**	10	9.0	ug/L			07/07/17 06:45	10
Xylenes, Total	20	U	20	6.6	ug/L			07/07/17 06:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*07/07/17 06:45*	*10*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*07/07/17 06:45*	*10*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*07/07/17 06:45*	*10*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/07/17 06:45*	*10*

Client Sample ID: DUP2

Date Collected: 06/28/17 00:00
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-4
Matrix: Water

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	3.49		2.00	0.92	ng/L		07/07/17 11:27	07/08/17 13:05	1
Perfluorohexanesulfonic acid (PFHxS)	4.28		2.00	0.87	ng/L		07/07/17 11:27	07/08/17 13:05	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 13:05	1
Perfluorooctanoic acid (PFOA)	9.58		2.00	0.75	ng/L		07/07/17 11:27	07/08/17 13:05	1
Perfluorooctanesulfonic acid (PFOS)	8.10		2.00	1.28	ng/L		07/07/17 11:27	07/08/17 13:05	1
Perfluorononanoic acid (PFNA)	1.05	J	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 13:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*102*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:05*	*1*
13C4-PFHpA	*106*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:05*	*1*
13C4 PFOA	*88*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:05*	*1*
13C4 PFOS	*94*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:05*	*1*
13C5 PFNA	*69*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:05*	*1*

Client Sample ID: TRIP BLANK

Date Collected: 06/28/17 00:00
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-5
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	1.0	U	1.0	0.82	ug/L			07/07/17 13:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/07/17 13:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/07/17 13:37	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/07/17 13:37	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/07/17 13:37	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/07/17 13:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/07/17 13:37	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/07/17 13:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/07/17 13:37	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/07/17 13:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/07/17 13:37	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 13:37	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/07/17 13:37	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/07/17 13:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/07/17 13:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/07/17 13:37	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/07/17 13:37	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/07/17 13:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/07/17 13:37	1
Acetone	10	U	10	3.0	ug/L			07/07/17 13:37	1
Benzene	1.0	U	1.0	0.41	ug/L			07/07/17 13:37	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/07/17 13:37	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/07/17 13:37	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/07/17 13:37	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/07/17 13:37	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/07/17 13:37	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/07/17 13:37	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-120330-5
Matrix: Water
Date Collected: 06/28/17 00:00
Date Received: 06/29/17 02:30

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			07/07/17 13:37	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/07/17 13:37	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/07/17 13:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/07/17 13:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/07/17 13:37	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/07/17 13:37	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/07/17 13:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/07/17 13:37	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/07/17 13:37	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/07/17 13:37	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/07/17 13:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/07/17 13:37	1
Methylcyclohexane	**0.25**	**J B**	1.0	0.16	ug/L			07/07/17 13:37	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/07/17 13:37	1
Styrene	1.0	U	1.0	0.73	ug/L			07/07/17 13:37	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/07/17 13:37	1
Toluene	1.0	U	1.0	0.51	ug/L			07/07/17 13:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/07/17 13:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/07/17 13:37	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/07/17 13:37	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/07/17 13:37	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/07/17 13:37	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/07/17 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*07/07/17 13:37*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*07/07/17 13:37*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*07/07/17 13:37*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/07/17 13:37*	*1*

Client Sample ID: EQUIPMENT BLANK 1

Lab Sample ID: 480-120330-6
Matrix: Water
Date Collected: 06/28/17 11:50
Date Received: 06/29/17 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			07/03/17 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 144*		*07/03/17 15:40*	*1*
4-Bromofluorobenzene	*97*		*72 - 133*		*07/03/17 15:40*	*1*

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	0.82	ug/L			07/07/17 14:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 14:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/07/17 14:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/07/17 14:04	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/07/17 14:04	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/07/17 14:04	1

Client Sample ID: EQUIPMENT BLANK 1
Date Collected: 06/28/17 11:50
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-6
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	0.26	ug/L			07/07/17 14:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/07/17 14:04	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/07/17 14:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/07/17 14:04	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/07/17 14:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/07/17 14:04	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 14:04	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/07/17 14:04	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/07/17 14:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/07/17 14:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/07/17 14:04	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/07/17 14:04	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/07/17 14:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/07/17 14:04	1
Acetone	10	U	10	3.0	ug/L			07/07/17 14:04	1
Benzene	1.0	U	1.0	0.41	ug/L			07/07/17 14:04	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/07/17 14:04	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/07/17 14:04	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/07/17 14:04	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/07/17 14:04	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/07/17 14:04	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/07/17 14:04	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/07/17 14:04	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/07/17 14:04	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/07/17 14:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/07/17 14:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/07/17 14:04	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/07/17 14:04	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/07/17 14:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/07/17 14:04	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/07/17 14:04	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/07/17 14:04	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/07/17 14:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/07/17 14:04	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/07/17 14:04	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/07/17 14:04	1
Styrene	1.0	U	1.0	0.73	ug/L			07/07/17 14:04	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/07/17 14:04	1
Toluene	1.0	U	1.0	0.51	ug/L			07/07/17 14:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/07/17 14:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/07/17 14:04	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/07/17 14:04	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/07/17 14:04	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/07/17 14:04	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/07/17 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*07/07/17 14:04*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*07/07/17 14:04*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*07/07/17 14:04*	*1*

Client Sample ID: EQUIPMENT BLANK 1

Lab Sample ID: 480-120330-6
Matrix: Water
Date Collected: 06/28/17 11:50
Date Received: 06/29/17 02:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/07/17 14:04*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:27	07/08/17 13:23	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/07/17 11:27	07/08/17 13:23	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 13:23	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/07/17 11:27	07/08/17 13:23	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:27	07/08/17 13:23	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 13:23	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	*106*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:23*	*1*
13C4-PFHpA	*111*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:23*	*1*
13C4 PFOA	*96*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:23*	*1*
13C4 PFOS	*99*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:23*	*1*
13C5 PFNA	*75*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:23*	*1*

Client Sample ID: EQUIPMENT BLANK 2

Lab Sample ID: 480-120330-7
Matrix: Water
Date Collected: 06/28/17 12:00
Date Received: 06/29/17 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			07/03/17 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 144*		*07/03/17 16:04*	*1*
4-Bromofluorobenzene	*99*		*72 - 133*		*07/03/17 16:04*	*1*

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	0.82	ug/L			07/07/17 14:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 14:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/07/17 14:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/07/17 14:32	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/07/17 14:32	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/07/17 14:32	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/07/17 14:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/07/17 14:32	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/07/17 14:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/07/17 14:32	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/07/17 14:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/07/17 14:32	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 14:32	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/07/17 14:32	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/07/17 14:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/07/17 14:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/07/17 14:32	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/07/17 14:32	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/07/17 14:32	1

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

TestAmerica Job ID: 480-120330-1

Client Sample ID: EQUIPMENT BLANK 2
Date Collected: 06/28/17 12:00
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/07/17 14:32	1
Acetone	10	U	10	3.0	ug/L			07/07/17 14:32	1
Benzene	1.0	U	1.0	0.41	ug/L			07/07/17 14:32	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/07/17 14:32	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/07/17 14:32	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/07/17 14:32	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/07/17 14:32	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/07/17 14:32	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/07/17 14:32	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/07/17 14:32	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/07/17 14:32	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/07/17 14:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/07/17 14:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/07/17 14:32	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/07/17 14:32	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/07/17 14:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/07/17 14:32	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/07/17 14:32	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/07/17 14:32	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/07/17 14:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/07/17 14:32	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/07/17 14:32	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/07/17 14:32	1
Styrene	1.0	U	1.0	0.73	ug/L			07/07/17 14:32	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/07/17 14:32	1
Toluene	1.0	U	1.0	0.51	ug/L			07/07/17 14:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/07/17 14:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/07/17 14:32	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/07/17 14:32	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/07/17 14:32	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/07/17 14:32	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/07/17 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*07/07/17 14:32*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*07/07/17 14:32*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*07/07/17 14:32*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/07/17 14:32*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:27	07/08/17 13:41	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/07/17 11:27	07/08/17 13:41	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 13:41	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/07/17 11:27	07/08/17 13:41	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:27	07/08/17 13:41	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 13:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*105*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:41*	*1*
13C4-PFHpA	*109*		*25 - 150*	*07/07/17 11:27*	*07/08/17 13:41*	*1*

Client Sample ID: EQUIPMENT BLANK 2

Lab Sample ID: 480-120330-7
Date Collected: 06/28/17 12:00
Matrix: Water
Date Received: 06/29/17 02:30

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	94		25 - 150	07/07/17 11:27	07/08/17 13:41	1
13C4 PFOS	98		25 - 150	07/07/17 11:27	07/08/17 13:41	1
13C5 PFNA	73		25 - 150	07/07/17 11:27	07/08/17 13:41	1

Client Sample ID: EQUIPMENT BLANK 3

Lab Sample ID: 480-120330-8
Date Collected: 06/28/17 12:10
Matrix: Water
Date Received: 06/29/17 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			07/03/17 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		71 - 144		07/03/17 16:27	1
4-Bromofluorobenzene	98		72 - 133		07/03/17 16:27	1

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	0.82	ug/L			07/07/17 14:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 14:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/07/17 14:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/07/17 14:59	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/07/17 14:59	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/07/17 14:59	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/07/17 14:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/07/17 14:59	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/07/17 14:59	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/07/17 14:59	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/07/17 14:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/07/17 14:59	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 14:59	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/07/17 14:59	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/07/17 14:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/07/17 14:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/07/17 14:59	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/07/17 14:59	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/07/17 14:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/07/17 14:59	1
Acetone	10	U	10	3.0	ug/L			07/07/17 14:59	1
Benzene	1.0	U	1.0	0.41	ug/L			07/07/17 14:59	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/07/17 14:59	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/07/17 14:59	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/07/17 14:59	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/07/17 14:59	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/07/17 14:59	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/07/17 14:59	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/07/17 14:59	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/07/17 14:59	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/07/17 14:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/07/17 14:59	1

Client Sample ID: EQUIPMENT BLANK 3
Date Collected: 06/28/17 12:10
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-8
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	0.36	ug/L			07/07/17 14:59	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/07/17 14:59	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/07/17 14:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/07/17 14:59	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/07/17 14:59	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/07/17 14:59	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/07/17 14:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/07/17 14:59	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/07/17 14:59	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/07/17 14:59	1
Styrene	1.0	U	1.0	0.73	ug/L			07/07/17 14:59	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/07/17 14:59	1
Toluene	1.0	U	1.0	0.51	ug/L			07/07/17 14:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/07/17 14:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/07/17 14:59	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/07/17 14:59	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/07/17 14:59	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/07/17 14:59	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/07/17 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*07/07/17 14:59*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*07/07/17 14:59*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*07/07/17 14:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/07/17 14:59*	*1*

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:27	07/08/17 14:00	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/07/17 11:27	07/08/17 14:00	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 14:00	1
Perfluorooctanoic acid (PFOA)	**0.77**	**J**	2.00	0.75	ng/L		07/07/17 11:27	07/08/17 14:00	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:27	07/08/17 14:00	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 14:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*105*		*25 - 150*	*07/07/17 11:27*	*07/08/17 14:00*	*1*
13C4-PFHpA	*105*		*25 - 150*	*07/07/17 11:27*	*07/08/17 14:00*	*1*
13C4 PFOA	*91*		*25 - 150*	*07/07/17 11:27*	*07/08/17 14:00*	*1*
13C4 PFOS	*97*		*25 - 150*	*07/07/17 11:27*	*07/08/17 14:00*	*1*
13C5 PFNA	*72*		*25 - 150*	*07/07/17 11:27*	*07/08/17 14:00*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-120330-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-120330-1	4009-7	96	102	97	98
480-120330-2	4009-8	96	103	95	97
480-120330-2 - DL	4009-8	105	95	103	101
480-120330-3	4009-26	97	100	100	95
480-120330-3 - DL	4009-26	104	98	105	102
480-120330-4	DUP2	94	101	96	97
480-120330-5	TRIP BLANK	110	96	107	99
480-120330-6	EQUIPMENT BLANK 1	103	98	105	102
480-120330-7	EQUIPMENT BLANK 2	105	98	104	102
480-120330-8	EQUIPMENT BLANK 3	104	98	102	98
LCS 480-365748/4	Lab Control Sample	98	98	100	97
LCS 480-365816/7	Lab Control Sample	105	97	106	101
MB 480-365748/6	Method Blank	98	94	97	95
MB 480-365816/32	Method Blank	105	101	107	102

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	12DCE (71-144)	BFB (72-133)
480-120330-1	4009-7	108	118
480-120330-2	4009-8	108	97
480-120330-3	4009-26	113	123
480-120330-4	DUP2	112	122
480-120330-6	EQUIPMENT BLANK 1	106	97
480-120330-7	EQUIPMENT BLANK 2	107	99
480-120330-8	EQUIPMENT BLANK 3	108	98
LCS 460-447341/4	Lab Control Sample	112	97
LCSD 460-447341/5	Lab Control Sample Dup	113	100
MB 460-447341/8	Method Blank	111	96

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene

Isotope Dilution Summary

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

TestAmerica Job ID: 480-120330-1

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		3O2 PFHx	3C4-PFHp	3C4 PFO/	3C4 PFOS	3C5 PFNA			
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)			
480-120330-1	4009-7	82	67	64	82	66			
480-120330-2	4009-8	103	109	88	99	78			
480-120330-3	4009-26	108	113	92	102	76			
480-120330-4	DUP2	102	106	88	94	69			
480-120330-6	EQUIPMENT BLANK 1	106	111	96	99	75			
480-120330-7	EQUIPMENT BLANK 2	105	109	94	98	73			
480-120330-8	EQUIPMENT BLANK 3	105	105	91	97	72			
LCS 320-172951/2-A	Lab Control Sample	107	116	96	99	85			
MB 320-172951/1-A	Method Blank	104	115	99	104	86			

Surrogate Legend

18O2 PFHxS = 18O2 PFHxS
13C4-PFHpA = 13C4-PFHpA
13C4 PFOA = 13C4 PFOA
13C4 PFOS = 13C4 PFOS
13C5 PFNA = 13C5 PFNA

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

Lab Sample ID: MB 480-365748/6
Matrix: Water
Analysis Batch: 365748

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	0.82	ug/L			07/07/17 00:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 00:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/07/17 00:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/07/17 00:52	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/07/17 00:52	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/07/17 00:52	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/07/17 00:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/07/17 00:52	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/07/17 00:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/07/17 00:52	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/07/17 00:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/07/17 00:52	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 00:52	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/07/17 00:52	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/07/17 00:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/07/17 00:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/07/17 00:52	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/07/17 00:52	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/07/17 00:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/07/17 00:52	1
Acetone	10	U	10	3.0	ug/L			07/07/17 00:52	1
Benzene	1.0	U	1.0	0.41	ug/L			07/07/17 00:52	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/07/17 00:52	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/07/17 00:52	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/07/17 00:52	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/07/17 00:52	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/07/17 00:52	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/07/17 00:52	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/07/17 00:52	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/07/17 00:52	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/07/17 00:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/07/17 00:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/07/17 00:52	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/07/17 00:52	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/07/17 00:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/07/17 00:52	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/07/17 00:52	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/07/17 00:52	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/07/17 00:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/07/17 00:52	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			07/07/17 00:52	1
Methylene Chloride	0.505	J	1.0	0.44	ug/L			07/07/17 00:52	1
Styrene	1.0	U	1.0	0.73	ug/L			07/07/17 00:52	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/07/17 00:52	1
Toluene	1.0	U	1.0	0.51	ug/L			07/07/17 00:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/07/17 00:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/07/17 00:52	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/07/17 00:52	1

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

Lab Sample ID: MB 480-365748/6
Matrix: Water
Analysis Batch: 365748

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/07/17 00:52	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/07/17 00:52	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/07/17 00:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*07/07/17 00:52*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*07/07/17 00:52*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*07/07/17 00:52*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*07/07/17 00:52*	*1*

Lab Sample ID: LCS 480-365748/4
Matrix: Water
Analysis Batch: 365748

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	25.0	24.0		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		100	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.3		ug/L		93	61 - 148
1,1,2-Trichloroethane	25.0	27.3		ug/L		109	76 - 122
1,1-Dichloroethane	25.0	25.3		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	24.1		ug/L		96	66 - 127
1,2,3-Trimethylbenzene	25.0	23.5		ug/L		94	78 - 120
1,2,4-Trichlorobenzene	25.0	23.9		ug/L		96	79 - 122
1,2,4-Trimethylbenzene	25.0	25.8		ug/L		103	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	26.9		ug/L		107	56 - 134
1,2-Dibromoethane	25.0	27.0		ug/L		108	77 - 120
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	25.8		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	26.3		ug/L		105	76 - 120
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	77 - 121
1,3-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 120
1,4-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 120
2-Butanone (MEK)	125	133		ug/L		106	57 - 140
2-Hexanone	125	159		ug/L		127	65 - 127
4-Methyl-2-pentanone (MIBK)	125	146		ug/L		117	71 - 125
Acetone	125	134		ug/L		107	56 - 142
Benzene	25.0	25.3		ug/L		101	71 - 124
Bromodichloromethane	25.0	26.2		ug/L		105	80 - 122
Bromoform	25.0	24.9		ug/L		99	61 - 132
Bromomethane	25.0	28.8		ug/L		115	55 - 144
Carbon disulfide	25.0	22.6		ug/L		90	59 - 134
Carbon tetrachloride	25.0	24.5		ug/L		98	72 - 134
Chlorobenzene	25.0	25.5		ug/L		102	80 - 120
Chloroethane	25.0	24.6		ug/L		98	69 - 136
Chloroform	25.0	24.4		ug/L		98	73 - 127
Chloromethane	25.0	21.3		ug/L		85	68 - 124
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124

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

Lab Sample ID: LCS 480-365748/4
Matrix: Water
Analysis Batch: 365748

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	28.1		ug/L		112	74 - 124
Cyclohexane	25.0	21.6		ug/L		87	59 - 135
Dibromochloromethane	25.0	27.1		ug/L		108	75 - 125
Dichlorodifluoromethane	25.0	18.7		ug/L		75	59 - 135
Ethylbenzene	25.0	24.9		ug/L		100	77 - 123
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
Methyl acetate	125	135		ug/L		108	74 - 133
Methyl tert-butyl ether	25.0	25.9		ug/L		104	77 - 120
Methylcyclohexane	25.0	23.0		ug/L		92	68 - 134
Methylene Chloride	25.0	23.5		ug/L		94	75 - 124
Styrene	25.0	26.3		ug/L		105	80 - 120
Tetrachloroethene	25.0	33.3	*	ug/L		133	74 - 122
Toluene	25.0	25.3		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	25.2		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	26.4		ug/L		106	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	23.2		ug/L		93	62 - 150
Vinyl chloride	25.0	20.7		ug/L		83	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 480-365816/32
Matrix: Water
Analysis Batch: 365816

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	0.82	ug/L			07/07/17 12:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 12:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			07/07/17 12:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			07/07/17 12:29	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			07/07/17 12:29	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			07/07/17 12:29	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			07/07/17 12:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			07/07/17 12:29	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			07/07/17 12:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			07/07/17 12:29	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			07/07/17 12:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			07/07/17 12:29	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			07/07/17 12:29	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			07/07/17 12:29	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			07/07/17 12:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			07/07/17 12:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			07/07/17 12:29	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			07/07/17 12:29	1

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

Lab Sample ID: MB 480-365816/32
Matrix: Water
Analysis Batch: 365816

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U	5.0	1.2	ug/L			07/07/17 12:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			07/07/17 12:29	1
Acetone	10	U	10	3.0	ug/L			07/07/17 12:29	1
Benzene	1.0	U	1.0	0.41	ug/L			07/07/17 12:29	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			07/07/17 12:29	1
Bromoform	1.0	U	1.0	0.26	ug/L			07/07/17 12:29	1
Bromomethane	1.0	U	1.0	0.69	ug/L			07/07/17 12:29	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			07/07/17 12:29	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			07/07/17 12:29	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			07/07/17 12:29	1
Chloroethane	1.0	U	1.0	0.32	ug/L			07/07/17 12:29	1
Chloroform	1.0	U	1.0	0.34	ug/L			07/07/17 12:29	1
Chloromethane	1.0	U	1.0	0.35	ug/L			07/07/17 12:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			07/07/17 12:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			07/07/17 12:29	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			07/07/17 12:29	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			07/07/17 12:29	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			07/07/17 12:29	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			07/07/17 12:29	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			07/07/17 12:29	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			07/07/17 12:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			07/07/17 12:29	1
Methylcyclohexane	0.740	J	1.0	0.16	ug/L			07/07/17 12:29	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			07/07/17 12:29	1
Styrene	1.0	U	1.0	0.73	ug/L			07/07/17 12:29	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			07/07/17 12:29	1
Toluene	1.0	U	1.0	0.51	ug/L			07/07/17 12:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			07/07/17 12:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			07/07/17 12:29	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			07/07/17 12:29	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			07/07/17 12:29	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			07/07/17 12:29	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			07/07/17 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*07/07/17 12:29*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*07/07/17 12:29*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*07/07/17 12:29*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/07/17 12:29*	*1*

Lab Sample ID: LCS 480-365816/7
Matrix: Water
Analysis Batch: 365816

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	25.0	20.7		ug/L		83	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	76 - 120

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

Lab Sample ID: LCS 480-365816/7
Matrix: Water
Analysis Batch: 365816

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	19.5		ug/L		78	61 - 148
1,1,2-Trichloroethane	25.0	24.1		ug/L		96	76 - 122
1,1-Dichloroethane	25.0	21.6		ug/L		87	77 - 120
1,1-Dichloroethene	25.0	20.6		ug/L		82	66 - 127
1,2,3-Trimethylbenzene	25.0	23.3		ug/L		93	78 - 120
1,2,4-Trichlorobenzene	25.0	22.7		ug/L		91	79 - 122
1,2,4-Trimethylbenzene	25.0	23.0		ug/L		92	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	21.0		ug/L		84	56 - 134
1,2-Dibromoethane	25.0	24.1		ug/L		96	77 - 120
1,2-Dichlorobenzene	25.0	22.8		ug/L		91	80 - 124
1,2-Dichloroethane	25.0	21.9		ug/L		88	75 - 120
1,2-Dichloropropane	25.0	23.6		ug/L		94	76 - 120
1,3,5-Trimethylbenzene	25.0	22.2		ug/L		89	77 - 121
1,3-Dichlorobenzene	25.0	22.6		ug/L		90	77 - 120
1,4-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 120
2-Butanone (MEK)	125	118		ug/L		95	57 - 140
2-Hexanone	125	126		ug/L		101	65 - 127
4-Methyl-2-pentanone (MIBK)	125	121		ug/L		97	71 - 125
Acetone	125	142		ug/L		114	56 - 142
Benzene	25.0	22.2		ug/L		89	71 - 124
Bromodichloromethane	25.0	23.7		ug/L		95	80 - 122
Bromoform	25.0	24.2		ug/L		97	61 - 132
Bromomethane	25.0	31.1		ug/L		125	55 - 144
Carbon disulfide	25.0	18.7		ug/L		75	59 - 134
Carbon tetrachloride	25.0	19.9		ug/L		80	72 - 134
Chlorobenzene	25.0	22.3		ug/L		89	80 - 120
Chloroethane	25.0	26.4		ug/L		106	69 - 136
Chloroform	25.0	21.5		ug/L		86	73 - 127
Chloromethane	25.0	20.3		ug/L		81	68 - 124
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	74 - 124
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	74 - 124
Cyclohexane	25.0	19.0		ug/L		76	59 - 135
Dibromochloromethane	25.0	24.8		ug/L		99	75 - 125
Dichlorodifluoromethane	25.0	21.0		ug/L		84	59 - 135
Ethylbenzene	25.0	22.3		ug/L		89	77 - 123
Isopropylbenzene	25.0	21.8		ug/L		87	77 - 122
Methyl acetate	125	116		ug/L		93	74 - 133
Methyl tert-butyl ether	25.0	24.1		ug/L		96	77 - 120
Methylcyclohexane	25.0	21.8		ug/L		87	68 - 134
Methylene Chloride	25.0	20.9		ug/L		83	75 - 124
Styrene	25.0	23.7		ug/L		95	80 - 120
Tetrachloroethene	25.0	22.6		ug/L		90	74 - 122
Toluene	25.0	22.0		ug/L		88	80 - 122
trans-1,2-Dichloroethene	25.0	20.4		ug/L		82	73 - 127
trans-1,3-Dichloropropene	25.0	24.6		ug/L		99	80 - 120
Trichloroethene	25.0	22.3		ug/L		89	74 - 123
Trichlorofluoromethane	25.0	26.2		ug/L		105	62 - 150

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

Lab Sample ID: LCS 480-365816/7
Matrix: Water
Analysis Batch: 365816

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			25.0	21.4		ug/L		85	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: MB 460-447341/8
Matrix: Water
Analysis Batch: 447341

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.40	U	0.40	0.20	ug/L			07/03/17 14:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 144*		*07/03/17 14:06*	*1*
4-Bromofluorobenzene	*96*		*72 - 133*		*07/03/17 14:06*	*1*

Lab Sample ID: LCS 460-447341/4
Matrix: Water
Analysis Batch: 447341

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.82		ug/L		96	66 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 144*
4-Bromofluorobenzene	*97*		*72 - 133*

Lab Sample ID: LCSD 460-447341/5
Matrix: Water
Analysis Batch: 447341

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
1,4-Dioxane			5.00	4.85		ug/L		97	66 - 135	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*71 - 144*
4-Bromofluorobenzene	*100*		*72 - 133*

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

TestAmerica Job ID: 480-120330-1

Method: WS-LC-0025 At1 - Perfluorinated Alkyl Substances

Lab Sample ID: MB 320-172951/1-A
Matrix: Water
Analysis Batch: 173148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	2.00	U	2.00	0.92	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluorohexanesulfonic acid (PFHxS)	2.00	U	2.00	0.87	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluoroheptanoic acid (PFHpA)	2.00	U	2.00	0.80	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluorooctanoic acid (PFOA)	2.00	U	2.00	0.75	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluorooctanesulfonic acid (PFOS)	2.00	U	2.00	1.28	ng/L		07/07/17 11:27	07/08/17 11:14	1
Perfluorononanoic acid (PFNA)	2.00	U	2.00	0.65	ng/L		07/07/17 11:27	07/08/17 11:14	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*104*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*
13C4-PFHpA	*115*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*
13C4 PFOA	*99*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*
13C4 PFOS	*104*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*
13C5 PFNA	*86*		*25 - 150*	*07/07/17 11:27*	*07/08/17 11:14*	*1*

Lab Sample ID: LCS 320-172951/2-A
Matrix: Water
Analysis Batch: 173148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanesulfonic acid (PFBS)	17.7	20.71		ng/L		117	72 - 151
Perfluorohexanesulfonic acid (PFHxS)	18.2	19.25		ng/L		106	73 - 157
Perfluoroheptanoic acid (PFHpA)	20.0	21.85		ng/L		109	71 - 138
Perfluorooctanoic acid (PFOA)	20.0	21.83		ng/L		109	70 - 140
Perfluorooctanesulfonic acid (PFOS)	18.6	19.56		ng/L		105	69 - 144
Perfluorononanoic acid (PFNA)	20.0	21.75		ng/L		109	73 - 147

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*107*		*25 - 150*
13C4-PFHpA	*116*		*25 - 150*
13C4 PFOA	*96*		*25 - 150*
13C4 PFOS	*99*		*25 - 150*
13C5 PFNA	*85*		*25 - 150*

GC/MS VOA

Analysis Batch: 365748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120330-1	4009-7	Total/NA	Water	8260C	
480-120330-2	4009-8	Total/NA	Water	8260C	
480-120330-3	4009-26	Total/NA	Water	8260C	
480-120330-4	DUP2	Total/NA	Water	8260C	
MB 480-365748/6	Method Blank	Total/NA	Water	8260C	
LCS 480-365748/4	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 365816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120330-2 - DL	4009-8	Total/NA	Water	8260C	
480-120330-3 - DL	4009-26	Total/NA	Water	8260C	
480-120330-5	TRIP BLANK	Total/NA	Water	8260C	
480-120330-6	EQUIPMENT BLANK 1	Total/NA	Water	8260C	
480-120330-7	EQUIPMENT BLANK 2	Total/NA	Water	8260C	
480-120330-8	EQUIPMENT BLANK 3	Total/NA	Water	8260C	
MB 480-365816/32	Method Blank	Total/NA	Water	8260C	
LCS 480-365816/7	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 447341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120330-1	4009-7	Total/NA	Water	8260C SIM	
480-120330-2	4009-8	Total/NA	Water	8260C SIM	
480-120330-3	4009-26	Total/NA	Water	8260C SIM	
480-120330-4	DUP2	Total/NA	Water	8260C SIM	
480-120330-6	EQUIPMENT BLANK 1	Total/NA	Water	8260C SIM	
480-120330-7	EQUIPMENT BLANK 2	Total/NA	Water	8260C SIM	
480-120330-8	EQUIPMENT BLANK 3	Total/NA	Water	8260C SIM	
MB 460-447341/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-447341/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-447341/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

LCMS

Prep Batch: 172951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120330-1	4009-7	Total/NA	Water	PFAS Prep	
480-120330-2	4009-8	Total/NA	Water	PFAS Prep	
480-120330-3	4009-26	Total/NA	Water	PFAS Prep	
480-120330-4	DUP2	Total/NA	Water	PFAS Prep	
480-120330-6	EQUIPMENT BLANK 1	Total/NA	Water	PFAS Prep	
480-120330-7	EQUIPMENT BLANK 2	Total/NA	Water	PFAS Prep	
480-120330-8	EQUIPMENT BLANK 3	Total/NA	Water	PFAS Prep	
MB 320-172951/1-A	Method Blank	Total/NA	Water	PFAS Prep	
LCS 320-172951/2-A	Lab Control Sample	Total/NA	Water	PFAS Prep	

Analysis Batch: 173148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120330-1	4009-7	Total/NA	Water	WS-LC-0025 At1	172951
480-120330-2	4009-8	Total/NA	Water	WS-LC-0025 At1	172951

LCMS (Continued)

Analysis Batch: 173148 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-120330-3	4009-26	Total/NA	Water	WS-LC-0025 At1	172951
480-120330-4	DUP2	Total/NA	Water	WS-LC-0025 At1	172951
480-120330-6	EQUIPMENT BLANK 1	Total/NA	Water	WS-LC-0025 At1	172951
480-120330-7	EQUIPMENT BLANK 2	Total/NA	Water	WS-LC-0025 At1	172951
480-120330-8	EQUIPMENT BLANK 3	Total/NA	Water	WS-LC-0025 At1	172951
MB 320-172951/1-A	Method Blank	Total/NA	Water	WS-LC-0025 At1	172951
LCS 320-172951/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025 At1	172951

Lab Chronicle

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

TestAmerica Job ID: 480-120330-1

Client Sample ID: 4009-7

Date Collected: 06/28/17 12:20
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365748	07/07/17 05:24	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 18:25	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 12:09	SER	TAL SAC

Client Sample ID: 4009-8

Date Collected: 06/28/17 10:05
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	365748	07/07/17 05:51	NEA	TAL BUF
Total/NA	Analysis	8260C	DL	25	365816	07/07/17 15:26	ARS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 18:49	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 12:28	SER	TAL SAC

Client Sample ID: 4009-26

Date Collected: 06/28/17 09:55
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	365748	07/07/17 06:18	NEA	TAL BUF
Total/NA	Analysis	8260C	DL	10	365816	07/07/17 15:54	ARS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 19:12	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 12:46	SER	TAL SAC

Client Sample ID: DUP2

Date Collected: 06/28/17 00:00
Date Received: 06/29/17 02:30

Lab Sample ID: 480-120330-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	365748	07/07/17 06:45	NEA	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 19:36	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 13:05	SER	TAL SAC

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-120330-5

Date Collected: 06/28/17 00:00 — **Matrix: Water**
Date Received: 06/29/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365816	07/07/17 13:37	ARS	TAL BUF

Client Sample ID: EQUIPMENT BLANK 1 — Lab Sample ID: 480-120330-6

Date Collected: 06/28/17 11:50 — **Matrix: Water**
Date Received: 06/29/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365816	07/07/17 14:04	ARS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 15:40	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 13:23	SER	TAL SAC

Client Sample ID: EQUIPMENT BLANK 2 — Lab Sample ID: 480-120330-7

Date Collected: 06/28/17 12:00 — **Matrix: Water**
Date Received: 06/29/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365816	07/07/17 14:32	ARS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 16:04	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 13:41	SER	TAL SAC

Client Sample ID: EQUIPMENT BLANK 3 — Lab Sample ID: 480-120330-8

Date Collected: 06/28/17 12:10 — **Matrix: Water**
Date Received: 06/29/17 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	365816	07/07/17 14:59	ARS	TAL BUF
Total/NA	Analysis	8260C SIM		1	447341	07/03/17 16:27	SZD	TAL EDI
Total/NA	Prep	PFAS Prep			172951	07/07/17 11:27	CCB	TAL SAC
Total/NA	Analysis	WS-LC-0025 At1		1	173148	07/08/17 14:00	SER	TAL SAC

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-120330-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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 Edison

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-18

Laboratory: TestAmerica Sacramento

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	11666	04-01-18

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

Analysis Method	Prep Method	Matrix	Analyte
WS-LC-0025 At1	PFAS Prep	Water	Perfluorobutanesulfonic acid (PFBS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluoroheptanoic acid (PFHpA)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorohexanesulfonic acid (PFHxS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorononanoic acid (PFNA)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorooctanesulfonic acid (PFOS)
WS-LC-0025 At1	PFAS Prep	Water	Perfluorooctanoic acid (PFOA)

Method Summary

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

TestAmerica Job ID: 480-120330-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
WS-LC-0025 At1	Perfluorinated Alkyl Substances	TAL-SAC	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

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

TestAmerica Job ID: 480-120330-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-120330-1	4009-7	Water	06/28/17 12:20	06/29/17 02:30
480-120330-2	4009-8	Water	06/28/17 10:05	06/29/17 02:30
480-120330-3	4009-26	Water	06/28/17 09:55	06/29/17 02:30
480-120330-4	DUP2	Water	06/28/17 00:00	06/29/17 02:30
480-120330-5	TRIP BLANK	Water	06/28/17 00:00	06/29/17 02:30
480-120330-6	EQUIPMENT BLANK 1	Water	06/28/17 11:50	06/29/17 02:30
480-120330-7	EQUIPMENT BLANK 2	Water	06/28/17 12:00	06/29/17 02:30
480-120330-8	EQUIPMENT BLANK 3	Water	06/28/17 12:10	06/29/17 02:30

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-120330 COC

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/28/17	277809
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Clifton Park / NY / 12065	Aubrey Thomas	Jody Stone	
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC Standby Vestal (NY)			
Contract/Purchase Order/Quote No.			
Contract D007618 Project 00266401.0000			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260C - (NOD) TCL List VOA	PFAs - DI - PFAs, 1,4 Dioxane	8260C - SIM - 1,4 Dioxane
4009-7	6/28/17	1220		X			2			5			3	2	2
4009-8	6/28/17	1005		X			2			5			3	2	2
4009-26	6/28/17	0955		X			2			5			3	2	2
DUP2	6/28/17	-		X			2			5			3	2	2
Trip Blank	-	-		X						2			2		
Equipment Blank1	6/28/17	1150		X			2			5			3	2	2
Equipment Blank2	6/28/17	1200		X			2			5			3	2	2
Equipment Blank3	6/28/17	1210		X			2			5			3	2	2
	RES														
6-28-17															

Special Instructions/ Conditions of Receipt

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1	Susie Ellsworth	6/28/17	1438	RE Syracuse, Syr	6-28-17	14:38
2	RE Syracuse	6-28-17	19:00	TAS	6-29-17	0230
3						

Comments
PFCs → SACRAMENTO FROM Syr. – RE

1.1 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Katie Bidwell	6/28/17	277809
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
855 Route 146 Suite 210	518-250-7300		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Clifton Park / NY / 12065	Aubrey Thomas	Judy Stone	
Project Name and Location (State)	**Carrier/Waybill Number**		
NYSDEC Standby Vestal (NY)			
Contract/Purchase Order/Quote No.			
Contract D007618 Project 002664401.0000			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260C - (NOD) TCL List VOA	PFAs - DL - PFAs, DOHR List (6)	8260C - SIM - 1,4 Dioxane
4009-7	6/28/17	1220		X			2			5			3	2	2
4009-8	6/28/17	1005		X			2			5			3	2	2
4009-26	6/28/17	0955		X			2			5			3	2	2
DUP2	6/28/17	-		X			2			5			3	2	2
Trip Blank	-	-		X						2			2		
Equipment Blank1	6/28/17	1150		X			2			5			3	2	2
Equipment Blank2	6/28/17	1200		X			2			5			3	2	2
Equipment Blank3	6/28/17	1210		X			2			5			3	2	2
	RES														
6-28-17															

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

480-120330 Chain of Custody

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Susie Ellsworth	6/28/17	1438	RE-Englith, Syr	6.28.17	14:38
2.	RE-Englith	6-28-17	19:00	FedEx	6/29/17	940 2.2°C
3.						

Comments
PFCs → SACRAMENTO FROM SYR. – RE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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

7/14/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-35796.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-120330-1
Address: 777 New Durham Road, ,	Due Date Requested: 7/12/2017			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
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 - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C_SIM/5030C (MOD) Volatile SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
4009-7 (480-120330-1)	6/28/17	12:20 Eastern		Water			X	2	
4009-8 (480-120330-2)	6/28/17	10:00 Eastern		Water			X	2	
4009-26 (480-120330-3)	6/28/17	09:55 Eastern		Water			X	2	
DUP2 (480-120330-4)	6/28/17	Eastern		Water			X	2	
EQUIPMENT BLANK 1 (480-120330-6)	6/28/17	11:50 Eastern		Water			X	2	
EQUIPMENT BLANK 2 (480-120330-7)	6/28/17	12:00 Eastern		Water			X	2	
EQUIPMENT BLANK 3 (480-120330-8)	6/28/17	12:10 Eastern		Water			X	2	

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 compliance 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
[signature]	6/28/17 1600	TAS	[signature] FedEx	6/30/17 0905	TAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ~~Yes~~ ☐ No	Custody Seal No.: 033810	Cooler Temperature(s) °C and Other Remarks: 3.7°C 828

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120330-1

Login Number: 120330
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

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.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120330-1

Login Number: 120330
List Number: 3
Creator: Armbruster, Chris

List Source: TestAmerica Edison
List Creation: 06/30/17 11:28 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	033810
Sample custody seals, if present, are intact.	N/A	
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	3.7°C IR8
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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-120330-1

Login Number: 120330
List Number: 2
Creator: Aguayo, Alonso

List Source: TestAmerica Sacramento
List Creation: 06/29/17 06:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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?	N/A	
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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: 480-117114-1
Client Project/Site: NYSDEC-Standby VESTAL

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

Attn: Jeremy Wyckoff

Joseph V. Giacomazza

Authorized for release by:
5/9/2017 12:58:36 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

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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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.
*	Surrogate 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: 480-117114-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-117114-1

Receipt
The samples were received on 4/28/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7º C and 3.0º C.

Receipt Exceptions
The client revised the following sample IDs and provided a revised chain of custody on 5/1/17. 4009-13 (480-117114-1) and 4009-13A (480-117114-2)

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-356083 recovered above the upper control limit for Dibromochloromethane and Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 4009-13 (480-117114-1), 4009-13A (480-117114-2), TRIP BLANK 42617 (480-117114-3), WELL 1-2A (480-117114-4), WELL 1-3 (480-117114-5) and TRIP BLANK 042617 (480-117114-6).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-356083 recovered outside control limits for the following analytes: Bromoform and Dibromochloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 4009-13 (480-117114-1), 4009-13A (480-117114-2), TRIP BLANK 42617 (480-117114-3), WELL 1-2A (480-117114-4), WELL 1-3 (480-117114-5) and TRIP BLANK 042617 (480-117114-6).

Method(s) 8260C: Toluene-d8 surrogate recovery for the following samples outside control limits: 4009-13 (480-117114-1), 4009-13A (480-117114-2), TRIP BLANK 42617 (480-117114-3) and WELL 1-2A (480-117114-4). All other surrogates were within acceptable limits for the samples and associated QC. Evidence of matrix interference is suspected and re-analysis was not performed due to hold time limitations.

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

Detection Summary

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

TestAmerica Job ID: 480-117114-1

Client Sample ID: 4009-13 — Lab Sample ID: 480-117114-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.41	J	1.0	0.41	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-13A — Lab Sample ID: 480-117114-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: TRIP BLANK 42617 — Lab Sample ID: 480-117114-3

No Detections.

Client Sample ID: WELL 1-2A — Lab Sample ID: 480-117114-4

No Detections.

Client Sample ID: WELL 1-3 — Lab Sample ID: 480-117114-5

No Detections.

Client Sample ID: TRIP BLANK 042617 — Lab Sample ID: 480-117114-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4009-13
Date Collected: 04/26/17 10:35
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-1
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	0.82	ug/L			05/08/17 02:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 02:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/08/17 02:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			05/08/17 02:02	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			05/08/17 02:02	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			05/08/17 02:02	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			05/08/17 02:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			05/08/17 02:02	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			05/08/17 02:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			05/08/17 02:02	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			05/08/17 02:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/08/17 02:02	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 02:02	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			05/08/17 02:02	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			05/08/17 02:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			05/08/17 02:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/08/17 02:02	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			05/08/17 02:02	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			05/08/17 02:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			05/08/17 02:02	1
Acetone	10	U	10	3.0	ug/L			05/08/17 02:02	1
Benzene	**0.41**	**J**	1.0	0.41	ug/L			05/08/17 02:02	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			05/08/17 02:02	1
Bromoform	1.0	U *	1.0	0.26	ug/L			05/08/17 02:02	1
Bromomethane	1.0	U	1.0	0.69	ug/L			05/08/17 02:02	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			05/08/17 02:02	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			05/08/17 02:02	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/08/17 02:02	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/08/17 02:02	1
Chloroform	1.0	U	1.0	0.34	ug/L			05/08/17 02:02	1
Chloromethane	1.0	U	1.0	0.35	ug/L			05/08/17 02:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			05/08/17 02:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			05/08/17 02:02	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			05/08/17 02:02	1
Dibromochloromethane	1.0	U *	1.0	0.32	ug/L			05/08/17 02:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			05/08/17 02:02	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/08/17 02:02	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			05/08/17 02:02	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			05/08/17 02:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			05/08/17 02:02	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			05/08/17 02:02	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			05/08/17 02:02	1
Styrene	1.0	U	1.0	0.73	ug/L			05/08/17 02:02	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			05/08/17 02:02	1
Toluene	1.0	U	1.0	0.51	ug/L			05/08/17 02:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			05/08/17 02:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			05/08/17 02:02	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			05/08/17 02:02	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			05/08/17 02:02	1

Client Sample ID: 4009-13

Date Collected: 04/26/17 10:35
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.90	ug/L			05/08/17 02:02	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/08/17 02:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*77 - 120*		*05/08/17 02:02*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/08/17 02:02*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*05/08/17 02:02*	*1*
Toluene-d8 (Surr)	*79*	*	*80 - 120*		*05/08/17 02:02*	*1*

Client Sample ID: 4009-13A

Date Collected: 04/26/17 10:35
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-2

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	0.82	ug/L			05/08/17 02:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 02:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/08/17 02:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			05/08/17 02:25	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			05/08/17 02:25	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			05/08/17 02:25	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			05/08/17 02:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			05/08/17 02:25	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			05/08/17 02:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			05/08/17 02:25	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			05/08/17 02:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/08/17 02:25	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 02:25	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			05/08/17 02:25	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			05/08/17 02:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			05/08/17 02:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/08/17 02:25	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			05/08/17 02:25	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			05/08/17 02:25	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			05/08/17 02:25	1
Acetone	**3.0**	**J**	10	3.0	ug/L			05/08/17 02:25	1
Benzene	1.0	U	1.0	0.41	ug/L			05/08/17 02:25	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			05/08/17 02:25	1
Bromoform	1.0	U *	1.0	0.26	ug/L			05/08/17 02:25	1
Bromomethane	1.0	U	1.0	0.69	ug/L			05/08/17 02:25	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			05/08/17 02:25	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			05/08/17 02:25	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/08/17 02:25	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/08/17 02:25	1
Chloroform	1.0	U	1.0	0.34	ug/L			05/08/17 02:25	1
Chloromethane	1.0	U	1.0	0.35	ug/L			05/08/17 02:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			05/08/17 02:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			05/08/17 02:25	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			05/08/17 02:25	1
Dibromochloromethane	1.0	U *	1.0	0.32	ug/L			05/08/17 02:25	1

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

TestAmerica Job ID: 480-117114-1

Client Sample ID: 4009-13A — **Lab Sample ID: 480-117114-2**
Date Collected: 04/26/17 10:35 — **Matrix: Water**
Date Received: 04/28/17 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			05/08/17 02:25	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/08/17 02:25	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			05/08/17 02:25	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			05/08/17 02:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			05/08/17 02:25	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			05/08/17 02:25	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			05/08/17 02:25	1
Styrene	1.0	U	1.0	0.73	ug/L			05/08/17 02:25	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			05/08/17 02:25	1
Toluene	1.0	U	1.0	0.51	ug/L			05/08/17 02:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			05/08/17 02:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			05/08/17 02:25	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			05/08/17 02:25	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			05/08/17 02:25	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			05/08/17 02:25	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/08/17 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*77 - 120*		*05/08/17 02:25*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*05/08/17 02:25*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*05/08/17 02:25*	*1*
Toluene-d8 (Surr)	*78*	*	*80 - 120*		*05/08/17 02:25*	*1*

Client Sample ID: TRIP BLANK 42617 — **Lab Sample ID: 480-117114-3**
Date Collected: 04/26/17 00:00 — **Matrix: Water**
Date Received: 04/28/17 09:30

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	0.82	ug/L			05/08/17 02:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 02:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/08/17 02:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			05/08/17 02:49	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			05/08/17 02:49	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			05/08/17 02:49	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			05/08/17 02:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			05/08/17 02:49	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			05/08/17 02:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			05/08/17 02:49	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			05/08/17 02:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/08/17 02:49	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 02:49	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			05/08/17 02:49	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			05/08/17 02:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			05/08/17 02:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/08/17 02:49	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			05/08/17 02:49	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			05/08/17 02:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			05/08/17 02:49	1
Acetone	10	U	10	3.0	ug/L			05/08/17 02:49	1

Client Sample ID: TRIP BLANK 42617 — **Lab Sample ID: 480-117114-3**
Date Collected: 04/26/17 00:00 — **Matrix: Water**
Date Received: 04/28/17 09:30

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	0.41	ug/L			05/08/17 02:49	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			05/08/17 02:49	1
Bromoform	1.0	U *	1.0	0.26	ug/L			05/08/17 02:49	1
Bromomethane	1.0	U	1.0	0.69	ug/L			05/08/17 02:49	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			05/08/17 02:49	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			05/08/17 02:49	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/08/17 02:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/08/17 02:49	1
Chloroform	1.0	U	1.0	0.34	ug/L			05/08/17 02:49	1
Chloromethane	1.0	U	1.0	0.35	ug/L			05/08/17 02:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			05/08/17 02:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			05/08/17 02:49	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			05/08/17 02:49	1
Dibromochloromethane	1.0	U *	1.0	0.32	ug/L			05/08/17 02:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			05/08/17 02:49	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/08/17 02:49	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			05/08/17 02:49	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			05/08/17 02:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			05/08/17 02:49	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			05/08/17 02:49	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			05/08/17 02:49	1
Styrene	1.0	U	1.0	0.73	ug/L			05/08/17 02:49	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			05/08/17 02:49	1
Toluene	1.0	U	1.0	0.51	ug/L			05/08/17 02:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			05/08/17 02:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			05/08/17 02:49	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			05/08/17 02:49	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			05/08/17 02:49	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			05/08/17 02:49	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/08/17 02:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*77 - 120*		*05/08/17 02:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*05/08/17 02:49*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*05/08/17 02:49*	*1*
Toluene-d8 (Surr)	*78*	*	*80 - 120*		*05/08/17 02:49*	*1*

Client Sample ID: WELL 1-2A — **Lab Sample ID: 480-117114-4**
Date Collected: 04/26/17 09:55 — **Matrix: Water**
Date Received: 04/28/17 09:30

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	0.82	ug/L			05/08/17 03:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 03:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/08/17 03:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			05/08/17 03:12	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			05/08/17 03:12	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			05/08/17 03:12	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			05/08/17 03:12	1

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

TestAmerica Job ID: 480-117114-1

Client Sample ID: WELL 1-2A
Date Collected: 04/26/17 09:55
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-4
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	0.41	ug/L			05/08/17 03:12	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			05/08/17 03:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			05/08/17 03:12	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			05/08/17 03:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/08/17 03:12	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 03:12	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			05/08/17 03:12	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			05/08/17 03:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			05/08/17 03:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/08/17 03:12	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			05/08/17 03:12	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			05/08/17 03:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			05/08/17 03:12	1
Acetone	10	U	10	3.0	ug/L			05/08/17 03:12	1
Benzene	1.0	U	1.0	0.41	ug/L			05/08/17 03:12	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			05/08/17 03:12	1
Bromoform	1.0	U *	1.0	0.26	ug/L			05/08/17 03:12	1
Bromomethane	1.0	U	1.0	0.69	ug/L			05/08/17 03:12	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			05/08/17 03:12	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			05/08/17 03:12	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/08/17 03:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/08/17 03:12	1
Chloroform	1.0	U	1.0	0.34	ug/L			05/08/17 03:12	1
Chloromethane	1.0	U	1.0	0.35	ug/L			05/08/17 03:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			05/08/17 03:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			05/08/17 03:12	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			05/08/17 03:12	1
Dibromochloromethane	1.0	U *	1.0	0.32	ug/L			05/08/17 03:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			05/08/17 03:12	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/08/17 03:12	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			05/08/17 03:12	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			05/08/17 03:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			05/08/17 03:12	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			05/08/17 03:12	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			05/08/17 03:12	1
Styrene	1.0	U	1.0	0.73	ug/L			05/08/17 03:12	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			05/08/17 03:12	1
Toluene	1.0	U	1.0	0.51	ug/L			05/08/17 03:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			05/08/17 03:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			05/08/17 03:12	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			05/08/17 03:12	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			05/08/17 03:12	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			05/08/17 03:12	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/08/17 03:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*77 - 120*		*05/08/17 03:12*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/08/17 03:12*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*05/08/17 03:12*	*1*
Toluene-d8 (Surr)	*78*	*	*80 - 120*		*05/08/17 03:12*	*1*

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

TestAmerica Job ID: 480-117114-1

Client Sample ID: WELL 1-3
Date Collected: 04/26/17 09:50
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-5
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	1.0	U	1.0	0.82	ug/L			05/08/17 03:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 03:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/08/17 03:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			05/08/17 03:36	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			05/08/17 03:36	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			05/08/17 03:36	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			05/08/17 03:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			05/08/17 03:36	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			05/08/17 03:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			05/08/17 03:36	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			05/08/17 03:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/08/17 03:36	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 03:36	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			05/08/17 03:36	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			05/08/17 03:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			05/08/17 03:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/08/17 03:36	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			05/08/17 03:36	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			05/08/17 03:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			05/08/17 03:36	1
Acetone	10	U	10	3.0	ug/L			05/08/17 03:36	1
Benzene	1.0	U	1.0	0.41	ug/L			05/08/17 03:36	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			05/08/17 03:36	1
Bromoform	1.0	U *	1.0	0.26	ug/L			05/08/17 03:36	1
Bromomethane	1.0	U	1.0	0.69	ug/L			05/08/17 03:36	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			05/08/17 03:36	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			05/08/17 03:36	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/08/17 03:36	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/08/17 03:36	1
Chloroform	1.0	U	1.0	0.34	ug/L			05/08/17 03:36	1
Chloromethane	1.0	U	1.0	0.35	ug/L			05/08/17 03:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			05/08/17 03:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			05/08/17 03:36	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			05/08/17 03:36	1
Dibromochloromethane	1.0	U *	1.0	0.32	ug/L			05/08/17 03:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			05/08/17 03:36	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/08/17 03:36	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			05/08/17 03:36	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			05/08/17 03:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			05/08/17 03:36	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			05/08/17 03:36	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			05/08/17 03:36	1
Styrene	1.0	U	1.0	0.73	ug/L			05/08/17 03:36	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			05/08/17 03:36	1
Toluene	1.0	U	1.0	0.51	ug/L			05/08/17 03:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			05/08/17 03:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			05/08/17 03:36	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			05/08/17 03:36	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			05/08/17 03:36	1

Client Sample ID: WELL 1-3 — **Lab Sample ID: 480-117114-5**
Date Collected: 04/26/17 09:50 — **Matrix: Water**
Date Received: 04/28/17 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.90	ug/L			05/08/17 03:36	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/08/17 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*77 - 120*		*05/08/17 03:36*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*05/08/17 03:36*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*05/08/17 03:36*	*1*
Toluene-d8 (Surr)	*81*		*80 - 120*		*05/08/17 03:36*	*1*

Client Sample ID: TRIP BLANK 042617 — **Lab Sample ID: 480-117114-6**
Date Collected: 04/26/17 00:00 — **Matrix: Water**
Date Received: 04/28/17 09:30

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	0.82	ug/L			05/08/17 03:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 03:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/08/17 03:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			05/08/17 03:59	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			05/08/17 03:59	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			05/08/17 03:59	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			05/08/17 03:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			05/08/17 03:59	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			05/08/17 03:59	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			05/08/17 03:59	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			05/08/17 03:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/08/17 03:59	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/08/17 03:59	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			05/08/17 03:59	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			05/08/17 03:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			05/08/17 03:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/08/17 03:59	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			05/08/17 03:59	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			05/08/17 03:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			05/08/17 03:59	1
Acetone	10	U	10	3.0	ug/L			05/08/17 03:59	1
Benzene	1.0	U	1.0	0.41	ug/L			05/08/17 03:59	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			05/08/17 03:59	1
Bromoform	1.0	U *	1.0	0.26	ug/L			05/08/17 03:59	1
Bromomethane	1.0	U	1.0	0.69	ug/L			05/08/17 03:59	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			05/08/17 03:59	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			05/08/17 03:59	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/08/17 03:59	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/08/17 03:59	1
Chloroform	1.0	U	1.0	0.34	ug/L			05/08/17 03:59	1
Chloromethane	1.0	U	1.0	0.35	ug/L			05/08/17 03:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			05/08/17 03:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			05/08/17 03:59	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			05/08/17 03:59	1
Dibromochloromethane	1.0	U *	1.0	0.32	ug/L			05/08/17 03:59	1

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

TestAmerica Job ID: 480-117114-1

Client Sample ID: TRIP BLANK 042617
Date Collected: 04/26/17 00:00
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			05/08/17 03:59	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/08/17 03:59	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			05/08/17 03:59	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			05/08/17 03:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			05/08/17 03:59	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			05/08/17 03:59	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			05/08/17 03:59	1
Styrene	1.0	U	1.0	0.73	ug/L			05/08/17 03:59	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			05/08/17 03:59	1
Toluene	1.0	U	1.0	0.51	ug/L			05/08/17 03:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			05/08/17 03:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			05/08/17 03:59	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			05/08/17 03:59	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			05/08/17 03:59	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			05/08/17 03:59	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/08/17 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*77 - 120*		*05/08/17 03:59*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*05/08/17 03:59*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*05/08/17 03:59*	*1*
Toluene-d8 (Surr)	*80*		*80 - 120*		*05/08/17 03:59*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-117114-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-117114-1	4009-13	83	98	90	79 *
480-117114-2	4009-13A	83	96	90	78 *
480-117114-3	TRIP BLANK 42617	85	96	90	78 *
480-117114-4	WELL 1-2A	82	99	91	78 *
480-117114-5	WELL 1-3	83	101	90	81
480-117114-6	TRIP BLANK 042617	80	101	89	80
LCS 480-356083/4	Lab Control Sample	82	101	90	81
MB 480-356083/7	Method Blank	81	103	89	82

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 480-356083/7
Matrix: Water
Analysis Batch: 356083

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	0.82	ug/L			05/07/17 21:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			05/07/17 21:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/07/17 21:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			05/07/17 21:30	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			05/07/17 21:30	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			05/07/17 21:30	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			05/07/17 21:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			05/07/17 21:30	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			05/07/17 21:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			05/07/17 21:30	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			05/07/17 21:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			05/07/17 21:30	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/07/17 21:30	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			05/07/17 21:30	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			05/07/17 21:30	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			05/07/17 21:30	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			05/07/17 21:30	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			05/07/17 21:30	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			05/07/17 21:30	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			05/07/17 21:30	1
Acetone	10	U	10	3.0	ug/L			05/07/17 21:30	1
Benzene	1.0	U	1.0	0.41	ug/L			05/07/17 21:30	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			05/07/17 21:30	1
Bromoform	1.0	U	1.0	0.26	ug/L			05/07/17 21:30	1
Bromomethane	1.0	U	1.0	0.69	ug/L			05/07/17 21:30	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			05/07/17 21:30	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			05/07/17 21:30	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			05/07/17 21:30	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/07/17 21:30	1
Chloroform	1.0	U	1.0	0.34	ug/L			05/07/17 21:30	1
Chloromethane	1.0	U	1.0	0.35	ug/L			05/07/17 21:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			05/07/17 21:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			05/07/17 21:30	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			05/07/17 21:30	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			05/07/17 21:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			05/07/17 21:30	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/07/17 21:30	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			05/07/17 21:30	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			05/07/17 21:30	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			05/07/17 21:30	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			05/07/17 21:30	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			05/07/17 21:30	1
Styrene	1.0	U	1.0	0.73	ug/L			05/07/17 21:30	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			05/07/17 21:30	1
Toluene	1.0	U	1.0	0.51	ug/L			05/07/17 21:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			05/07/17 21:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			05/07/17 21:30	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			05/07/17 21:30	1

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

Lab Sample ID: MB 480-356083/7
Matrix: Water
Analysis Batch: 356083

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			05/07/17 21:30	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			05/07/17 21:30	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/07/17 21:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*77 - 120*		*05/07/17 21:30*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*05/07/17 21:30*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*05/07/17 21:30*	*1*
Toluene-d8 (Surr)	*82*		*80 - 120*		*05/07/17 21:30*	*1*

Lab Sample ID: LCS 480-356083/4
Matrix: Water
Analysis Batch: 356083

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	25.0	25.0		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/L		97	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.4		ug/L		94	61 - 148
1,1,2-Trichloroethane	25.0	22.8		ug/L		91	76 - 122
1,1-Dichloroethane	25.0	24.2		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	22.4		ug/L		90	66 - 127
1,2,3-Trimethylbenzene	25.0	22.5		ug/L		90	78 - 120
1,2,4-Trichlorobenzene	25.0	22.7		ug/L		91	79 - 122
1,2,4-Trimethylbenzene	25.0	21.8		ug/L		87	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	25.0		ug/L		100	56 - 134
1,2-Dibromoethane	25.0	23.3		ug/L		93	77 - 120
1,2-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 124
1,2-Dichloroethane	25.0	24.5		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	24.0		ug/L		96	76 - 120
1,3,5-Trimethylbenzene	25.0	21.9		ug/L		88	77 - 121
1,3-Dichlorobenzene	25.0	23.6		ug/L		94	77 - 120
1,4-Dichlorobenzene	25.0	22.4		ug/L		90	80 - 120
2-Butanone (MEK)	125	147		ug/L		117	57 - 140
2-Hexanone	125	134		ug/L		107	65 - 127
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	166		ug/L		133	56 - 142
Benzene	25.0	22.9		ug/L		92	71 - 124
Bromodichloromethane	25.0	28.8		ug/L		115	80 - 122
Bromoform	25.0	36.1	*	ug/L		144	61 - 132
Bromomethane	25.0	22.9		ug/L		92	55 - 144
Carbon disulfide	25.0	21.3		ug/L		85	59 - 134
Carbon tetrachloride	25.0	29.4		ug/L		118	72 - 134
Chlorobenzene	25.0	22.9		ug/L		92	80 - 120
Chloroethane	25.0	20.9		ug/L		84	69 - 136
Chloroform	25.0	23.8		ug/L		95	73 - 127
Chloromethane	25.0	23.0		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	74 - 124

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

Lab Sample ID: LCS 480-356083/4
Matrix: Water
Analysis Batch: 356083

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	24.9		ug/L		99	74 - 124
Cyclohexane	25.0	24.2		ug/L		97	59 - 135
Dibromochloromethane	25.0	32.2	*	ug/L		129	75 - 125
Dichlorodifluoromethane	25.0	22.9		ug/L		91	59 - 135
Ethylbenzene	25.0	21.5		ug/L		86	77 - 123
Isopropylbenzene	25.0	21.7		ug/L		87	77 - 122
Methyl acetate	125	134		ug/L		108	74 - 133
Methyl tert-butyl ether	25.0	22.8		ug/L		91	77 - 120
Methylcyclohexane	25.0	23.0		ug/L		92	68 - 134
Methylene Chloride	25.0	21.1		ug/L		84	75 - 124
Styrene	25.0	22.3		ug/L		89	80 - 120
Tetrachloroethene	25.0	23.1		ug/L		92	74 - 122
Toluene	25.0	21.5		ug/L		86	80 - 122
trans-1,2-Dichloroethene	25.0	23.4		ug/L		94	73 - 127
trans-1,3-Dichloropropene	25.0	22.7		ug/L		91	80 - 120
Trichloroethene	25.0	23.6		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	24.4		ug/L		97	62 - 150
Vinyl chloride	25.0	22.9		ug/L		92	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*90*		*75 - 123*
Toluene-d8 (Surr)	*81*		*80 - 120*

QC Association Summary

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

TestAmerica Job ID: 480-117114-1

GC/MS VOA

Analysis Batch: 356083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-117114-1	4009-13	Total/NA	Water	8260C	
480-117114-2	4009-13A	Total/NA	Water	8260C	
480-117114-3	TRIP BLANK 42617	Total/NA	Water	8260C	
480-117114-4	WELL 1-2A	Total/NA	Water	8260C	
480-117114-5	WELL 1-3	Total/NA	Water	8260C	
480-117114-6	TRIP BLANK 042617	Total/NA	Water	8260C	
MB 480-356083/7	Method Blank	Total/NA	Water	8260C	
LCS 480-356083/4	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

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

TestAmerica Job ID: 480-117114-1

Client Sample ID: 4009-13
Date Collected: 04/26/17 10:35
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	356083	05/08/17 02:02	CDC	TAL BUF

Client Sample ID: 4009-13A
Date Collected: 04/26/17 10:35
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	356083	05/08/17 02:25	CDC	TAL BUF

Client Sample ID: TRIP BLANK 42617
Date Collected: 04/26/17 00:00
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	356083	05/08/17 02:49	CDC	TAL BUF

Client Sample ID: WELL 1-2A
Date Collected: 04/26/17 09:55
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	356083	05/08/17 03:12	CDC	TAL BUF

Client Sample ID: WELL 1-3
Date Collected: 04/26/17 09:50
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	356083	05/08/17 03:36	CDC	TAL BUF

Client Sample ID: TRIP BLANK 042617
Date Collected: 04/26/17 00:00
Date Received: 04/28/17 09:30

Lab Sample ID: 480-117114-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	356083	05/08/17 03:59	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-117114-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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

Method Summary

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

TestAmerica Job ID: 480-117114-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

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

TestAmerica Job ID: 480-117114-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-117114-1	4009-13	Water	04/26/17 10:35	04/28/17 09:30
480-117114-2	4009-13A	Water	04/26/17 10:35	04/28/17 09:30
480-117114-3	TRIP BLANK 42617	Water	04/26/17 00:00	04/28/17 09:30
480-117114-4	WELL 1-2A	Water	04/26/17 09:55	04/28/17 09:30
480-117114-5	WELL 1-3	Water	04/26/17 09:50	04/28/17 09:30
480-117114-6	TRIP BLANK 042617	Water	04/26/17 00:00	04/28/17 09:30

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: Lance Whalen	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-96863-23080.1
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): Standard			
State, Zip: NY, 12065	PO #: Project 00266401.0000			
Phone: 518-250-7300(Tel)	WO #: Contract D007618			
Email: katie.bidwell@arcadis-us.com	Project #: 48005198			
Project Name: NYSDEC-Standby VESTAL	SSOW#:			
Site:				

Analysis Requested

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 + TMBS	Total Number of containers	Special Instructions/Note:
Preservation Code:							A		
~~Well 13~~ 4009-13	4-26-17	1035	G	Water	N	N	B		
~~Well 13A~~ 4009-13A	4-26-17	1035	G	Water	N	N			
Trip Blank 42617	4-26-17	-	-		-	-			

KB 5/1/17

480-117114 COC

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
W - pH 4-5
Z - other (specify)
Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: L. Whalen	Date/Time: 4-26-17 1500	Company	Received by:		Date/Time: 4/28/17 0930	Company	
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: 3.0 #1

5/9/2017

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: Lance Whalen	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-96863-23080.1
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		Analysis Requested		Job #:
Address: 855 Route 146 Suite 210	Due Date Requested:			Preservation Codes:
City: Clifton Park	TAT Requested (days): Standard			A - HCL B - NaO C - Zn D - Nitri E - NaH F - MeO G - Amci H - Asco I - Ice J - DI Wat K - EDTA L - EDA M - hexAA W - pH 4-5 Z - other (specify)
State, Zip: NY, 12065				
Phone: 518-250-7300(Tel)	PO #: Project 00266401.0000			
Email: katie.bidwell@arcadis-us.com	WO #: Contract D007618			480-117114 COC ahydrate
Project Name: NYSDEC-Standby VESTAL	Project #: 48005198			Other:
Site:	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)	8260C - (MOD) TCL list OLM04.2 + TMBS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
Well 13	4-26-17	1035	G	Water	N	N	3		
Well 13A	4-26-17	1035	G	Water	N	N	3		
Trip Blank 42617	4-26-17	-	-		-	-	2		

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
L. Whalen	4-26-17 1500			4/28/17 0930	
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: 3.0 #1

5/9/2017

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: Lance Whalen	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-93131-18034.1
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:	Analysis 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#:	

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 1-2A	4/26/17	0955	G	Water			X		
Well 1-3	4/26/17	0950	G	Water			X		
Trip Blank 042617	4/26/17	-	-	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
	Lance D. Whal	04/26/17 1400			4/26/17 0936	
	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: 2.7 #1

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-117114-1

Login Number: 117114

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl 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.	N/A	
Chlorine Residual checked.	N/A	

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: 480-118623-1
Client Project/Site: NYSDEC-Standby VESTAL

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

Attn: Jeremy Wyckoff

Judy Stone

Authorized for release by:
6/5/2017 3:03:29 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.

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: 480-118623-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-118623-1

Receipt
The samples were received on 5/26/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-360321 recovered outside acceptance criteria, low biased, for Carbon disulfide and 1,1,1-Trichloroethane. 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. The following samples are impacted: WELL 1-2A (480-118623-1), WELL 1-3 (480-118623-2) and TRIP BLANK 052417 (480-118623-3).

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

Detection Summary

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

TestAmerica Job ID: 480-118623-1

Client Sample ID: WELL 1-2A — **Lab Sample ID: 480-118623-1**

No Detections.

Client Sample ID: WELL 1-3 — **Lab Sample ID: 480-118623-2**

No Detections.

Client Sample ID: TRIP BLANK 052417 — **Lab Sample ID: 480-118623-3**

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-118623-1

Client Sample ID: WELL 1-2A
Date Collected: 05/24/17 09:05
Date Received: 05/26/17 09:30

Lab Sample ID: 480-118623-1
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	0.82	ug/L			06/03/17 02:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/03/17 02:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/03/17 02:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/03/17 02:28	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/03/17 02:28	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/03/17 02:28	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/03/17 02:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/03/17 02:28	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/03/17 02:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/03/17 02:28	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/03/17 02:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/03/17 02:28	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/03/17 02:28	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/03/17 02:28	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/03/17 02:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/03/17 02:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/03/17 02:28	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/03/17 02:28	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/03/17 02:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/03/17 02:28	1
Acetone	10	U	10	3.0	ug/L			06/03/17 02:28	1
Benzene	1.0	U	1.0	0.41	ug/L			06/03/17 02:28	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/03/17 02:28	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/03/17 02:28	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/03/17 02:28	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/03/17 02:28	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/03/17 02:28	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/03/17 02:28	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/03/17 02:28	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/03/17 02:28	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/03/17 02:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/03/17 02:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/03/17 02:28	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/03/17 02:28	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/03/17 02:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/03/17 02:28	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/03/17 02:28	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/03/17 02:28	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/03/17 02:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/03/17 02:28	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/03/17 02:28	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/03/17 02:28	1
Styrene	1.0	U	1.0	0.73	ug/L			06/03/17 02:28	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/03/17 02:28	1
Toluene	1.0	U	1.0	0.51	ug/L			06/03/17 02:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/03/17 02:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/03/17 02:28	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/03/17 02:28	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/03/17 02:28	1

Client Sample ID: WELL 1-2A — **Lab Sample ID: 480-118623-1**
Date Collected: 05/24/17 09:05 — **Matrix: Water**
Date Received: 05/26/17 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/03/17 02:28	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/03/17 02:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*06/03/17 02:28*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*06/03/17 02:28*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*06/03/17 02:28*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*06/03/17 02:28*	*1*

Client Sample ID: WELL 1-3 — **Lab Sample ID: 480-118623-2**
Date Collected: 05/24/17 09:00 — **Matrix: Water**
Date Received: 05/26/17 09:30

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	0.82	ug/L			06/03/17 02:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/03/17 02:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/03/17 02:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/03/17 02:52	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/03/17 02:52	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/03/17 02:52	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/03/17 02:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/03/17 02:52	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/03/17 02:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/03/17 02:52	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/03/17 02:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/03/17 02:52	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/03/17 02:52	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/03/17 02:52	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/03/17 02:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/03/17 02:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/03/17 02:52	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/03/17 02:52	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/03/17 02:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/03/17 02:52	1
Acetone	10	U	10	3.0	ug/L			06/03/17 02:52	1
Benzene	1.0	U	1.0	0.41	ug/L			06/03/17 02:52	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/03/17 02:52	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/03/17 02:52	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/03/17 02:52	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/03/17 02:52	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/03/17 02:52	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/03/17 02:52	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/03/17 02:52	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/03/17 02:52	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/03/17 02:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/03/17 02:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/03/17 02:52	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/03/17 02:52	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/03/17 02:52	1

Client Sample ID: WELL 1-3
Date Collected: 05/24/17 09:00
Date Received: 05/26/17 09:30

Lab Sample ID: 480-118623-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/03/17 02:52	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/03/17 02:52	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/03/17 02:52	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/03/17 02:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/03/17 02:52	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/03/17 02:52	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/03/17 02:52	1
Styrene	1.0	U	1.0	0.73	ug/L			06/03/17 02:52	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/03/17 02:52	1
Toluene	1.0	U	1.0	0.51	ug/L			06/03/17 02:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/03/17 02:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/03/17 02:52	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/03/17 02:52	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/03/17 02:52	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/03/17 02:52	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/03/17 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*06/03/17 02:52*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*06/03/17 02:52*	*1*
Dibromofluoromethane (Surr)	*87*		*75 - 123*		*06/03/17 02:52*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*06/03/17 02:52*	*1*

Client Sample ID: TRIP BLANK 052417
Date Collected: 05/24/17 00:00
Date Received: 05/26/17 09:30

Lab Sample ID: 480-118623-3
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	0.82	ug/L			06/03/17 03:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/03/17 03:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/03/17 03:16	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/03/17 03:16	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/03/17 03:16	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/03/17 03:16	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/03/17 03:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/03/17 03:16	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/03/17 03:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/03/17 03:16	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/03/17 03:16	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/03/17 03:16	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/03/17 03:16	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/03/17 03:16	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/03/17 03:16	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/03/17 03:16	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/03/17 03:16	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/03/17 03:16	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/03/17 03:16	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/03/17 03:16	1
Acetone	10	U	10	3.0	ug/L			06/03/17 03:16	1

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

TestAmerica Job ID: 480-118623-1

Client Sample ID: TRIP BLANK 052417
Date Collected: 05/24/17 00:00
Date Received: 05/26/17 09:30

Lab Sample ID: 480-118623-3
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	0.41	ug/L			06/03/17 03:16	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/03/17 03:16	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/03/17 03:16	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/03/17 03:16	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/03/17 03:16	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/03/17 03:16	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/03/17 03:16	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/03/17 03:16	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/03/17 03:16	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/03/17 03:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/03/17 03:16	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/03/17 03:16	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/03/17 03:16	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/03/17 03:16	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/03/17 03:16	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/03/17 03:16	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/03/17 03:16	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/03/17 03:16	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/03/17 03:16	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/03/17 03:16	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/03/17 03:16	1
Styrene	1.0	U	1.0	0.73	ug/L			06/03/17 03:16	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/03/17 03:16	1
Toluene	1.0	U	1.0	0.51	ug/L			06/03/17 03:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/03/17 03:16	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/03/17 03:16	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/03/17 03:16	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/03/17 03:16	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/03/17 03:16	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/03/17 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*06/03/17 03:16*	*1*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*06/03/17 03:16*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*06/03/17 03:16*	*1*
Toluene-d8 (Surr)	*84*		*80 - 120*		*06/03/17 03:16*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-118623-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-118623-1	WELL 1-2A	94	86	92	87
480-118623-2	WELL 1-3	92	86	87	86
480-118623-3	TRIP BLANK 052417	89	84	86	84
LCS 480-360321/4	Lab Control Sample	97	90	93	91
MB 480-360321/6	Method Blank	94	88	92	90

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

TestAmerica Job ID: 480-118623-1

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

Lab Sample ID: MB 480-360321/6
Matrix: Water
Analysis Batch: 360321

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	0.82	ug/L			06/02/17 22:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			06/02/17 22:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			06/02/17 22:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/02/17 22:41	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			06/02/17 22:41	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/02/17 22:41	1
1,2,3-Trimethylbenzene	1.0	U	1.0	0.26	ug/L			06/02/17 22:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			06/02/17 22:41	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			06/02/17 22:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			06/02/17 22:41	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			06/02/17 22:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			06/02/17 22:41	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			06/02/17 22:41	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			06/02/17 22:41	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			06/02/17 22:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			06/02/17 22:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			06/02/17 22:41	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			06/02/17 22:41	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			06/02/17 22:41	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			06/02/17 22:41	1
Acetone	10	U	10	3.0	ug/L			06/02/17 22:41	1
Benzene	1.0	U	1.0	0.41	ug/L			06/02/17 22:41	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			06/02/17 22:41	1
Bromoform	1.0	U	1.0	0.26	ug/L			06/02/17 22:41	1
Bromomethane	1.0	U	1.0	0.69	ug/L			06/02/17 22:41	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			06/02/17 22:41	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			06/02/17 22:41	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			06/02/17 22:41	1
Chloroethane	1.0	U	1.0	0.32	ug/L			06/02/17 22:41	1
Chloroform	1.0	U	1.0	0.34	ug/L			06/02/17 22:41	1
Chloromethane	1.0	U	1.0	0.35	ug/L			06/02/17 22:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			06/02/17 22:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			06/02/17 22:41	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			06/02/17 22:41	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			06/02/17 22:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			06/02/17 22:41	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			06/02/17 22:41	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			06/02/17 22:41	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			06/02/17 22:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			06/02/17 22:41	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			06/02/17 22:41	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			06/02/17 22:41	1
Styrene	1.0	U	1.0	0.73	ug/L			06/02/17 22:41	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			06/02/17 22:41	1
Toluene	1.0	U	1.0	0.51	ug/L			06/02/17 22:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			06/02/17 22:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			06/02/17 22:41	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			06/02/17 22:41	1

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

Lab Sample ID: MB 480-360321/6
Matrix: Water
Analysis Batch: 360321

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			06/02/17 22:41	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			06/02/17 22:41	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			06/02/17 22:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*06/02/17 22:41*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*06/02/17 22:41*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*06/02/17 22:41*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/02/17 22:41*	*1*

Lab Sample ID: LCS 480-360321/4
Matrix: Water
Analysis Batch: 360321

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	25.0	22.9		ug/L		92	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	23.5		ug/L		94	61 - 148
1,1,2-Trichloroethane	25.0	22.9		ug/L		92	76 - 122
1,1-Dichloroethane	25.0	25.1		ug/L		100	77 - 120
1,1-Dichloroethene	25.0	23.3		ug/L		93	66 - 127
1,2,3-Trimethylbenzene	25.0	26.9		ug/L		108	78 - 120
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	79 - 122
1,2,4-Trimethylbenzene	25.0	23.5		ug/L		94	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	27.1		ug/L		108	56 - 134
1,2-Dibromoethane	25.0	22.9		ug/L		92	77 - 120
1,2-Dichlorobenzene	25.0	23.7		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	23.8		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	25.1		ug/L		100	76 - 120
1,3,5-Trimethylbenzene	25.0	23.3		ug/L		93	77 - 121
1,3-Dichlorobenzene	25.0	23.6		ug/L		94	77 - 120
1,4-Dichlorobenzene	25.0	23.4		ug/L		94	80 - 120
2-Butanone (MEK)	125	152		ug/L		122	57 - 140
2-Hexanone	125	141		ug/L		113	65 - 127
4-Methyl-2-pentanone (MIBK)	125	134		ug/L		108	71 - 125
Acetone	125	157		ug/L		125	56 - 142
Benzene	25.0	23.3		ug/L		93	71 - 124
Bromodichloromethane	25.0	24.0		ug/L		96	80 - 122
Bromoform	25.0	25.8		ug/L		103	61 - 132
Bromomethane	25.0	24.0		ug/L		96	55 - 144
Carbon disulfide	25.0	21.9		ug/L		88	59 - 134
Carbon tetrachloride	25.0	24.3		ug/L		97	72 - 134
Chlorobenzene	25.0	22.7		ug/L		91	80 - 120
Chloroethane	25.0	24.1		ug/L		96	69 - 136
Chloroform	25.0	22.5		ug/L		90	73 - 127
Chloromethane	25.0	23.6		ug/L		94	68 - 124
cis-1,2-Dichloroethene	25.0	22.9		ug/L		92	74 - 124

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

Lab Sample ID: LCS 480-360321/4
Matrix: Water
Analysis Batch: 360321

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	24.0		ug/L		96	74 - 124
Cyclohexane	25.0	25.3		ug/L		101	59 - 135
Dibromochloromethane	25.0	24.8		ug/L		99	75 - 125
Dichlorodifluoromethane	25.0	22.7		ug/L		91	59 - 135
Ethylbenzene	25.0	22.4		ug/L		90	77 - 123
Isopropylbenzene	25.0	23.2		ug/L		93	77 - 122
Methyl acetate	125	135		ug/L		108	74 - 133
Methyl tert-butyl ether	25.0	22.8		ug/L		91	77 - 120
Methylcyclohexane	25.0	23.2		ug/L		93	68 - 134
Methylene Chloride	25.0	25.9		ug/L		103	75 - 124
Styrene	25.0	23.7		ug/L		95	80 - 120
Tetrachloroethene	25.0	22.8		ug/L		91	74 - 122
Toluene	25.0	23.1		ug/L		92	80 - 122
trans-1,2-Dichloroethene	25.0	22.3		ug/L		89	73 - 127
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	80 - 120
Trichloroethene	25.0	23.0		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	23.0		ug/L		92	62 - 150
Vinyl chloride	25.0	24.4		ug/L		98	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*
Dibromofluoromethane (Surr)	*93*		*75 - 123*
Toluene-d8 (Surr)	*91*		*80 - 120*

QC Association Summary

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

TestAmerica Job ID: 480-118623-1

GC/MS VOA

Analysis Batch: 360321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-118623-1	WELL 1-2A	Total/NA	Water	8260C	
480-118623-2	WELL 1-3	Total/NA	Water	8260C	
480-118623-3	TRIP BLANK 052417	Total/NA	Water	8260C	
MB 480-360321/6	Method Blank	Total/NA	Water	8260C	
LCS 480-360321/4	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

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

TestAmerica Job ID: 480-118623-1

Client Sample ID: WELL 1-2A — Lab Sample ID: 480-118623-1

Date Collected: 05/24/17 09:05 — **Matrix: Water**
Date Received: 05/26/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	360321	06/03/17 02:28	RJF	TAL BUF

Client Sample ID: WELL 1-3 — Lab Sample ID: 480-118623-2

Date Collected: 05/24/17 09:00 — **Matrix: Water**
Date Received: 05/26/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	360321	06/03/17 02:52	RJF	TAL BUF

Client Sample ID: TRIP BLANK 052417 — Lab Sample ID: 480-118623-3

Date Collected: 05/24/17 00:00 — **Matrix: Water**
Date Received: 05/26/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	360321	06/03/17 03:16	RJF	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-118623-1

Laboratory: TestAmerica Buffalo

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	10026	03-31-18

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

Method Summary

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

TestAmerica Job ID: 480-118623-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

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

TestAmerica Job ID: 480-118623-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-118623-1	WELL 1-2A	Water	05/24/17 09:05	05/26/17 09:30
480-118623-2	WELL 1-3	Water	05/24/17 09:00	05/26/17 09:30
480-118623-3	TRIP BLANK 052417	Water	05/24/17 00:00	05/26/17 09:30

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: 480-93132-18034.1
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:	Analysis 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#:	

Preservation Codes:
A - HCL M - Hexane
B - NaOH N - None
C - Zn
D - N
E - N
F - M
G - A
H - A
I - Ic
J - D
K - EDTA
L - EDA
Z - other (specify)
Other:

480-118623 COC

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	5-24-17	0905	G	Water			X		
Well 1-3	5-24-17	0900	G	Water			X		
Trip Blank 052417	5-24-17	-	-	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
L. D. Whal	5/24/17 1800			5/26/17 0930	
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: 7.0 #1

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-118623-1

Login Number: 118623

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl 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.	N/A	
Chlorine Residual checked.	N/A	

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J7D0161

Town of Vestal

Bill Peltz
701 Vestal Parkway West
Vestal, NY 13850-1363

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Received: 04/04/2017
Reported: 04/05/2017

Analytical Testing Parameters

Client Sample ID: 1-2A Raw
Sample Matrix: Drinking Water
Lab Sample ID: J7D0161-01
Collected By: Bethany Robinson
Collection Date: 04/04/2017 8:26

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0323	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0323	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-2A Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-01	**Collection Date:**	04/04/2017 8:26

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			04/05/17 0323	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		04/05/17 0323	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		04/05/17 0323	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0323	NY
Surrogate: 4-Bromofluorobenzene	86.2	Limit: 70-130		% Rec			04/05/17 0323	NY
Surrogate: 1,2-Dichlorobenzene-d4	89.2	Limit: 70-130		% Rec			04/05/17 0323	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-02	**Collection Date:**	04/04/2017 8:29

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-02	**Collection Date:**	04/04/2017 8:29

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0354	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0354	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-02	**Collection Date:**	04/04/2017 8:29

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			04/05/17 0354	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		04/05/17 0354	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		04/05/17 0354	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0354	NY
Surrogate: 4-Bromofluorobenzene	83.4	Limit: 70-130		% Rec			04/05/17 0354	NY
Surrogate: 1,2-Dichlorobenzene-d4	86.8	Limit: 70-130		% Rec			04/05/17 0354	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-03	**Collection Date:**	04/04/2017 8:33

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-03	**Collection Date:**	04/04/2017 8:33

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0424	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0424	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-03	**Collection Date:**	04/04/2017 8:33

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			04/05/17 0424	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		04/05/17 0424	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		04/05/17 0424	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0424	NY
Surrogate: 4-Bromofluorobenzene	83.4	Limit: 70-130		% Rec			04/05/17 0424	NY
Surrogate: 1,2-Dichlorobenzene-d4	88.2	Limit: 70-130		% Rec			04/05/17 0424	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-04	**Collection Date:**	04/04/2017 8:36

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-04	**Collection Date:**	04/04/2017 8:36

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0455	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0455	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-04	**Collection Date:**	04/04/2017 8:36

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			04/05/17 0455	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		04/05/17 0455	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		04/05/17 0455	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0455	NY
Surrogate: 4-Bromofluorobenzene	85.4	Limit: 70-130		% Rec			04/05/17 0455	NY
Surrogate: 1,2-Dichlorobenzene-d4	87.8	Limit: 70-130		% Rec			04/05/17 0455	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	4-2 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-05	**Collection Date:**	04/04/2017 9:02

Client Sample ID:	4-2 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-05	**Collection Date:**	04/04/2017 9:02

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0525	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0525	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Tetrachloroethene	**0.670**	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	4-2 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-05	**Collection Date:**	04/04/2017 9:02

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,1,1-Trichloroethane	**0.780**	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Trichloroethene	**0.570**	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			04/05/17 0525	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		04/05/17 0525	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		04/05/17 0525	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0525	NY
Surrogate: 4-Bromofluorobenzene	85.2	Limit: 70-130		% Rec			04/05/17 0525	NY
Surrogate: 1,2-Dichlorobenzene-d4	88.2	Limit: 70-130		% Rec			04/05/17 0525	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	4-2 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-06	**Collection Date:**	04/04/2017 9:05

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	4-2 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-06	**Collection Date:**	04/04/2017 9:05

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0555	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0555	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	4-2 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-06	**Collection Date:**	04/04/2017 9:05

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			04/05/17 0555	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		04/05/17 0555	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		04/05/17 0555	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0555	NY
Surrogate: 4-Bromofluorobenzene	85.0	Limit: 70-130		% Rec			04/05/17 0555	NY
Surrogate: 1,2-Dichlorobenzene-d4	88.4	Limit: 70-130		% Rec			04/05/17 0555	NY

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-07	**Collection Date:**	03/30/2017 14:05

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-07	**Collection Date:**	03/30/2017 14:05

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0626	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			04/05/17 0626	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J7D0161

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7D0161-07	**Collection Date:**	03/30/2017 14:05

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			04/05/17 0626	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		04/05/17 0626	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		04/05/17 0626	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			04/05/17 0626	NY
Surrogate: 4-Bromofluorobenzene	84.0	Limit: 70-130		% Rec			04/05/17 0626	NY
Surrogate: 1,2-Dichlorobenzene-d4	86.8	Limit: 70-130		% Rec			04/05/17 0626	NY

Laboratory

NY: Microbac Laboratories, Inc., New York Division

Definitions

MCL: Maximum Contaminant Level

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.

Limits may be 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.

Reviewed and Approved By:



Renee Lantz
Project Manager
renee.lantz@microbac.com
04/05/2017 18:45

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Microbac Laboratories, Inc., New York Division

Chain of Custody

J7D0161

TAT 7 days

Town of Vestal

Bill Peltz
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: 4/4/2017
Field Route ID: NY-Route 1 Bing

Client Sample ID: 1-2A Raw
Lab Sample ID: J7D0161-01
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 04-04-2017@ 0826

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days
		Total Containers: 2	

Client Sample ID: 1-2A Finished
Lab Sample ID: J7D0161-02
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 04-04-2017@ 0829

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days
		Total Containers: 2	

Client Sample ID: 1-3 Raw
Lab Sample ID: J7D0161-03
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 04-04-2017@ 0833

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7D0161

Town of Vestal

Bill Peltz
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: 4/4/2017
Field Route ID: NY-Route 1 Bing

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days
		Total Containers: 2	

Client Sample ID: 1-3 Finished
Lab Sample ID: J7D0161-04
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 04-04-2017 08:36

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days
		Total Containers: 2	

Client Sample ID: 4-2 Raw
Lab Sample ID: J7D0161-05
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 04-04-2017 09:02

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1		14 days

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7D0161

Town of Vestal

Bill Peltz
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: 4/4/2017
Field Route ID: NY-Route 1 Bing

524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: 4-2 Finished
Lab Sample ID: J7D0161-06
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 04-04-2017 0905

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: Trip Blank
Lab Sample ID: J7D0161-07
Matrix: Drinking Water
Type: Trip Blank

Sampled Date & Time: 03-30-2017 1405

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 1

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7D0161

Town of Vestal

Bill Peltz
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: 4/4/2017
Field Route ID: NY-Route 1 Bing

Sampled by:	Date/Time: 4.4.17 0908	Received by:
Printed Name: Bethany Robinson		Printed Name:
Relinquished by:	Date/Time: 4-4-17 1237	Received by: 4/4/17
Printed Name: Bethany Robinson		Printed Name: Danielle Gauer 1237
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:

As Received at Laboratory: On Ice: Yes / No Temp 6.1 °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 another accredited laboratory. By signing this document you are attesting that you have been informed by Microbac of the intent to subcontract and are in programs agreement with this action.

Notes:

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J7E0173

Town of Vestal

Bill Peltz
701 Vestal Parkway West
Vestal, NY 13850-1363

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Received: 05/19/2017
Reported: 05/26/2017

Analytical Testing Parameters

Client Sample ID: 1-2A Raw
Sample Matrix: Drinking Water
Lab Sample ID: J7E0173-01
Collected By: BNR-Lab
Collection Date: 05/19/2017 9:12

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			05/23/17 1808	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			05/23/17 1808	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	1-2A Raw		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-01	**Collection Date:**	05/19/2017 9:12

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			05/23/17 1808	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 1808	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 1808	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1808	NY
Surrogate: 4-Bromofluorobenzene	81.4	Limit: 70-130		% Rec			05/23/17 1808	NY
Surrogate: 1,2-Dichlorobenzene-d4	78.8	Limit: 70-130		% Rec			05/23/17 1808	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-02	**Collection Date:**	05/19/2017 9:14

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			05/23/17 1837	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			05/23/17 1837	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-02	**Collection Date:**	05/19/2017 9:14

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			05/23/17 1837	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 1837	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 1837	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1837	NY
Surrogate: 4-Bromofluorobenzene	80.6	Limit: 70-130		% Rec			05/23/17 1837	NY
Surrogate: 1,2-Dichlorobenzene-d4	78.0	Limit: 70-130		% Rec			05/23/17 1837	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-03	**Collection Date:**	05/19/2017 9:16

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			05/23/17 1906	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			05/23/17 1906	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-03	**Collection Date:**	05/19/2017 9:16

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			05/23/17 1906	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		05/23/17 1906	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		05/23/17 1906	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1906	NY
Surrogate: 4-Bromofluorobenzene	80.0	Limit: 70-130		% Rec			05/23/17 1906	NY
Surrogate: 1,2-Dichlorobenzene-d4	78.0	Limit: 70-130		% Rec			05/23/17 1906	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-04	**Collection Date:**	05/19/2017 9:18

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			05/23/17 1935	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			05/23/17 1935	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-04	**Collection Date:**	05/19/2017 9:18

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			05/23/17 1935	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 1935	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 1935	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 1935	NY
Surrogate: 4-Bromofluorobenzene	79.4	Limit: 70-130		% Rec			05/23/17 1935	NY
Surrogate: 1,2-Dichlorobenzene-d4	77.4	Limit: 70-130		% Rec			05/23/17 1935	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	4-2 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-05	**Collection Date:**	05/19/2017 8:18

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			05/23/17 2004	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			05/23/17 2004	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Tetrachloroethene	**1.02**	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY

Client Sample ID:	4-2 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-05	**Collection Date:**	05/19/2017 8:18

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,1,1-Trichloroethane	**1.04**	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Trichloroethene	**0.900**	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			05/23/17 2004	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 2004	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 2004	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2004	NY
Surrogate: 4-Bromofluorobenzene	79.4	Limit: 70-130		% Rec			05/23/17 2004	NY
Surrogate: 1,2-Dichlorobenzene-d4	78.2	Limit: 70-130		% Rec			05/23/17 2004	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	4-2 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-06	**Collection Date:**	05/19/2017 8:20

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			05/23/17 2034	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			05/23/17 2034	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	4-2 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-06	**Collection Date:**	05/19/2017 8:20

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			05/23/17 2034	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 2034	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		05/23/17 2034	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2034	NY
Surrogate: 4-Bromofluorobenzene	80.0	Limit: 70-130		% Rec			05/23/17 2034	NY
Surrogate: 1,2-Dichlorobenzene-d4	78.6	Limit: 70-130		% Rec			05/23/17 2034	NY

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-07	**Collection Date:**	05/18/2017 17:35

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			05/23/17 2103	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			05/23/17 2103	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J7E0173

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	BNR-Lab
Lab Sample ID:	J7E0173-07	**Collection Date:**	05/18/2017 17:35

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			05/23/17 2103	NY
m,p-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		05/23/17 2103	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		05/23/17 2103	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			05/23/17 2103	NY
Surrogate: 4-Bromofluorobenzene	81.0	Limit: 70-130		% Rec			05/23/17 2103	NY
Surrogate: 1,2-Dichlorobenzene-d4	79.6	Limit: 70-130		% Rec			05/23/17 2103	NY

Laboratory

NY: Microbac Laboratories, Inc., New York Division

Definitions

MCL: US EPA Maximum Contaminant Level

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.

Limits may be 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.

Reviewed and Approved By:



Renee Lantz
Project Manager
renee.lantz@microbac.com
05/26/2017 09:31

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7E0173

TAT 7 days

Town of Vestal

Bill Peltz
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: 5/9/2017
Field Route ID: NY-Route 1 Bing

Client Sample ID: 1-2A Raw
Lab Sample ID: J7E0173-01
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 05-19-17@ 0912

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: 1-2A Finished
Lab Sample ID: J7E0173-02
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 05-19-17@ 0914

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: 1-3 Raw
Lab Sample ID: J7E0173-03
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 05-19-17@ 0916

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7E0173

Town of Vestal

Project Name: Town of Vestal Monthly/Quarterly

Bill Peltz
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project / PO Number: N/A
Tenatively Scheduled: 5/9/2017
Field Route ID: NY-Route 1 Bing

PWSID: _____ **Point Type:** _____

Sampling Point: _____ **Frequency** _____

Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days
		Total Containers: 2	

Client Sample ID: 1-3 Finished
Lab Sample ID: J7E0173-04
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 05-19-17 @ 0918

PWSID: _____ **Point Type:** _____

Sampling Point: _____ **Frequency** _____

Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days
		Total Containers: 2	

Client Sample ID: 4-2 Raw
Lab Sample ID: J7E0173-05
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 05-19-17 @ 0818

PWSID: _____ **Point Type:** _____

Sampling Point: _____ **Frequency** _____

Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7E0173

Town of Vestal

Project Name: Town of Vestal Monthly/Quarterly

Bill Peltz
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Project / PO Number: N/A
Tenatively Scheduled: 5/9/2017
Field Route ID: NY-Route 1 Bing

524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: 4-2 Finished
Lab Sample ID: J7E0173-06
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 05-9-17 @ 1500

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: Trip Blank
Lab Sample ID: J7E0173-07
Matrix: Drinking Water
Type: Trip Blank

Sampled Date & Time: 05-8-17 @ 1735

PWSID: _____ **Point Type:** _____
Sampling Point: _____ **Frequency** _____
Point No: _____ **Num/Frequency** _____ **Sample Location:** _____

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 1

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7E0173

Town of Vestal

Bill Peltz
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: 5/9/2017
Field Route ID: NY-Route 1 Bing

Sampled/Relinquished by:	Date/Time:	Received by:
Printed Name: Bethany Robinson	05-19-17E 0930	Printed Name:
Relinquished by:	Date/Time:	Received by:
Printed Name: Bethany Robinson	5-19-17E 1049	Printed Name:
Relinquished by:	Date/Time: 5/19/17, 1230	Received by:
Printed Name:		Printed Name: Brenna Murray

As Received at Laboratory: On Ice: (Yes) / No Temp 6.2 °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 another accredited laboratory. By signing this document you are attesting that you have been informed by Microbac of the intent to subcontract and are in programs agreement with this action.

Notes:

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J7F0749

Town of Vestal

Bill Peltz
701 Vestal Parkway West
Vestal, NY 13850-1363

Project Name: Town of Vestal Monthly/Quarterly

Project / PO Number: N/A
Received: 06/20/2017
Reported: 06/28/2017

Analytical Testing Parameters

Client Sample ID: 1-2A Raw
Sample Matrix: Drinking Water
Lab Sample ID: J7F0749-01
Collected By: Bethany Robinson
Collection Date: 06/20/2017 12:35

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/22/17 2358	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/22/17 2358	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			06/22/17 2358	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			06/22/17 2358	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	1-2A Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-01	**Collection Date:**	06/20/2017 12:35

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			06/22/17 2358	NY
m,p-Xylene	<1.00	5.00 MCL	1.00	ug/L	Y		06/22/17 2358	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	Y		06/22/17 2358	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			06/22/17 2358	NY
Surrogate: 4-Bromofluorobenzene	86.2	Limit: 70-130		% Rec			06/22/17 2358	NY
Surrogate: 1,2-Dichlorobenzene-d4	80.4	Limit: 70-130		% Rec			06/22/17 2358	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-02	**Collection Date:**	06/20/2017 12:37

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0027	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0027	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0027	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0027	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	1-2A Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-02	**Collection Date:**	06/20/2017 12:37

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			06/23/17 0027	NY
m,p-Xylene	<1.00	5.00 MCL	1.00	ug/L	**Y**		06/23/17 0027	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		06/23/17 0027	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0027	NY
Surrogate: 4-Bromofluorobenzene	83.6	Limit: 70-130		% Rec			06/23/17 0027	NY
Surrogate: 1,2-Dichlorobenzene-d4	78.4	Limit: 70-130		% Rec			06/23/17 0027	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-03	**Collection Date:**	06/20/2017 12:42

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0056	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0056	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0056	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0056	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	1-3 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-03	**Collection Date:**	06/20/2017 12:42

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			06/23/17 0056	NY
m,p-Xylene	<1.00	5.00 MCL	1.00	ug/L	**Y**		06/23/17 0056	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		06/23/17 0056	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0056	NY
Surrogate: 4-Bromofluorobenzene	83.8	Limit: 70-130		% Rec			06/23/17 0056	NY
Surrogate: 1,2-Dichlorobenzene-d4	79.0	Limit: 70-130		% Rec			06/23/17 0056	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-04	**Collection Date:**	06/20/2017 12:44

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0125	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0125	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0125	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0125	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	1-3 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-04	**Collection Date:**	06/20/2017 12:44

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			06/23/17 0125	NY
m,p-Xylene	<1.00	5.00 MCL	1.00	ug/L	**Y**		06/23/17 0125	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		06/23/17 0125	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0125	NY
Surrogate: 4-Bromofluorobenzene	104	Limit: 70-130		% Rec			06/23/17 0125	NY
Surrogate: 1,2-Dichlorobenzene-d4	98.0	Limit: 70-130		% Rec			06/23/17 0125	NY

Client Sample ID:	4-2 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-05	**Collection Date:**	06/20/2017 13:04

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0154	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0154	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0154	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0154	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Tetrachloroethene	0.680	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	4-2 Raw		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-05	**Collection Date:**	06/20/2017 13:04

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,1,1-Trichloroethane	0.780	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Trichloroethene	1.05	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			06/23/17 0154	NY
m,p-Xylene	<1.00	5.00 MCL	1.00	ug/L	**Y**		06/23/17 0154	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		06/23/17 0154	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0154	NY
Surrogate: 4-Bromofluorobenzene	82.6	Limit: 70-130		% Rec			06/23/17 0154	NY
Surrogate: 1,2-Dichlorobenzene-d4	78.0	Limit: 70-130		% Rec			06/23/17 0154	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	4-2 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-06	**Collection Date:**	06/20/2017 13:06

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0223	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0223	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0223	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0223	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	4-2 Finished		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-06	**Collection Date:**	06/20/2017 13:06

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			06/23/17 0223	NY
m,p-Xylene	<1.00	5.00 MCL	1.00	ug/L	**Y**		06/23/17 0223	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		06/23/17 0223	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0223	NY
Surrogate: 4-Bromofluorobenzene	82.4	Limit: 70-130		% Rec			06/23/17 0223	NY
Surrogate: 1,2-Dichlorobenzene-d4	77.0	Limit: 70-130		% Rec			06/23/17 0223	NY

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-07	**Collection Date:**	06/19/2017 17:00

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
Benzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Bromobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Bromochloromethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
n-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
tert-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
sec-Butylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Carbon tetrachloride	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Chlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Chloroethane (Ethyl chloride)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
2-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
4-Chlorotoluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Dibromomethane (Methylene bromide)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0252	NY
1,2-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,4-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,3-Dichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Dichlorodifluoromethane (Freon-12)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,1-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,2-Dichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,1-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
cis-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
trans-1,2-Dichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
2,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,2-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,3-Dichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
cis-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
trans-1,3-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,1-Dichloropropene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Ethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Hexachlorobutadiene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Isopropylbenzene (Cumene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
4-Isopropyltoluene (p-Isopropyltoluene)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Methyl bromide (Bromomethane)	<0.500	5.00 MCL	0.500	ug/L	Q2		06/23/17 0252	NY
Methyl tert-butyl ether (MTBE)	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0252	NY
Methyl chloride (Chloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Methylene chloride (Dichloromethane)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Naphthalene	<0.500	50.0 MCL	0.500	ug/L			06/23/17 0252	NY
n-Propylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Styrene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,1,2,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,1,1,2-Tetrachloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Tetrachloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Toluene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY

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Microbac Laboratories, Inc., New York Division

CERTIFICATE OF ANALYSIS

J7F0749

Client Sample ID:	Trip Blank		
Sample Matrix:	Drinking Water	**Collected By:**	Bethany Robinson
Lab Sample ID:	J7F0749-07	**Collection Date:**	06/19/2017 17:00

Volatile Organic Compounds - GC/MS	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Lab
Method: EPA 524.2/EPA 524.2, Rv 4.1								
1,2,4-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,2,3-Trichlorobenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,1,2-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,1,1-Trichloroethane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Trichloroethene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Trichlorofluoromethane (Freon 11)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,2,3-Trichloropropane	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,3,5-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
1,2,4-Trimethylbenzene	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Vinyl chloride	<0.500	2.00 MCL	0.500	ug/L			06/23/17 0252	NY
m,p-Xylene	<1.00	5.00 MCL	1.00	ug/L	**Y**		06/23/17 0252	NY
o-Xylene	<0.500	5.00 MCL	0.500	ug/L	**Y**		06/23/17 0252	NY
Xylenes (total)	<0.500	5.00 MCL	0.500	ug/L			06/23/17 0252	NY
Surrogate: 4-Bromofluorobenzene	82.2	Limit: 70-130		% Rec			06/23/17 0252	NY
Surrogate: 1,2-Dichlorobenzene-d4	78.4	Limit: 70-130		% Rec			06/23/17 0252	NY

*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.*

Laboratory

NY: Microbac Laboratories, Inc., New York Division

Definitions

MCL: US EPA Maximum Contaminant Level
Q2: LCS recovery is above acceptance limits. Results may be bias high.
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
Project Manager
renee.lantz@microbac.com
06/28/2017 18:16

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7F0749

TAT 7 days

Town of Vestal

Bill Peltz
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: 6/14/2017
Field Route ID: NY-Route 1 Bing

Client Sample ID: 1-2A Raw
Lab Sample ID: J7F0749-01
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 06-20-17 @ 1235

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: 1-2A Finished
Lab Sample ID: J7F0749-02
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 06-20-17@ 1237

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: 1-3 Raw
Lab Sample ID: J7F0749-03
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 06-20-17 @ 1235 48 pm

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7F0749

Town of Vestal

Bill Peltz
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: 6/14/2017
Field Route ID: NY-Route 1 Bing

Client Sample ID: 1-3 Finished
Lab Sample ID: J7F0749-04
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 06-20-17@ 1244

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: 4-2 Raw
Lab Sample ID: J7F0749-05
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 06-20-17@ 1304 BR

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Client Sample ID: 4-2 Finished
Lab Sample ID: J7F0749-06
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 06-20-17@ 1306

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 2

Microbac Laboratories, Inc., New York Division

Chain of Custody

J7F0749

Town of Vestal

Bill Peltz
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: 6/14/2017
Field Route ID: NY-Route 1 Bing

Client Sample ID: **Trip Blank**

Lab Sample ID: **J7F0749-07**

Matrix: **Drinking Water**

Sampled Date & Time: 06-19-17 @ 1700

Type: **Trip Blank**

Analysis	Method	Container	Hold Time
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear Vial, Ascorbic Acid, HCL	14 days
524.2 VOC NY	EPA 524.2, Rv 4.1	V-40ml Clear vial, HCL	14 days

Total Containers: 1

Sampled/Relinquished by: [signature]	Date/Time:	Received by:
Printed Name: Bethany Robinson	06-20-17 1309	Printed Name:
Relinquished by: [signature]	Date/Time:	Received by: [signature]
Printed Name: Bethany Robinson	06-20-17 1509	Printed Name: Renee Lantz
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:

As Received at Laboratory: On Ice: (Yes) / No Temp 2.6 °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 another accredited laboratory. By signing this document you are attesting that you have been informed by Microbac of the intent to subcontract and are in programs agreement with this action.

Notes:

Arcadis CE, Inc.

855 Route 146

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Clifton Park, New York 12065

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Fax 518 250 7301

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