



**New York State Department of
Environmental Conservation**

Division of Environmental Remediation

**Remedial System Optimization Report
1st Quarter 2014**

Vestal Water Supply Site

Vestal, New York

Site Number 7-04-009A

August 2014



A handwritten signature in black ink, appearing to read "Bruce Nelson", written over a horizontal line.

Bruce Nelson, CPG
Principal Geologist / Vice President

A handwritten signature in black ink, appearing to read "Jeremy Wyzkoff", written over a horizontal line.

Jeremy Wyzkoff
Project Geologist

Remedial System Optimization Report

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

Prepared for:
New York State Department of
Environmental Conservation

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Date:
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Malcolm Pirnie, Inc. was acquired by
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1. Introduction

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

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 temporarily 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.

In accordance with the RSO Work Plan, this Quarterly Report has been prepared to summarize the December 2013 through March 2014 field activities, which include the baseline groundwater results.

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, which will be summarized in the Focused Feasibility Study (FFS).

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 up to one year, collection of groundwater samples from new and existing wells, evaluation of data, and reporting of conclusions and recommendations.

2.1 Drilling and Monitoring Well Installation

Prior to drilling, a sub-surface utility survey was performed on August 6, 2013 by Diversified Geophysics, Inc. using ground-penetrating radar. Field observations, data from the sub-surface utility survey, utility mark outs, and maps obtained from the Town of Vestal and other utility providers were used to aid in identifying buried infrastructure in the vicinity of the proposed drilling locations.

Drilling was conducted by Stearns Drilling Company from December 11, 2013 to December 19, 2013 and from January 6, 2014 to January 11, 2014. Seven soil borings and 13 new permanent monitoring wells were installed to provide additional information to delineate the horizontal and vertical extent of groundwater contamination. Locations of existing and newly installed wells (4009-23S, 4009-23D, 4009-24, 4009-25S, 4009-25D, 4009-26, 4009-27S, 4009-27I, 4009-27D, 4009-28, 4009-29S, 4009-29I, and 4009-29D), are shown on Figure 2-1. In general, the wells were installed between the source area on Stage Road (Operable Unit 1 (OU-1)) and the Well 1-1A groundwater treatment plant. One of the wells (4009-28) was installed between the Well 1-1A treatment plant and Town of Vestal Well 1-2A and Well 1-3 to monitor groundwater concentrations during the planned shutdown of the Well 1-1A treatment plant.

Soil borings were generally advanced to bedrock or to identify the contact between a glacial till layer found above the bedrock. Soil sampling and groundwater monitoring

well installation procedures were completed as described in the RSO Work Plan (Malcolm Pirnie, 2013).

2.1.1 Soil Borings

Seven soil borings were drilled to evaluate sub-surface geology and to provide additional data on the nature and extent of soil contamination. Prior to drilling, each boring location was hand-cleared to five feet bgs to provide an additional line of evidence to identify buried infrastructure. The boring locations were hand cleared, backfilled, flagged, and identified as the final drilling locations on December 5 and 6, 2013. Soil borings were drilled using a truck-mounted sonic drill rig at the previously cleared locations. Continuous four-inch inner-diameter (I.D.) soil cores were collected from the ground surface to the final depth of each boring and extruded into plastic sleeves. Upon collection, each soil core sleeve was opened and the soil was screened for VOCs using a photo ionization detector (PID). The soil was visually inspected for indication of contamination (e.g., staining and/or sheens), and visually classified by the on-site geologist. Soil boring and well construction logs are provided in Appendix A.

2.1.1.1 Geology

Table 2-1 provides a summary of drilling depths. As shown in Table 2-1, the final depth of the borings ranged from 69 feet below ground surface (bgs) at the 4009-25 monitoring well cluster to 189 feet bgs at monitoring well 4009-28. As shown in Table 2-1, glacial till was identified at depths ranging from 37 feet bgs (4009-25) to 184 feet bgs (4009-28). Figure 2-2 presents an isometric contour map of the till contact based on from the RSO drilling activities and prior site investigations (Ecology and Environment, 1986). As shown in Figure 2-2, the depth to till increases to the northwest, with the deepest till contact measured at 4009-28. Bedrock was encountered beneath the till at depths ranging from 67 feet bgs (4009-25) to 122 feet bgs (4009-27). Table 2-1 shows that bedrock was not encountered at borings 4009-28 or 4009-29.

Based on soil boring logs (Appendix A), the depth to till and the till / bedrock contact increases to the northwest. Gravel and sand overlies the till and thins to the west, with some lenses of clayey silt within the gravel and sand layer. The gravel and sand unit is generally overlain by a sand and silt layer, with silt and clayey silt in some locations to the west.

2.1.1.2 Soil Sample Collection and Results

Soil samples were collected from each soil boring in accordance with the RSO Work Plan. With the exception of 4009-23, soil samples were collected from the depth interval immediately above the water table at each of the seven drilling locations and analyzed for Target Compound List VOCs. Based on field evidence of petroleum-impacted soil, two additional samples were collected at boring 4009-23 (4 feet bgs and 5 to 6 feet bgs) to evaluate potential impacts. In addition to TCL VOCs, the samples collected from the 4 feet bgs sample at 4009-23 were also analyzed for Spills Technology and Remediation Series (STARS) VOCs. The NYSDEC were notified of the petroleum impacted soil on December 6, 2013 and a Spill Number (1309058) was assigned by the NYSDEC. According to the NYSDEC Spills Database, this spill was closed on April 14, 2014. Based on a review of prior investigations in this area, the petroleum impacts to soil were identified during drilling of the soil borings for monitoring well 4009-7 (previously identified at monitoring well S-2). The information was presented to the NYSDEC in a Work Plan for additional investigation of the area (Ecology and Environment, 1986a).

Analytical results for sub-surface soil samples are presented in Table 2-2. As shown in Table 2-2, the soil sample collected at 4009-23 at 4 feet bgs was the only soil sample that contained VOCs at concentrations greater than the NYSDEC Unrestricted Use Soil Cleanup Objectives (Unrestricted Use SCOs). Table 2-2 shows that this sample had concentrations of 1,2,4-trimethylbenzene (55 milligrams per kilograms [mg/kg]), 1,3,5-Trimethylbenzene (32 mg/kg), ethylbenzene (1.4 mg/kg), n-propylbenzene (4.6 mg/kg), and total xylenes (10 mg/kg) that exceeded the respective Unrestricted Use SCOs. As shown in Table 2-2, none of the soil samples contained concentrations of VOCs greater than the respective NYSDEC Industrial or Commercial SCOs.

One composite soil sample (ground surface to final depth of boring) was collected from each soil boring and submitted for waste characterization analyses, including: Toxicity Characteristic Leaching Procedure (TCLP) VOCs, TCLP pesticides and herbicides, Semi-volatile organic compounds (SVOCs), and metals. These data were used to evaluate investigation derived waste (IDW) characteristics for the drill cuttings generated at each soil boring. Analytical data for these samples are presented in Appendix B.

2.1.2 Monitoring Well Installation

Thirteen new individual and nested wells were installed for the RSO. Four sets of nested wells were installed: 4009-23 (shallow and deep); 4009-25 (shallow and deep); 4009-27 (shallow, intermediate and deep); and 4009-29 (shallow, intermediate and deep). Monitoring wells 4009-24, 4009-26, and 4009-28 were installed as individual shallow wells. A well construction summary is provided as Table 2-1. The final depths of monitoring wells were dependent on the targeted hydrostratigraphic unit. In general, shallow wells were screened to intercept the water table or targeted higher permeability units near the water table. Intermediate wells were generally screened in higher permeability fluvial deposits and deep wells were screened in high permeability sediments directly above the till contact.

2.1.3 Monitoring Well Development

Monitoring wells were developed from January 9 through January 16, 2014. The purpose of well development was to minimize turbidity in groundwater samples and to improve hydraulic properties of the monitoring wells. Monitoring wells were developed using an inertial pump and surge block. In general, well development was completed by removing approximately five times the water that was required to drill the soil boring over the selected screened interval of the well. The volume of water removed from the monitoring wells during development ranged from approximately 60 gallons at 4009-23S to 410 gallons at 4009-29D. The total volume of water purged from all of the new groundwater monitoring wells was approximately 2,700 gallons. Water generated during well development was filtered on-site and treated using the Well 1-1A treatment plant as described in Section 2.2, below.

2.1.4 Hydraulic Conductivity Testing

Slug tests were performed on each of the 13 new monitoring wells on February 4 and 5, 2014. Results of the slug tests are being used to evaluate hydrogeologic properties at and support findings for the FFS. Slug test data and evaluations will be presented in the final RSO/FFS.

2.2 Investigation Derived Waste

Investigation derived wastes (IDW) were contained in United Nation (UN)-approved 55-gallon drums and staged on-site. Seventeen drums containing soil and three drums containing bag filters and drilling fluids were removed from the site on May 28, 2014 by

Veolia Environmental Solutions and transported for off-site disposal at their West Carrollton, Ohio disposal facility. A copy of the waste profile and disposal manifest are provided in Appendix C. Disposal characterization data are provided in the laboratory analytical reporting forms in Appendix B. Based on the analytical data, the IDW were classified at non-hazardous, non-DOT regulated materials.

In consultation with NYSDEC, recovered drilling waste water (drilling fluids) and groundwater monitoring well development water were filtered on-site and treated using the Well 1-1A treatment system. The wastewater was staged in 55 gallon drums at the Well 1-1A treatment plant until a “batch” of approximately 200 gallons of water was accumulated. Treatment of the wastewater consisted of pumping the water through a series of bag filter assemblies with 10 micron filters and discharging into the pre-treatment water line of the Well 1-1A treatment system. The combined waste water and Well 1-1A process water was then treated using the Well 1-1A air stripper tower for removal of VOCs. Approximately 600 gallons of recovered drilling fluids and 2,700 gallons of well development water were treated during the RSO investigation. Residual wastes, including bag filters and accumulated solids, were placed in drums for off-site disposal, as discussed above.

2.3 Survey

The location and elevation of new and existing groundwater monitoring wells (including 11 USEPA Environmental Response Team (ERT) wells on the ECO International property) were surveyed by YEC, Inc. on January 30, 2014. A summary of the survey data are presented in Table 2-3. Additionally, the Well 1-1A treatment plant area was surveyed, including the buildings, fence perimeter, utility structures and treatment plant outfall.

2.4 Groundwater Sampling

Groundwater samples were collected from existing and newly installed monitoring wells on February 20, 2014. In consultation with NYSDEC and USEPA, groundwater samples were also collected from 10 USEPA ERT monitoring wells on the ECO International property. 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 to TestAmerica-Buffalo following chain-of-custody sample handling procedures.

2.4.1 Water Level Data

Groundwater levels were measured on February 19, 2014 (while Well 1-1A was operating) and on March 17, 2014 following the prescribed shutdown of the Well 1-1A treatment facility using an oil-water interface probe. 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 2-4. As shown in Table 2-4, light non-aqueous phase liquid (LNAPL) was detected in monitoring well ERT-1S during the February 19, 2014 (0.93 ft) and March 17, 2014 (0.05 ft) gauging events. Based on gauging data presented in the 2012 Conceptual Site Model (Lockheed Martin, 2012), LNAPL has previously been identified in this well and is not believed to be wide-spread in that area. A trace of LNAPL (0.01 ft) was also present in monitoring well ERT-1D during the February 19, 2014 gauging event but was not detected during the March 17, 2014 gauging event.

The February 19, 2014 potentiometric maps (Figures 2-3, 2-4, and 2-5) provide baseline flow direction for the shallow, intermediate and deep groundwater monitoring zones. The March 17, 2014 potentiometric maps (Figures 2-6, 2-7, and 2-8) provide groundwater flow information for the shallow, intermediate and deep groundwater monitoring zones following the Well 1-1A treatment plant shutdown.

2.4.1.1 Baseline (February 19, 2014)

As shown on Figures 2-3 and 2-4, the direction of groundwater flow in the shallow and intermediate groundwater monitoring zones is generally west to northwest. Figure 2-5 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 northwest, toward Well 1-1A.

2.4.1.2 Post Well 1-1A Shutdown (March 17, 2014)

As shown on Figures 2-6, 2-7, and 2-8 the direction of groundwater flow in the shallow, intermediate and deep groundwater monitoring zone following shutdown of the Well 1-1A treatment facility is generally consistent with baseline conditions.

2.4.1.3 Water Level Monitoring

Pressure transducers were placed in six wells (4009-5, 4009-12, 4009-25D, 4009-26, 4009-28, and 4009-29D) to measure changes in water levels before and after the Well

1-1A groundwater treatment system shutdown. These data, in conjunction with pumping rate and time information, were also used to evaluate changes in groundwater flow directions related to withdrawals from the Town of Vestal water supply wells 1-2A and 1-3. The transducer data and Susquehanna River stage data from the United States Geological Survey (USGS) gauging station at Vestal, New York are plotted on Figure 2-9.

As shown of Figure 2-9, the groundwater elevation data from wells 4009-29D, 4009-28 and 4009-12 contain the following similarities:

- Increases and decreases in groundwater elevation closely related to changes in stage recorded for the Susquehanna River.
- Noticeable change in groundwater elevation on February 28, 2014 when the Well 1-1A treatment facility was shut down.
- Cyclical changes in groundwater elevations in Wells 4009-12, 4009-28, and 4009-29 are related to diurnal pumping from Town of Vestal Wells 1-2A and/or 1-3. These data are supported by discussions with the Town of Vestal Water Superintendent regarding pump cycle times for wells 1-2A and 1-3.

Wells 4009-5, 4009-25D and 4009-26 are screened between 45 and 60 feet above 4009-29D. Figure 2-9 shows that these wells show a similar response to changes in stage recorded at the Susquehanna River, but the response is generally dampened and delayed compared to the wells screened deeper in the valley fill. The effects of pumping are also not as evident in wells 4009-25D and 4009-26 compared to the deeper wells. However, a slight change in elevation is noticeable when the Well 1-1A treatment plant is shut down. Figure 2-9 shows that the water level data recorded in well 4009-5 were not stable enough to determine how pumping may have been affecting groundwater elevations at this location.

2.4.2 Baseline Groundwater Sampling

On February 20, 2014 baseline groundwater samples were collected using PDBs that were deployed on February 6, 2014. PDBs were deployed in 21 existing and 13 newly installed monitoring wells. In addition, PDBs were also deployed in 10 USEPA ERT on the ECO International property. Due to the presence of LNAPL at ERT-1S (Section 2.4.1), no PDBs were deployed at this location.

2.4.2.1 Baseline Groundwater Sampling Results

Groundwater results from the February 20, 2014 baseline groundwater sampling event are provided in Table 2-5. The VOCs measured at the highest concentrations were 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, and total VOC concentrations during the baseline groundwater sampling event are presented on Figures 2-10, 2-11, 2-12, and 2-13, respectively.

As shown in Table 2-5, the highest VOC concentrations were measured at the USEPA ERT groundwater monitoring wells in the vicinity of the source area. The groundwater samples collected from ERT-4S contained the maximum concentration of total VOCs (821,601 µg/L). As shown on Figure 2-10, the highest concentrations of VOCs in the shallow groundwater monitoring zone are found in the vicinity of the source area.

Figure 2-11 shows that the VOC plume in the intermediate groundwater monitoring zone extends approximately 1,000 feet farther to the west toward Well 1-1A. As shown on Figure 2-11, the highest concentration of total VOCs in the intermediate groundwater monitoring zone detected down-gradient from the source area, was 2,906 µg/L in the sample from 4009-29I.

Figure 2-12 and Table 2-5 show that monitoring wells 4009-12 and 4009-29D and Well 1-1A were the only wells screened in the deep groundwater monitoring zone that contained concentrations of VOCs that exceeded NYSDEC Class GA Groundwater Standards. The total VOCs measured at 4009-12 were 75.5 µg/L and the total VOCs measured at 4009-29D were 9.00 µg/L.; the total VOC concentration in the sample from Well 1-1A was 237 µg/L. It should be noted that the sample from Well 1-1A was collected from the treatment system influent under pumping conditions.

Figure 2-13 shows that the groundwater contamination plume is relatively narrow from the source area to Well 1-1A. Decades of pumping at Wells 1-1 (and replacement well 1-1A) have 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. However, analytical data from groundwater monitoring wells between Well 1-1A and the Town of Vestal wells 1-2A and 1-3, indicate that Well 1-1A is has maintained hydraulic control of the plume.

2.4.3 Post-shutdown Sampling

Quarterly groundwater samples will be collected following the shutdown of the Well 1-1A groundwater treatment system and analyzed for VOCs. Results from the first round of post-shutdown sampling will be presented in the RSO Second Quarter Report.

2.4.4 Town of Vestal Municipal Well Sampling

Monthly Analytical data are provided by the Town of Vestal Water Superintendent for Well 1-2A and/or 1-3. Pre-treatment groundwater samples were also collected from the Town of Vestal water supply wells 1-2A and 1-3 on January 30, 2014. 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.

2.4.4.1 Town of Vestal Municipal Well Sampling Results

VOCs associated with contamination at the source area has not been detected in the Town of Vestal water supply wells 1-2A and 1-3. The only VOC measured in the January 30, 2014 samples was methylene chloride, which is a common laboratory contaminant. Concentrations of methylene chloride measured at Well 1-2A (0.8 µg/l) and Well 1-3 (0.6 µg/l) were less than the NYSDEC Groundwater Standard of 5 µg/l. No VOCs were detected above laboratory reporting limits in the Town of Vestal groundwater samples collected at Well 1-3 on March 27, 2014. Laboratory analytical reporting forms are provided in Appendix B.

2.4.5 Out of Scope Activities

Monitoring well 4009-22 (formerly identified as monitoring well 1-22) was located in the vicinity of a proposed RSO well location along Stage Road (Figure 2-1) prior to drilling activities. This groundwater monitoring well was sampled on December 3, 2013 in general accordance with USEPA Low Flow Sampling Techniques. The groundwater analytical results for the December 2013 and the February 2014 (baseline) sampling events are provided in Table 2-5. As shown in Table 2-5, the samples collected from this well contained low-level (<1 ug/L) concentrations of benzene and toluene. Table 2-5 shows that the concentrations of benzene and toluene were below the corresponding NYSDEC Class GA Standards of 1 ug/L and 5 ug/L, respectively.



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Acetone (a common laboratory contaminate) was detected in the December 2013 and February 2014 groundwater samples from this well at concentrations of 3.1 ug/L and 12 ug/L, respectively.

3. Activities for Next Quarter

- Second quarter groundwater sampling scheduled for May 2014.
- Post shutdown sampling at Town of Vestal Wells 1-2A and 1-3.
- Second quarter 2014 RSO Report.

4. References

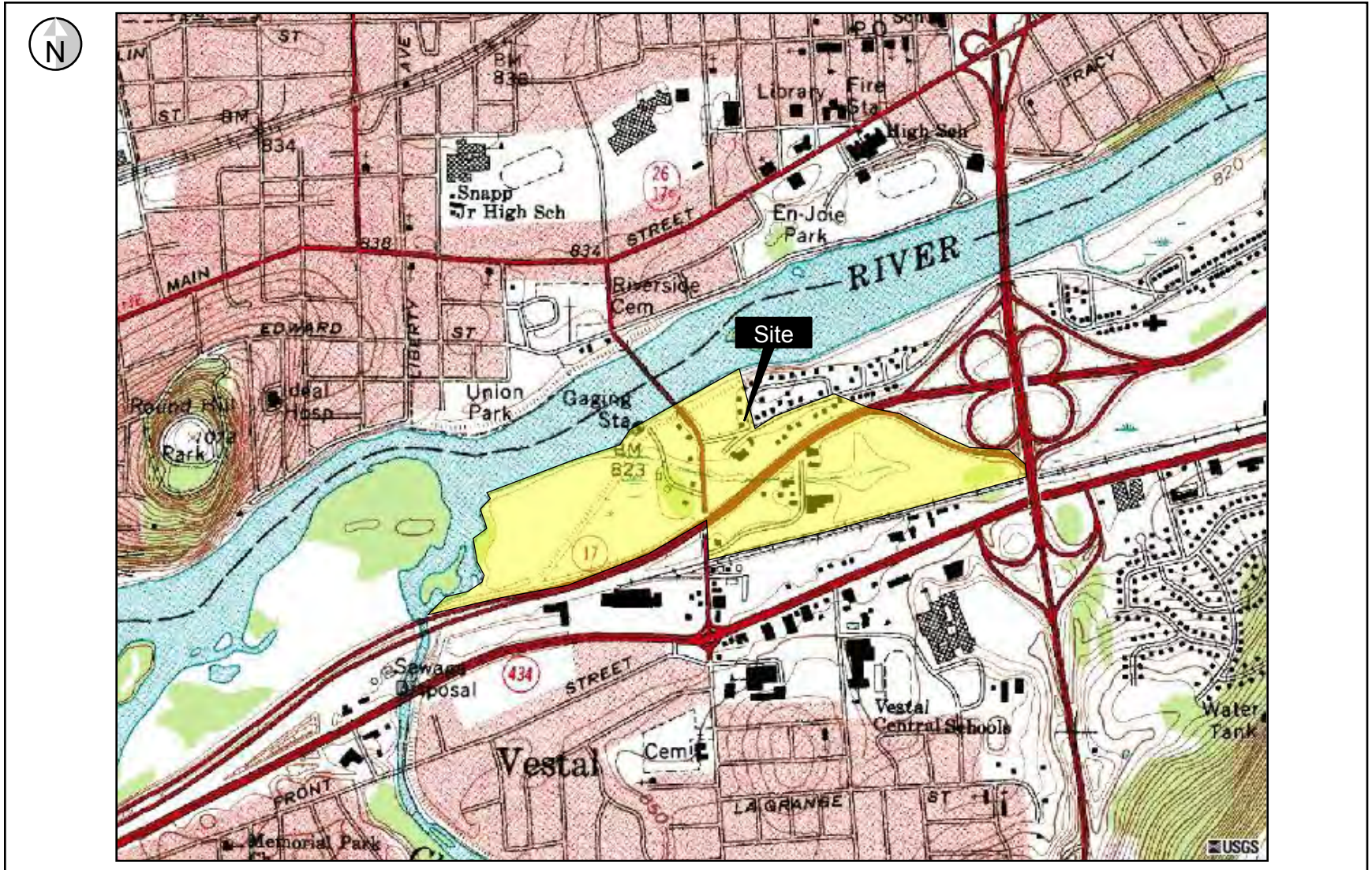
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Ecology and Environment, 1986a, Work Plan for Additional Soil, Groundwater, and Geophysical Analysis at the Vestal Well Field Site, Vestal, New York, Vestal Phase II, April 10, 1986.

Lockheed Martin, 2012, Conceptual Site Model, Vestal Chlorinated Solvent Site, Vestal, New York, Work Assignment 0-064: Technical Memorandum.

Malcolm Pirnie, 2013, Remedial Site Optimization Work Plan, Vestal Water Supply Site, Work Assignment D007618-7, Site Number 7-04-009A.

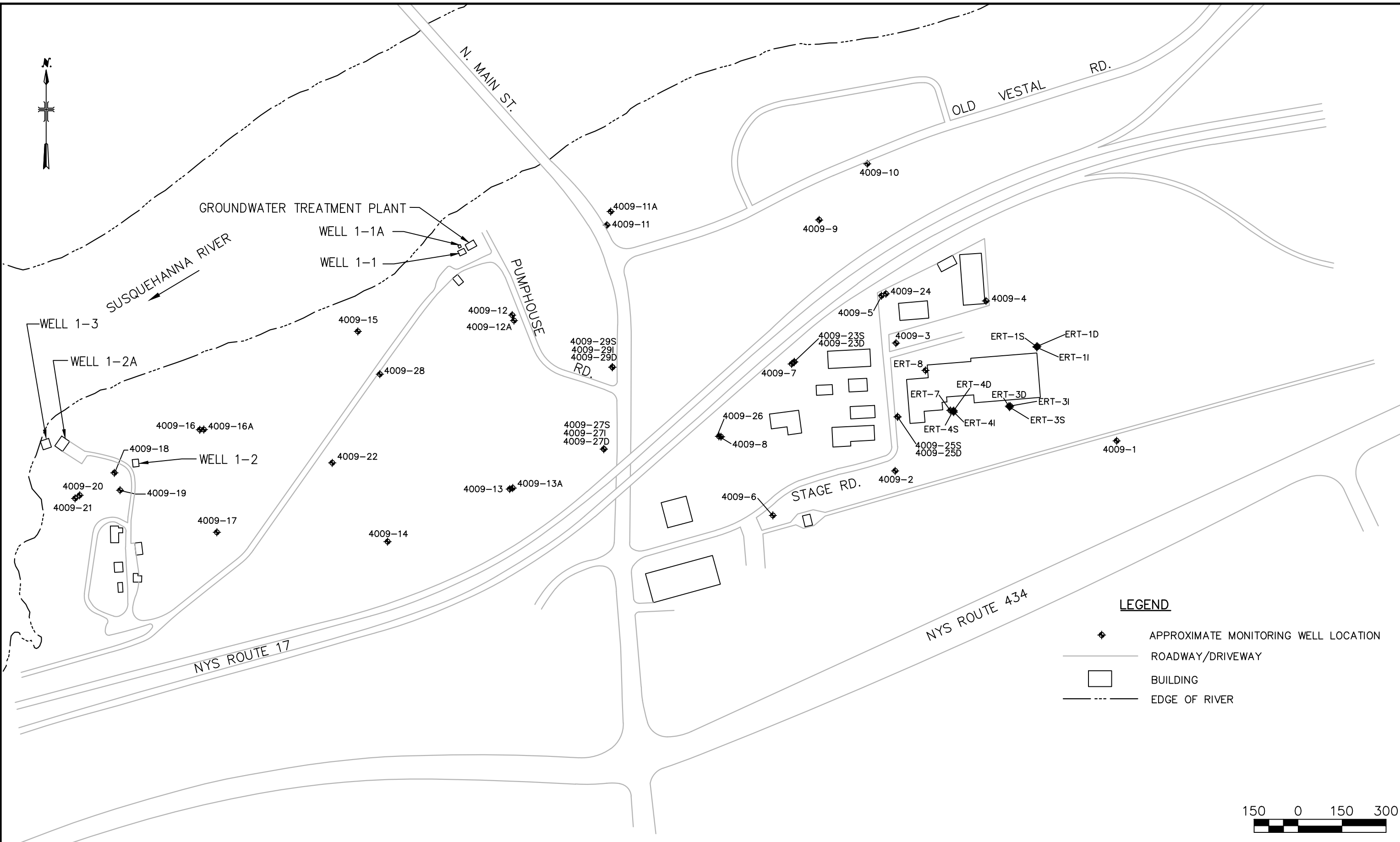
0 2,000 ft



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

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



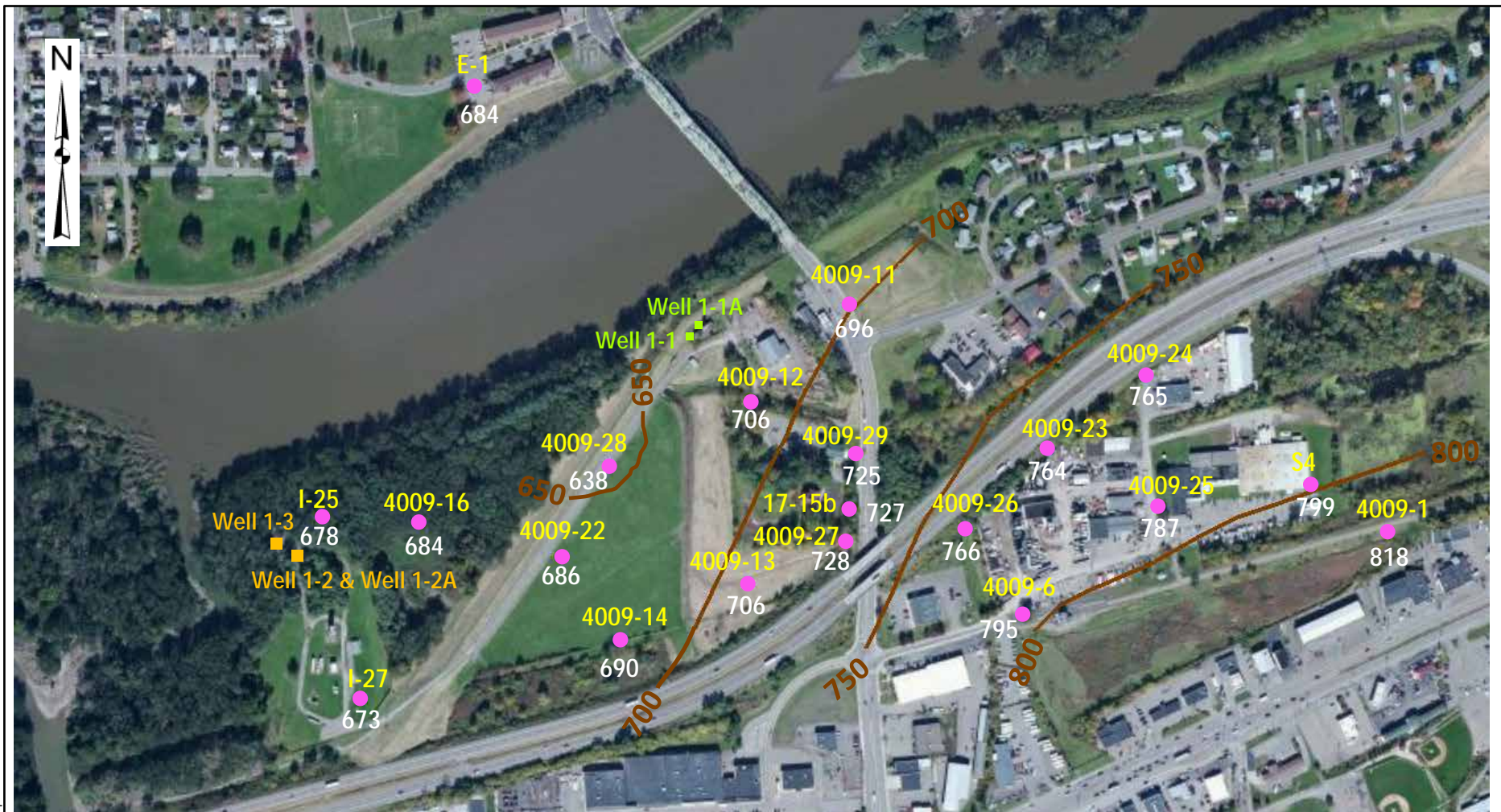
NYSDEC STANDBY CONTRACT NO. D007618-7
 NYSDEC SITE NO. 7-04-009
VESTAL WATER SUPPLY
 VESTAL, NEW YORK

MONITORING WELL LOCATION MAP

SCALE: AS SHOWN

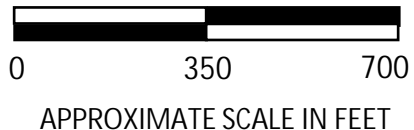
MAY 2014
 FIGURE 2-1

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LEGEND

- 4009-28 MONITORING WELL IDENTIFIER
- MONITORING WELL
- 700 ELEVATION ISOCONTOUR - TOP OF GLACIAL TILL UNIT (Ft. AMSL)
- 655 ELEVATION - TOP OF GLACIAL TILL (Ft. AMSL)
- Well 1-1A EXTRACTION WELL & IDENTIFIER
- Well 1-3 WATER SUPPLY WELL & IDENTIFIER



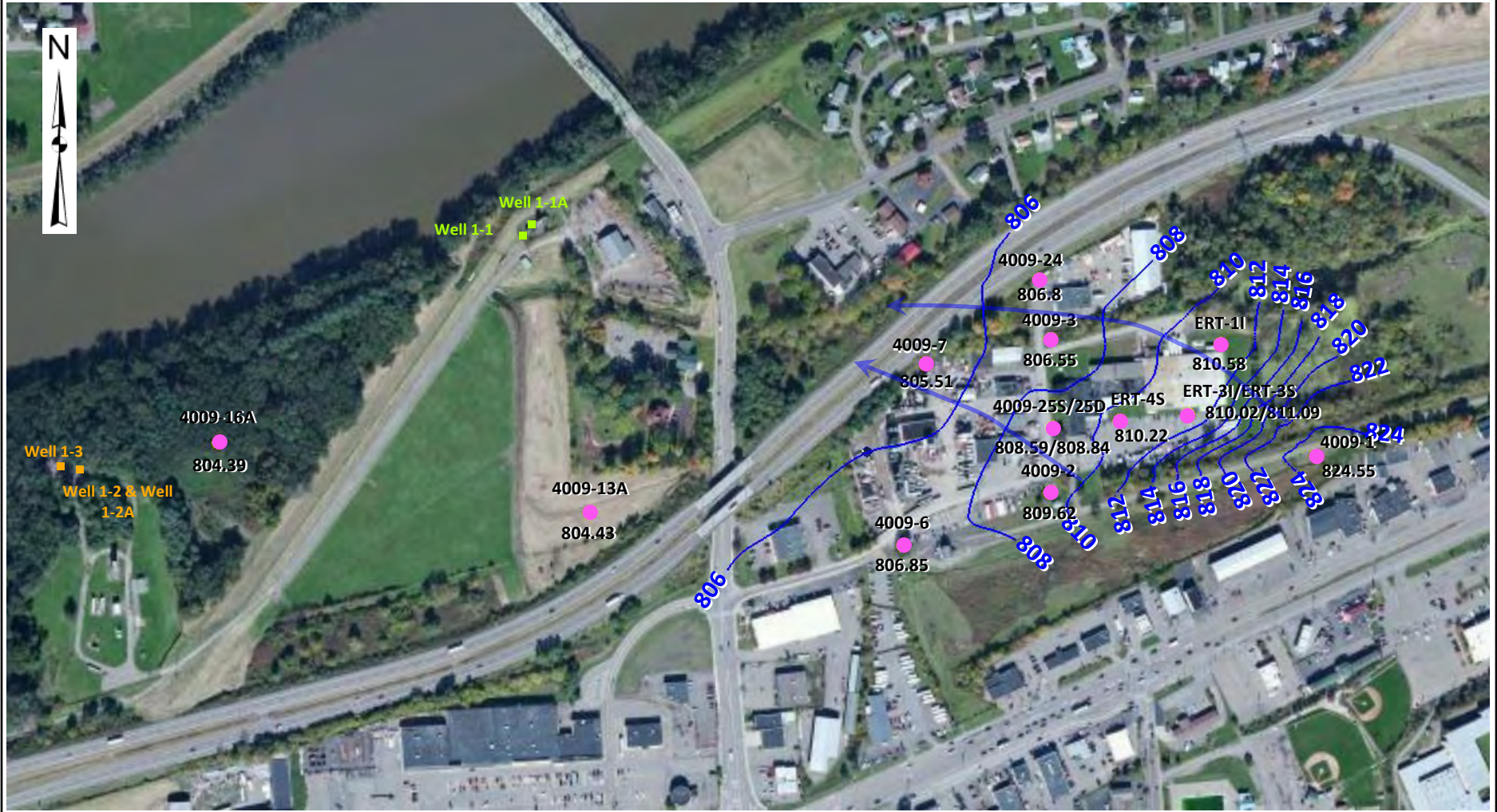
Vestal Water Supply
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Top Elevation of Glacial Till



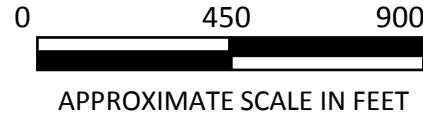
Infrastructure · Water · Environment · Buildings

Figure
2-2

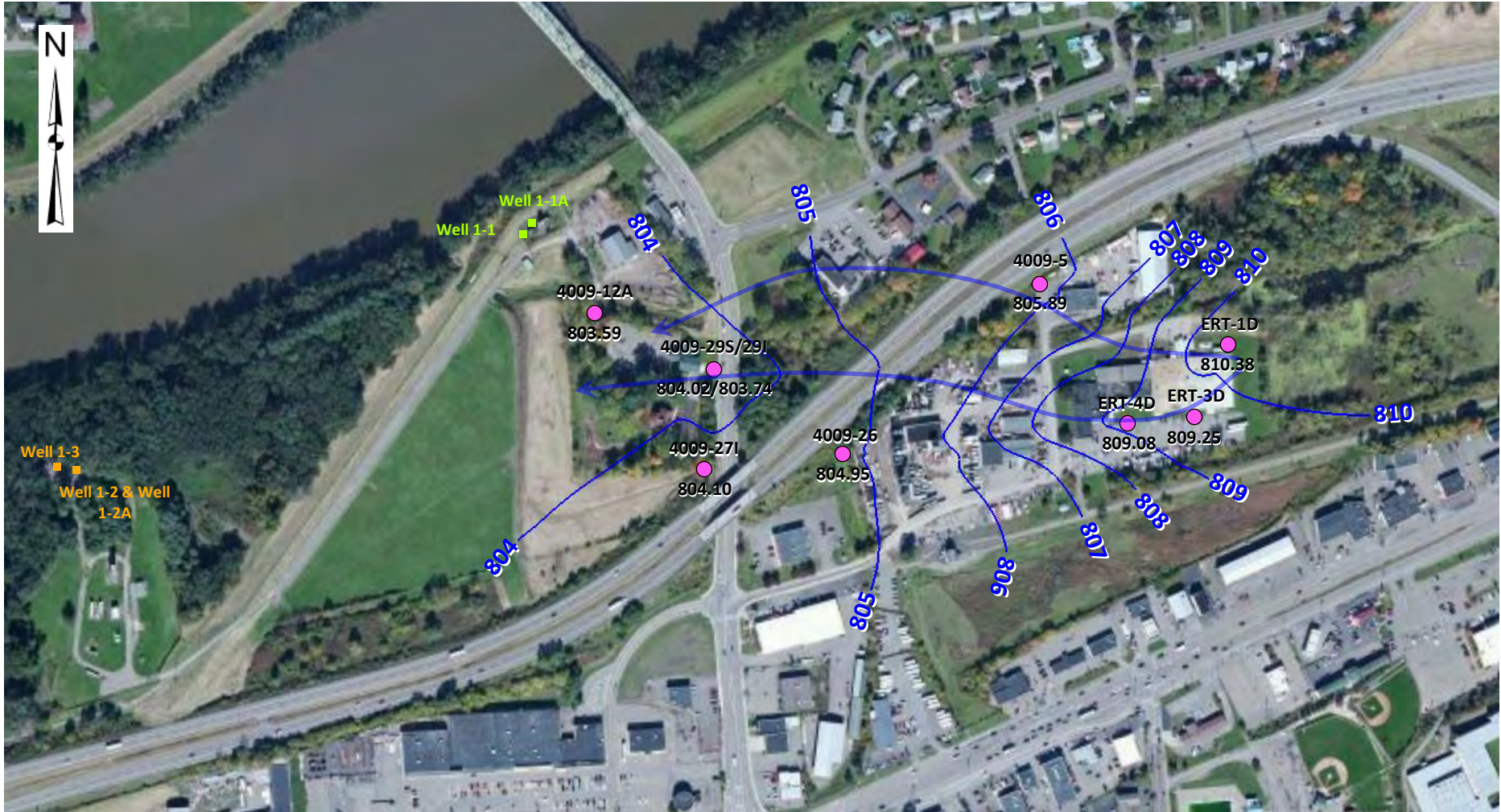


LEGEND

- Well 1-1A
■ EXTRACTION WELL & IDENTIFIER
- 4009-16A
● MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)
- 804.39
● GROUNDWATER ELEVATION
(Feet AMSL)
- 808
~ POTENTIOMETRIC CONTOUR
(Feet AMSL)
- Well 1-3
■ WATER SUPPLY WELL & IDENTIFIER

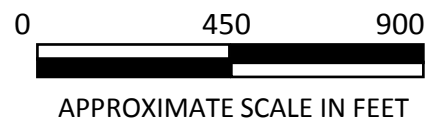


Vestal Water Supply NYSDEC Site #7-04-009 Vestal, New York	
Shallow Potentiometric Surface with Active Pumping in Well 1-1A (February 2014 Heads)	
 <small>Infrastructure · Water · Environment · Buildings</small>	Figure 2-3



LEGEND

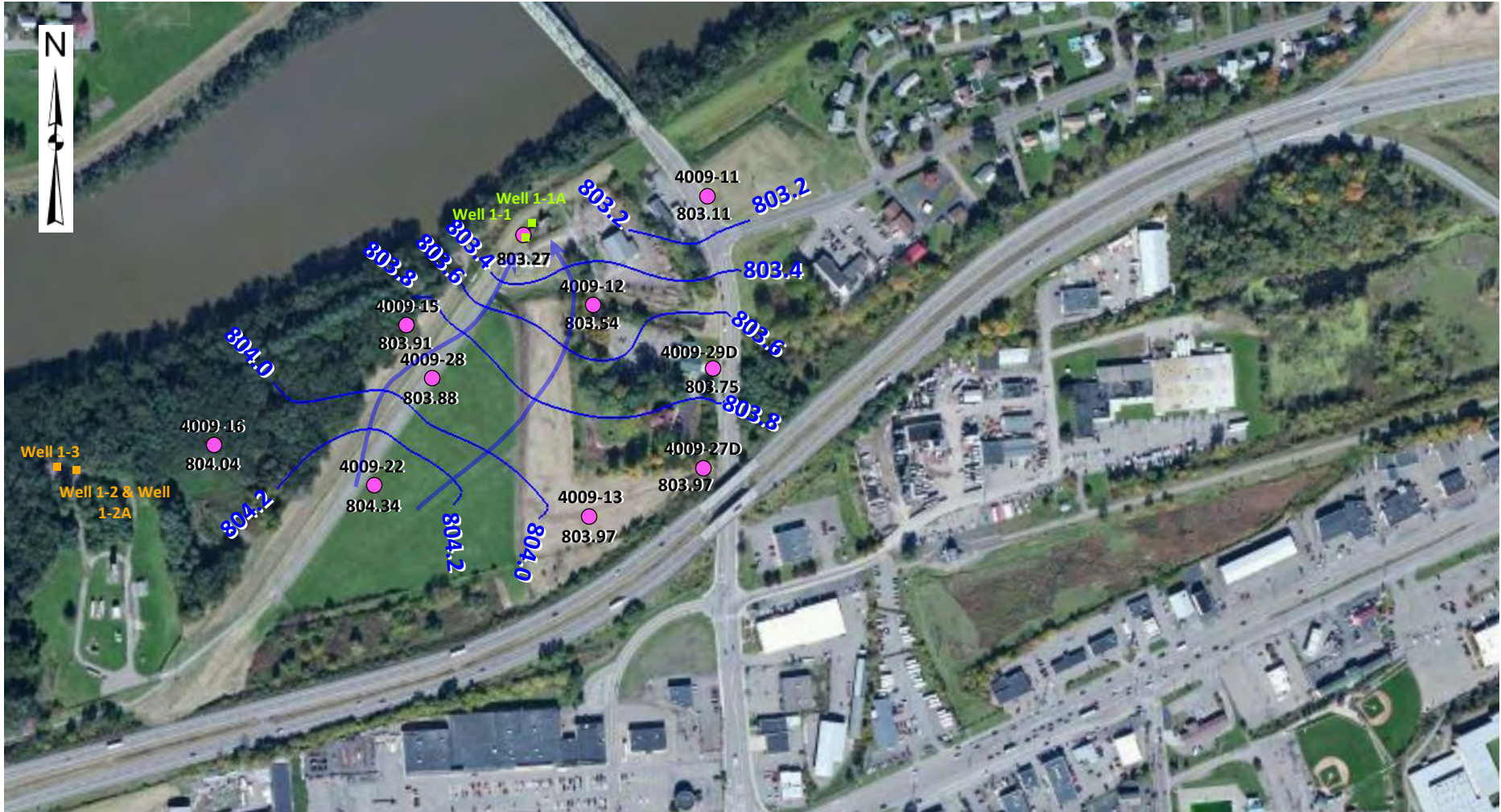
- Well 1-1A ■ EXTRACTION WELL & IDENTIFIER
- 4009-12A ● MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)
- 803.59 ● GROUNDWATER ELEVATION POTENTIOMETRIC CONTOUR
(Feet AMSL)
- ~ 808 WATER SUPPLY WELL & IDENTIFIER
- Well 1-3 ■
- Well 1-2 & Well 1-2A ■



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

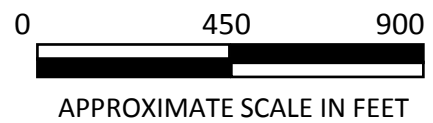
**Intermediate Potentiometric
 Surface with Active Pumping in
 Well 1-1A (February 2014 Heads)**

Figure
2-4

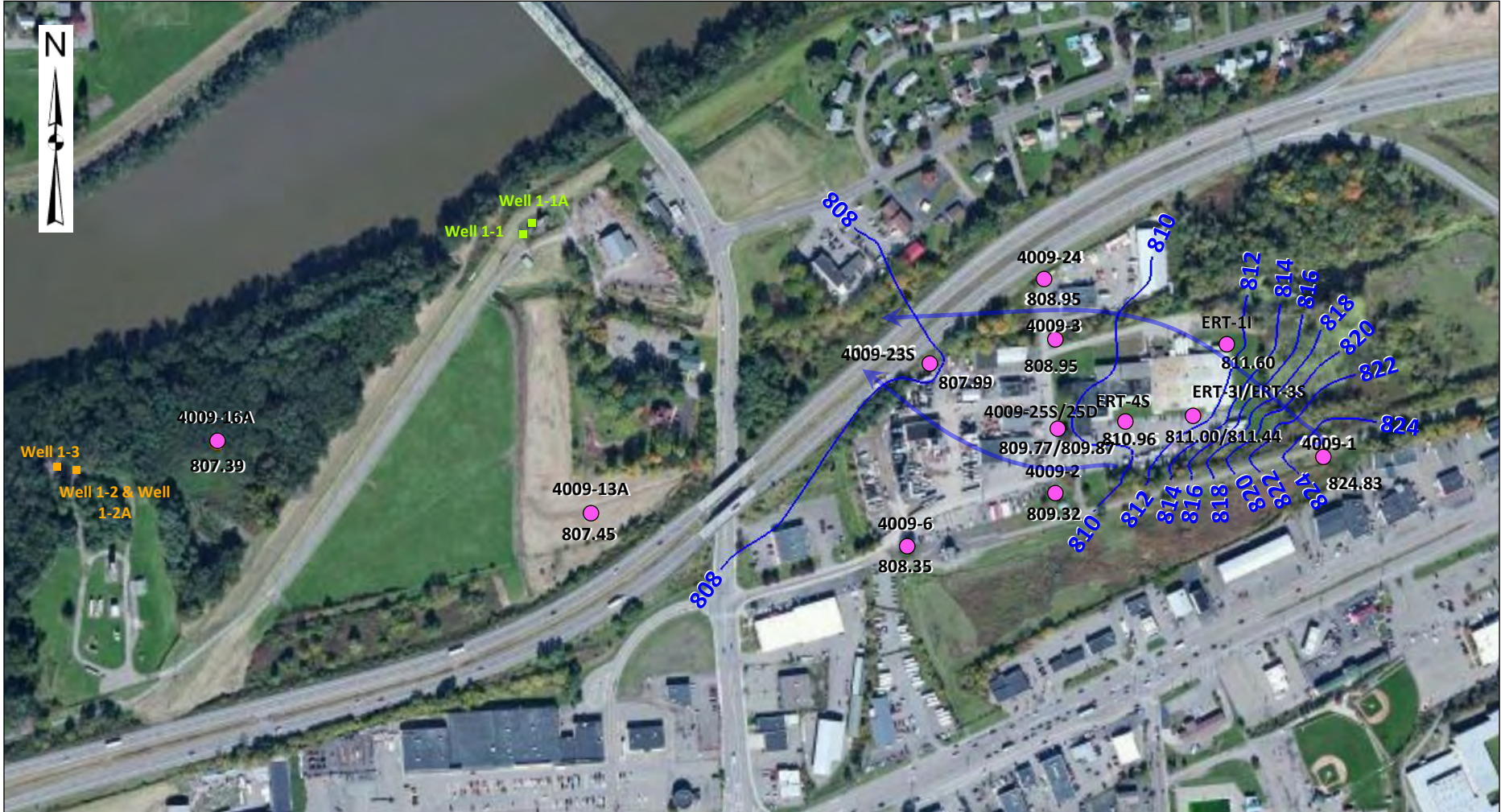


LEGEND

- Well 1-1A
■ EXTRACTION WELL & IDENTIFIER
- 4009-16
● MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)
- 804.04
● GROUNDWATER ELEVATION
POTENTIOMETRIC CONTOUR
(Feet AMSL)
- 803
~ WATER SUPPLY WELL & IDENTIFIER

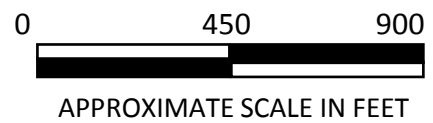


Vestal Water Supply NYSDEC Site #7-04-009 Vestal, New York	
Deep Potentiometric Surface with Active Pumping in Well 1-1A (February 2014 Heads)	
	Figure 2-5



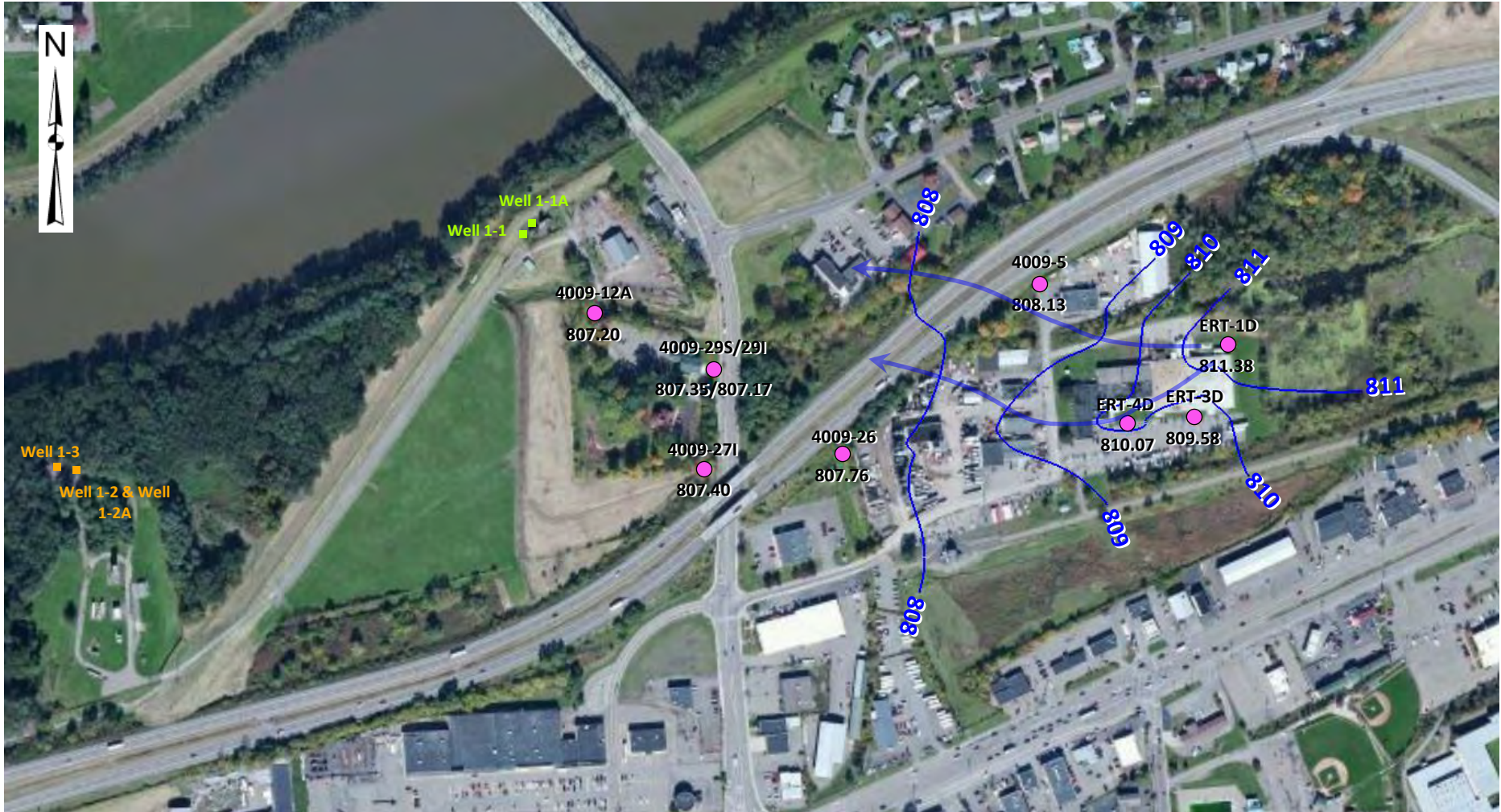
LEGEND

- Well 1-1A
■ EXTRACTION WELL & IDENTIFIER
- 4009-13A
● MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)
- 807.45
● GROUNDWATER ELEVATION
POTENTIOMETRIC CONTOUR
(Feet AMSL)
- Well 1-3
■ WATER SUPPLY WELL & IDENTIFIER



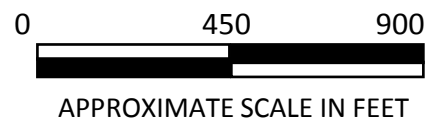
Vestal Water Supply NYSDEC Site #7-04-009 Vestal, New York
Shallow Potentiometric Surface with Well 1-1A Inactive (March 2014 Heads)
2-6

Figure
2-6



LEGEND

- Well 1-1A
■ EXTRACTION WELL & IDENTIFIER
- 4009-12A
● MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)
807.20
- GROUNDWATER ELEVATION
POTENTIOMETRIC CONTOUR
(Feet AMSL)
- Well 1-3
■ WATER SUPPLY WELL & IDENTIFIER



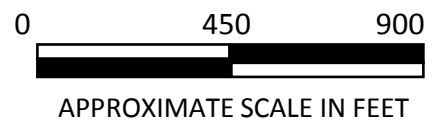
Vestal Water Supply
NYSDEC Site #7-04-009
Vestal, New York

**Intermediate Potentiometric
Surface with Well 1-1A Inactive
(March 2014 Heads)**



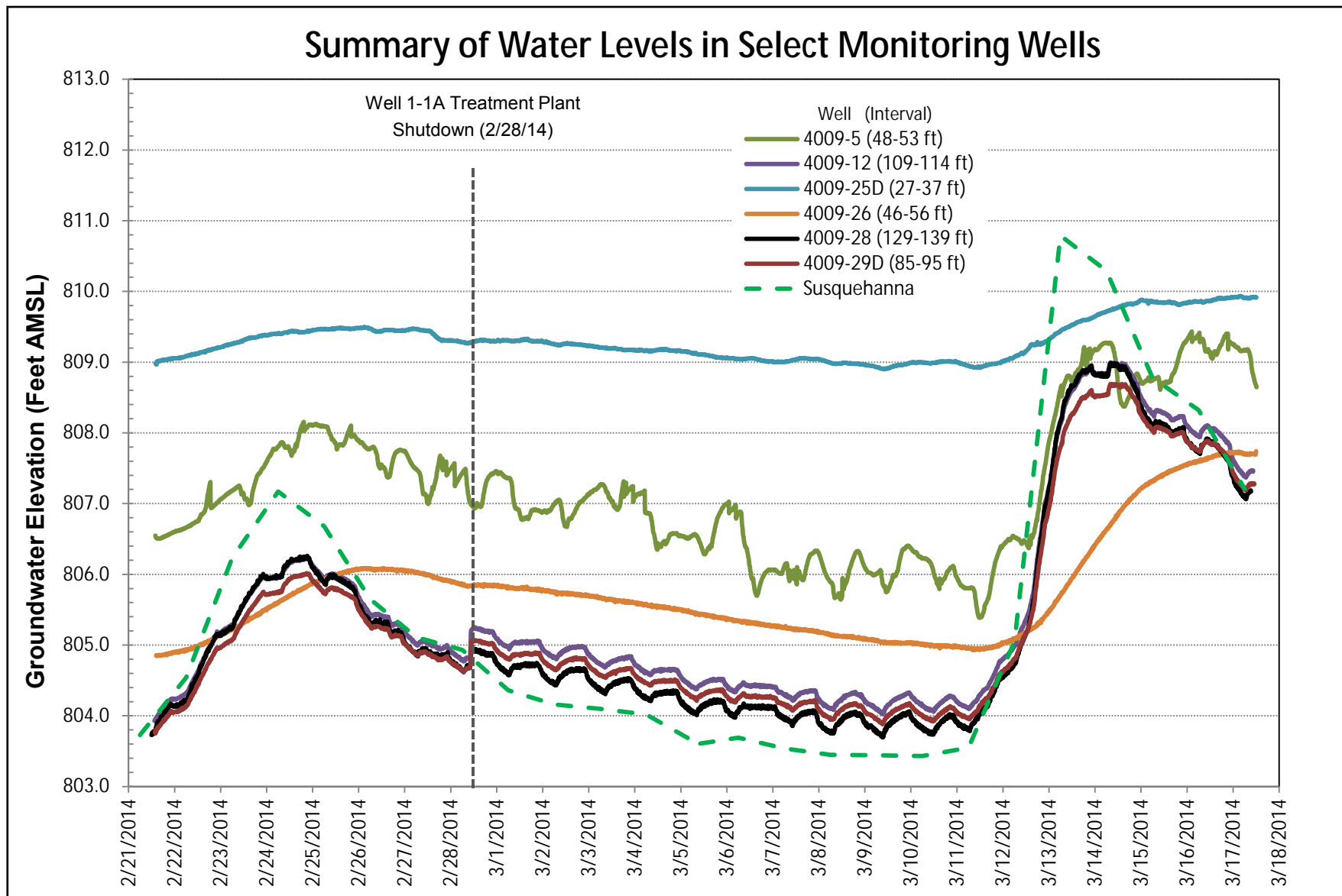
LEGEND

- Well 1-1A
EXTRACTION WELL & IDENTIFIER
- 4009-15
MONITORING WELL & IDENTIFIER
(Groundwater Elevation – Feet AMSL)
- 807.22
GROUNDWATER ELEVATION
POTENTIOMETRIC CONTOUR
(Feet AMSL)
- ~ 807.4
GROUNDWATER ELEVATION
POTENTIOMETRIC CONTOUR
(Feet AMSL)
- Well 1-3
WATER SUPPLY WELL & IDENTIFIER



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

**Deep Potentiometric Surface
 with Well 1-1A Inactive
 (March 2014 Heads)**



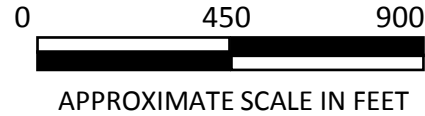


LEGEND

- **Well 1-1A** EXTRACTION WELL & IDENTIFIER
- 4009-16A ● **MONITORING WELL & IDENTIFIER**
1.60 Total VOC Concentration(ug/L);
"ND" indicates no detection
- **Well 1-3** WATER SUPPLY 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



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

**Total VOC Concentrations
(Shallow Wells)
February 20, 2014**

Figure
2-10

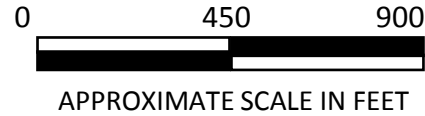
Infrastructure · Water · Environment · Buildings



LEGEND

- **Well 1-1A** EXTRACTION WELL & IDENTIFIER
- 4009-12A ● **MONITORING WELL & IDENTIFIER**
82.5 Total VOC Concentration(ug/L); "ND" indicates no detection
- **Well 1-3** WATER SUPPLY 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



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

**Total VOC Concentrations
(Intermediate Wells)
February 20, 2014**

Figure
2-11

Infrastructure · Water · Environment · Buildings



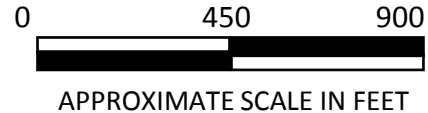
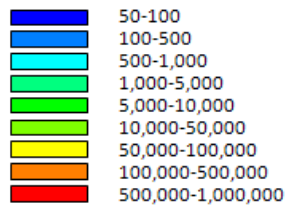
LEGEND

Well 1-1A EXTRACTION WELL & IDENTIFIER

4009-22 MONITORING WELL & IDENTIFIER
1.24 Total VOC Concentration(ug/L); "ND" indicates no detection

Well 1-3 WATER SUPPLY WELL & IDENTIFIER

TOTAL VOCs (ug/l)



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

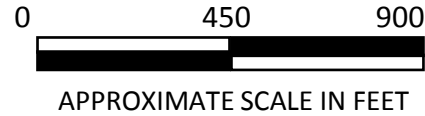
**Total VOC Concentrations
(Deep Wells)
February 20, 2014**



LEGEND

- **Well 1-1A** EXTRACTION WELL & IDENTIFIER
- 4009-16A ● **MONITORING WELL & IDENTIFIER**
1.60 Total VOC Concentration(ug/L);
 "ND" indicates no detection
- **Well 1-3** WATER SUPPLY 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



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

**Total VOC Concentrations
 (All Wells)
 February 20, 2014**

Figure
2-13

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Table 2-1 Drilling and Well Summary
Remedial Site Optimization Work Plan
Vestal Water Supply Site
Site Number 7-04-009A

New Well ID	Total Depth Drilled	Till Contact	Bedrock Contact	Screened interval (bgs)
4009-23S	82	50	78	10-20
4009-23D	82	50	78	45-50
4009-24	78	56	76	15-25
4009-25S	69	37	67	11-21
4009-25D	69	37	67	27-37
4009-26	84	56	82	46-56
4009-27S	124	95	122	40-50
4009-27I	124	95	122	65-75
4009-27D	124	95	122	85-95
4009-28	189	184	Not Encountered	129-139
4009-29S	109	101	Not Encountered	40-50
4009-29I	109	101	Not Encountered	60-70
4009-29D	109	101	Not Encountered	85-95

Notes:

HORIZONTAL DATUM: NAD 83 FROM GPS OBSERVATIONS

VERTICAL DATUM: NAVD 88 FROM GPS OBSERVATIONS

Table 2-2 Summary of Soil Results
Remedial Site Optimization Report/ First Quarter 2014
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Sample Interval Units	Unrestricted Soil Cleanup Objective ppm	Commercial Soil Cleanup Objective ppm	Industrial Soil Cleanup Objective ppm	4009-23 (120513) 12/5/2013 4' mg/Kg	4009-23 (121113) 12/11/2013 5-6' mg/Kg	4009-23 (12113) 12/11/2013 11-12' mg/Kg	4009-24 (121313) 12/13/2014 14-16' mg/Kg	4009-25 (121413) 12/14/2013 14-16' mg/Kg	4009-26 (121613) 12/16/2013 14-15' mg/Kg	4009-27 (121813) 12/18/2013 13-14' mg/Kg
1,1,1-Trichloroethane	0.68	500	1,000	1.2 U	0.057 U	0.006 U	0.0061 U	0.015	0.0062 U	0.00072 J
1,1,2,2-Tetrachloroethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,1,2-Trichloroethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,1-Dichloroethane	0.27	240	480	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,1-Dichloroethene	0.33	500	1,000	1.2 U	0.057 U	0.006 U	0.0061 U	0.0015 J	0.0062 U	0.0056 U
1,2,4-Trichlorobenzene				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,2,4-Trimethylbenzene	3.6	190	380	55.0	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,2-Dibromoethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,2-Dichlorobenzene	1.1	500	1,000	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,2-Dichloroethane	0.02	30	60	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,2-Dichloropropane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,3,5-Trimethylbenzene	8.4	190	380	32.0	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	2.4	280	560	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
1,4-Dichlorobenzene	1.8	130	250	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
2-Butanone (MEK)	0.12	500	1,000	6.1 U	0.28 U	0.030 U	0.030 U	0.029 U	0.031 U	0.028 U
2-Hexanone				6.1 U	0.28 U	0.030 U	0.030 U	0.029 U	0.031 U	0.028 U
4-Isopropyltoluene				9.8	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone				6.1 U	0.28 U	0.030 U	0.030 U	0.029 U	0.031 U	0.028 U
Acetone	0.05	500	1,000	6.1 U	0.28 U	0.025 J	0.030 U	0.029 U	0.031 U	0.028 U
Benzene	0.06	44	89	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0058 U
Bromodichloromethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Bromoform				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Bromomethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Carbon Disulfide				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Carbon Tetrachloride	0.76	22	44	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Chlorobenzene	1.1	500	1,000	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Chloroethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Chloroform	0.37	350	700	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Chloromethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
cis-1,2-Dichloroethene	0.25	500	1,000	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
cis-1,3-Dichloropropene				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Dibromochloromethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Dichlorodifluoromethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Ethylbenzene	1	390	780	1.4	0.090	0.010	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Isopropylbenzene				1.7	0.13	0.015 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Methyl tert-butyl ether	0.93	500	1,000	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Methylene Chloride	0.05	500	1,000	1.0 J	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Naphthalene				9.3	NA	NA	NA	NA	NA	NA
n-Butylbenzene				8.5	NA	NA	NA	NA	NA	NA
n-Propylbenzene	3.9	500	1,000	4.6	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	11	500	1,000	3.1	NA	NA	NA	NA	NA	NA
Styrene				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
tert-Butylbenzene	5.9	500	1,000	1.2 U	NA	NA	NA	NA	NA	NA
Tetrachloroethene	1.3	150	300	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Toluene	0.7	500	1,000	0.6 J	0.010 J	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
trans-1,2-Dichloroethene	0.19	500	1,000	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
trans-1,3-Dichloropropene				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Trichloroethene	0.47	200	400	1.2 U	0.057 U	0.006 U	0.0061 U	0.0016 J	0.0062 U	0.0015 J
Trichlorofluoromethane				1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Vinyl Chloride	0.02	13	27	1.2 U	0.057 U	0.006 U	0.0061 U	0.0058 U	0.0062 U	0.0056 U
Xylene (Total)	0.26	500	1,000	10.0	0.25	0.023	0.0120 U	0.0120 U	0.012 U	0.011 U

Notes:

U - Compound not detected, Reporting Limit provided.

NA- Not analyzed

J - Compound detected below the reporting limit; concentration is estimated.

Highlighted results exceed Unrestricted Use SCOs.

Bold results indicate detected concentrations.

Table 2-2 Summary of Soil Results
Remedial Site Optimization Report/ First Quarter 2014
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Sample Interval Sample Units	Unrestricted Soil Cleanup Objective ppm	Commercial Soil Cleanup Objective ppm	Industrial Soil Cleanup Objective ppm	4009-28 (010614) / 4009-29 (011014) / DUP-01-011014*		
				1/6/2014 13-14' mg/Kg	1/10/2014 12-13' mg/Kg	1/10/2014 12-13' mg/Kg
1,1,1-Trichloroethane	0.68	500	1,000	0.006 U	0.006 U	0.0059 U
1,1,2,2-Tetrachloroethane				0.006 U	0.006 U	0.0059 U
1,1,2-Trichloroethane				0.006 U	0.006 U	0.0059 U
1,1-Dichloroethane	0.27	240	480	0.006 U	0.006 U	0.0059 U
1,1-Dichloroethene	0.33	500	1,000	0.006 U	0.006 U	0.0059 U
1,2,4-Trichlorobenzene				0.006 U	0.006 U	0.0059 U
1,2,4-Trimethylbenzene	3.6	190	380	NA	NA	NA
1,2-Dibromo-3-chloropropane				0.006 U	0.006 U	0.0059 U
1,2-Dibromoethane				0.006 U	0.006 U	0.0059 U
1,2-Dichlorobenzene	1.1	500	1,000	0.006 U	0.006 U	0.0059 U
1,2-Dichloroethane	0.02	30	60	0.006 U	0.006 U	0.0059 U
1,2-Dichloropropane				0.006 U	0.006 U	0.0059 U
1,3,5-Trimethylbenzene	8.4	190	380	NA	NA	NA
1,3-Dichlorobenzene	2.4	280	560	0.006 U	0.006 U	0.0059 U
1,4-Dichlorobenzene	1.8	130	250	0.006 U	0.006 U	0.0059 U
2-Butanone (MEK)	0.12	500	1,000	0.030 U	0.030 U	0.029 U
2-Hexanone				0.030 U	0.030 U	0.029 U
4-Isopropyltoluene				NA	NA	NA
4-Methyl-2-pentanone				0.030 U	0.030 U	0.029 U
Acetone	0.05	500	1,000	0.0072 J	0.0057 J	0.0077 J
Benzene	0.06	44	89	0.006 U	0.006 U	0.0059 U
Bromodichloromethane				0.006 U	0.006 U	0.0059 U
Bromoform				0.006 U	0.006 U	0.0059 U
Bromomethane				0.006 U	0.006 U	0.0059 U
Carbon Disulfide				0.006 U	0.006 U	0.0059 U
Carbon Tetrachloride	0.76	22	44	0.006 U	0.006 U	0.0059 U
Chlorobenzene	1.1	500	1,000	0.006 U	0.006 U	0.0059 U
Chloroethane				0.006 U	0.006 U	0.0059 U
Chloroform	0.37	350	700	0.006 U	0.006 U	0.0059 U
Chloromethane				0.006 U	0.006 U	0.0059 U
cis-1,2-Dichloroethene	0.25	500	1,000	0.006 U	0.006 U	0.0059 U
cis-1,3-Dichloropropene				0.006 U	0.006 U	0.0059 U
Dibromochloromethane				0.006 U	0.006 U	0.0059 U
Dichlorodifluoromethane				0.006 U	0.006 U	0.0059 U
Ethylbenzene	1	390	780	0.006 U	0.006 U	0.0059 U
Isopropylbenzene				0.006 U	0.006 U	0.0059 U
Methyl tert-butyl ether	0.93	500	1,000	0.006 U	0.006 U	0.0059 U
Methylene Chloride	0.05	500	1,000	0.006 U	0.006 U	0.0059 U
Naphthalene				NA	NA	NA
n-Butylbenzene				NA	NA	NA
n-Propylbenzene	3.9	500	1,000	NA	NA	NA
sec-Butylbenzene	11	500	1,000	NA	NA	NA
Styrene				0.006 U	0.006 U	0.0059 U
tert-Butylbenzene	5.9	500	1,000	NA	NA	NA
Tetrachloroethene	1.3	150	300	0.006 U	0.006 U	0.0059 U
Toluene	0.7	500	1,000	0.006 U	0.006 U	0.0059 U
trans-1,2-Dichloroethene	0.19	500	1,000	0.006 U	0.006 U	0.0059 U
trans-1,3-Dichloropropene				0.006 U	0.006 U	0.0059 U
Trichloroethene	0.47	200	400	0.006 U	0.006 U	0.0059 U
Trichlorofluoromethane				0.006 U	0.006 U	0.0059 U
Vinyl Chloride	0.02	13	27	0.006 U	0.006 U	0.0059 U
Xylene (Total)	0.26	500	1,000	0.012 U	0.012 U	0.012 U

Notes:

U - Compound not detected, Reporting Limit provided.

NA- Not analyzed

J - Compound detected below the reporting limit; concentration is estimated.

Highlighted results exceed Unrestricted Use SCOs.

Bold results indicate detected concentrations.

**Table 2-3 Summary of Well Survey Data
Remedial Site Optimization Work Plan
Vestal Water Supply Site
Site Number 7-04-009A**

WELL I.D.	NORTHING	EASTING	GROUND ELEVATION	RISER ELEVATION	CASING ELEVATION
4009-1	761423.50	965640.11	829.62	831.98	832.25
4009-2	761320.69	964884.69	825.69	827.78	828.03
4009-3	761757.05	964887.40	821.05	823.47	824.00
4009-4	761900.85	965194.43	821.88	822.22	822.36
4009-5	761918.55	964838.19	823.75	824.36	825.20
4009-6	761168.98	964467.53	824.95	827.73	827.82
4009-7	761685.90	964531.54	822.05	824.27	824.58
4009-8	761437.29	964290.78	821.56	824.52	824.71
4009-9	762177.10	964625.47	825.50	825.05	825.50
4009-10	762368.75	964789.45	832.14	831.31	832.14
4009-11	762159.91	963901.42	831.01	830.06	831.01
4009-11A	762205.94	963914.46	831.28	830.80	831.28
4009-12	761852.51	963578.65	823.74	823.34	823.74
4009-12A	761833.77	963584.57	823.93	823.80	823.93
4009-13	761258.88	963570.10	816.62	816.28	816.62
4009-13A	761262.44	963580.33	816.40	816.17	816.40
4009-14	761079.30	963153.38	817.88	820.71	821.19
4009-15	761796.74	963052.09	824.25	826.54	826.78
4009-16	761461.14	962513.06	824.43	826.72	827.00
4009-16A	761462.03	962526.70	824.41	826.84	827.21
4009-17	761111.51	962571.32	819.81	820.53	NA
4009-18	761314.11	962221.77	831.89	834.78	834.95
4009-19	761254.91	962241.18	822.55	824.94	825.05
4009-20	761237.68	962103.35	822.06	822.90	NA
4009-21	761227.00	962087.64	821.95	823.10	NA
4009-22	761348.12	962964.85	817.63	817.40	817.63
4009-23S	761692.63	964540.50	821.84	824.48	824.68
4009-23D	761692.63	964540.50	821.84	824.39	824.68
4009-24	761925.36	964853.11	822.70	822.32	822.70
4009-25S	761505.49	964893.13	823.91	823.61	823.91
4009-25D	761505.49	964893.13	823.91	823.57	823.91
4009-26	761438.78	964283.85	821.59	824.31	824.54
4009-27S	761395.24	963891.04	823.06	826.19	826.36
4009-27I	761395.24	963891.04	823.06	826.03	826.36
4009-27D	761395.24	963891.04	823.06	825.87	826.36
4009-28	761650.98	963127.25	821.93	821.59	821.93
4009-29S	761674.83	963920.11	826.19	825.77	826.19
4009-29I	761674.83	963920.11	826.19	825.68	826.19
4009-29D	761674.83	963920.11	826.19	825.67	826.19
WELL 1-1	NA	NA	829.80	832.36	NA
WELL 1-1A	762087.59	963399.25	NA	831.13	NA
ERT-1S	761745.42	965366.54	825.25	824.01	825.25
ERT-1I	761742.09	965367.98	824.49	824.03	824.49
ERT-1D	761746.19	965370.17	824.25	823.88	824.25
ERT-3S	761538.30	965275.37	825.04	824.38	825.04
ERT-3I	761542.16	965276.89	824.94	824.23	824.94
ERT-3D	761541.64	965272.78	824.86	824.20	824.86
ERT-4S	761524.29	965081.61	824.34	823.54	824.34
ERT-4I	761521.56	965084.81	824.22	823.49	824.22
ERT-4D	761526.57	965084.41	824.27	823.63	824.27
ERT-7	761527.36	965072.86	824.34	823.96	824.34
ERT-8	761663.73	964988.22	825.32	824.69	825.32

Notes:

Survey completed by YEC, Inc. on 1/30/2014
HORIZONTAL DATUM: NAD 83 FROM GPS OBSERVATIONS
VERTICAL DATUM: NAVD 88 FROM GPS OBSERVATIONS

Table 2-4 Summary of Groundwater Elevation Data
Remedial Site Optimization Work Plan
Vestal Water Supply Site
Site Number 7-04-009A

WELL I.D.	Top of Riser (ft) AMSL)	2/19/2014			3/17/2014		
		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
4009-2	827.78	18.16	NP	809.62	17.96	NP	809.82
4009-3	823.47	16.92	NP	806.55	14.52	NP	808.95
4009-4	822.22	11.87	NP	810.35	10.64	NP	811.58
4009-5	824.36	18.47	NP	805.89	16.23	NP	808.13
4009-6	827.73	20.88	NP	806.85	19.38	NP	808.35
4009-7	824.27	18.76	NP	805.51	16.28	NP	807.99
4009-8	824.52	19.69	NP	804.83	13.28	NP	811.24
4009-9	825.05	20.36	NP	804.69	18.00	NP	807.05
4009-10	831.31	26.44	NP	804.87	24.28	NP	807.03
4009-11	830.06	26.95	NP	803.11	23.75	NP	806.31
4009-11A	830.8	15.22	NP	815.58	14.78	NP	816.02
4009-12	823.34	18.8	NP	804.54	16.68	NP	806.66
4009-12A	823.8	20.21	NP	803.59	16.60	NP	807.20
4009-13	816.28	12.31	NP	803.97	8.97	NP	807.31
4009-13A	816.17	11.74	NP	804.43	8.72	NP	807.45
4009-14	820.71	16.62	NP	804.09	13.43	NP	807.28
4009-15	826.54	22.63	NP	803.91	19.35	NP	807.19
4009-16	826.72	22.68	NP	804.04	19.5	NP	807.22
4009-16A	826.84	22.45	NP	804.39	19.45	NP	807.39
4009-17	820.53	26.12	NP	794.41	12.95	NP	807.58
4009-18	834.78	30.59	NP	804.19	27.61	NP	807.17
4009-19	824.94	20.79	NP	804.15	17.78	NP	807.16
4009-20	822.9	18.45	NP	804.45	15.60	NP	807.30
4009-21	823.1	18.9	NP	804.2	15.90	NP	807.20
4009-22	817.4	13.06	NP	804.34	9.85	NP	807.55
4009-23S	824.48	16.65	NP	807.83	15.48	NP	809.00
4009-23D	824.39	18.93	NP	805.46	16.37	NP	808.02
4009-24	822.32	15.52	NP	806.8	13.38	NP	808.94
4009-25S	823.61	14.77	NP	808.84	13.84	NP	809.77
4009-25D	823.57	14.98	NP	808.59	13.70	NP	809.87
4009-26	824.31	19.36	NP	804.95	16.55	NP	807.76
4009-27S	826.19	21.97	NP	804.22	18.80	NP	807.39
4009-27I	826.03	21.93	NP	804.1	18.63	NP	807.40
4009-27D	825.87	21.9	NP	803.97	18.43	NP	807.44
4009-28	821.59	17.71	NP	803.88	14.45	NP	807.14
4009-29S	825.77	21.75	NP	804.02	18.42	NP	807.35
4009-29I	825.68	21.94	NP	803.74	18.51	NP	807.17
4009-29D	825.67	21.92	NP	803.75	18.54	NP	807.13
WELL 1-1	832.36	29.09	NP	803.27	25.23	NP	807.13
WELL 1-1A	831.13	24.93	NP	806.2	24.13	NP	807.00
ERT-1S	824.01	12.65	11.72	810.57	11.83	10.88	811.37
ERT-1I	824.03	13.45	NP	810.58	12.43	NP	811.60
ERT-1D	823.88	13.50	13.49	810.38	12.50	NP	811.38
ERT-2S	NS	14.19	NP	NA	13.72	NP	NA
ERT-2I	NS	14.07	NP	NA	13.08	NP	NA
ERT-2D	NS	12.98	NP	NA	12.88	NP	NA
ERT-3S	824.38	13.29	NP	811.09	12.94	NP	811.44
ERT-3I	824.23	14.21	NP	810.02	13.23	NP	811.00
ERT-3D	824.2	14.95	NP	809.25	14.62	NP	809.58
ERT-4S	823.54	13.32	NP	810.22	12.58	NP	810.96
ERT-4I	823.49	14.23	NP	809.26	13.37	NP	810.12
ERT-4D	823.63	14.55	NP	809.08	13.56	NP	810.07
ERT-5	NS	NM	NP	NA	12.34	NP	NA
ERT-6	NS	14.25	NP	NA	13.05	NP	NA
ERT-7	823.96	15.38	NP	808.58	14.25	NP	809.71
ERT-8	824.69	16.70	NP	807.99	15.13	NP	809.56

Notes:

fbgs - feet below ground surface
famsl - feet above mean sea level
NS - Not surveyed
NM - Not measured

NP - No product encountered with interface probe Corrected based on assumed LNAPL density of 0.85 g/cm³

Table 2-5 Summary of Groundwater Results
Remedial Site Optimization Report/ First Quarter 2014
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID	NYSDEC GA Standard ug/L	4009-1 2/20/2014 Shallow ug/L	4009-2 2/20/2014 Shallow ug/L	4009-3 2/20/2014 Shallow ug/L	4009-4 2/20/2014 Shallow ug/L	4009-5 2/20/2014 Shallow ug/L	4009-6 2/20/2014 Shallow ug/L	4009-7 2/20/2014 Shallow ug/L	4009-X 7/16/2012 Shallow ug/L	4009-8 2/20/2014 Shallow ug/L	4009-9 2/20/2014 Shallow ug/L	4009-10 2/20/2014 Shallow ug/L	4009-11 2/20/2014 Deep ug/L	4009-11A 2/20/2014 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	1200	790 D	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 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		14	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	0.94 J	0.51 J	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	2.7	6.3	1.0 U	2.7	1.0 U	0.98 J	60	40	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.3	1.0 U	2.2	1.0 U	1.0 U	90	31	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
1,2,4-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
1,2,4-Trimethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 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
1,2-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
1,2-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
1,2-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 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 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	1.3 J	10 U	10 U	1.5 J	10 U	10 U	10 U	10 U	10 U	1.4 J	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 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 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 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
1,3-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
1,4-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
Acetone	50*	10 U	7.2 J	10	12	11	8.5 J	5.3 J	10 U	9.6 J	12	10	7.8 J	9.8 J
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1	0.67 J	1.0 U	0.60 J	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 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 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 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 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 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 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	8.7	2.2	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	1.4	0.63 J	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 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.6	14	77	1.0 U	250 D	1.0 U	20	400	440 D	6.3	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 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
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 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
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (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
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
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
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 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	0.26 J	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 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	1.3	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 U	1.0 U	1.0 U	2.0	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	1.0 U	1.0 U	2.9	1.1	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 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.4	2.9	26	1.0 U	21	0.53 J	2.1	550	19	0.54 J	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
Vinyl chloride	2	1.0 U	6.9	11	1.0 U	39	1.0 U	2.5	27	44	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 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		15.7	34.80	131.60	13.50	326.90	9.29	31.98	2346	1394.01	20.24	12.6	7.8 J	9.80 J
Total VOCs (w/o Acetone or Methylene Chloride)		5.7	27.60	121.60	1.50	315.90	0.79	26.68		1384.41	8.24	2.6	0.0	0.00

Notes

Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or concentration is estimated for TICS.

B - Analyte detected in the method blank and sample

E - Estimated value.

D- Result of diluted sample shown

* - Laboratory control sample/duplicate exceeds control limits.

2-Sample DUP-02 is a duplicate sample from 4009-25D

3-Sample DUP-01 is a duplicate sample from 4009-29I

Table 2-5 Summary of Groundwater Results
Remedial Site Optimization Report/ First Quarter 2014
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Screened Interval Units	NYSDEC GA Standard ug/L	4009-12 2/20/2014 Deep ug/L	4009-12A 2/20/2014 Shallow ug/L	4009-13 2/20/2014 Deep ug/L	4009-13A 2/20/2014 Shallow ug/L	4009-14 2/20/2014 Deep ug/L	4009-15 2/20/2014 Deep ug/L	4009-16 2/20/2014 Deep ug/L	4009-16A 2/20/2014 Shallow ug/L	4009-22 12/3/2013 Deep ug/L	4009-22 2/20/2014 Deep ug/L	4009-23S 2/20/2014 Shallow ug/L	4009-23D 2/20/2014 Deep ug/L	4009-24 2/20/2014 Shallow ug/L
1,1,1-Trichloroethane	5	32	34	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	130 D	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
1,1,2-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	24	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
1,1-Dichloroethane	5	4.0	4.3	1.0 U	1.0 U	1.0 U	0.52 J	1.0 U	1.0 U	1.0 U	1.0 U	3.2	250 D	1.0 U
1,1-Dichloroethene	5	3.4	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	31	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	1.8	10 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
1,2,4-Trimethylbenzene	5	1.0 U	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	10 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
1,2-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
1,2-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
1,2-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	0.43 J	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
2-Butanone (MEK)	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.6 J	10 U	10 U	10 U	10 U	1.4 J
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 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 U	5.0 U	5.0 U	5.0 U	5.0 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	4.4	10 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
1,4-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
Acetone	50*	5.8 J	9.9 J	8.4 J	8.4 J	6.3 J	7.5 J	5.9 J	12	3.1 J	12	6.1 J	8.3 J	9.3 J
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.69 J	0.69 J	1.8	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
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
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
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
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
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
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	11	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
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
cis-1,2-Dichloroethene	5	13	15	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	580 D	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
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	0.78 J	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
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
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
Isopropylbenzene (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	5.3	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	1.0 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	0.69 J	0.25 J	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
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
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
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
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	0.65 J	0.55 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 U	1.0 U	1.0 U	1.0 U	2.4	2.3	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
Trichloroethene	5	17	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.6	8.7	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
Vinyl chloride	2	6.1	6.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.93 J	630 D	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
Total VOCs		81.30	92.4	8.4	8	6	8.0	6	14	4	13	40	1676	11
Total VOCs (w/o Acetone or Methylene Chloride)		75.50	82.5	0.0	0.0	0.0	0.5	0.0	2	1	1	34	1667	1

Notes

Concentration exceeds NYSDEC Class GA Standard

U - Compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or concentration is estimated for TICS.

B - Analyte detected in the method blank and sample

E - Estimated value.

D- Result of diluted sample shown

* - Laboratory control sample/duplicate exceeds control limits.

2-Sample DUP-02 is a duplicate sample from 4009-25D

3-Sample DUP-01 is a duplicate sample from 4009-29I

Table 2-5 Summary of Groundwater Results
Remedial Site Optimization Report/ First Quarter 2014
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Screened Interval Units	NYSDEC GA Standard ug/L	4009-25S 2/20/2014 Shallow ug/L	4009-25D 2/20/2014 Deep ug/L	DUP-02 ² 2/20/2014 Deep ug/L	4009-26 2/20/2014 Shallow ug/L	4009-27S 2/20/2014 Shallow ug/L	4009-27I 2/20/2014 Intermediate ug/L	4009-27D 2/20/2014 Deep ug/L	4009-28 2/20/2014 Deep ug/L	4009-29S 2/20/2014 Shallow ug/L	4009-29I 2/20/2014 Intermediate ug/L	DUP_01 ³ 2/20/2014 Intermediate ug/L	4009-29D 2/20/2014 Deep ug/L	ERT-11 2/20/2014 Intermediate ug/L
1,1,1-Trichloroethane	5	2600 D	1900 D	1800 D	98	54	1.0 U	1.0 U	1.3	710 D	1700 D	1500 D	1.0 U	1.0 U
1,1,2-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
1,1,2-Trichloro-1,2,2-Trifluoroethane		31	32	31	7.7	2.8	1.0 U	1.0 U	1.0 U	12	21	20	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	0.86 J	0.86 J	1.0 U	1.0 U
1,1-Dichloroethane	5	87	74	79	27	1.9	1.0 U	1.0 U	1.0 U	130 D	83	86	1.1	4.1
1,1-Dichloroethene	5	110 D	120 D	50	6.0	5.7	1.0 U	1.0 U	1.0 U	92	150 D	99	1.0 U	0.99 J
1,2,3-Trimethylbenzene		40 U	20 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-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
1,2,4-Trimethylbenzene	5	40 U	20 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-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
1,2-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
1,2-Dichlorobenze	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
1,2-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	0.41 J	0.40 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 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
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
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
1,3,5-Trimethylbenzene (Mesitylene)	5	40 U	20 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 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
1,4-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
Acetone	50*	10 U	6.0 J	5.6 J	10	9.9 J	5.8 J	9.8 J	7.9 J	6.0 J	11	13	6.9 J	4.8 J
Benzene	1	1.0 U	1.0 U	1.0 U	0.81 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.59 J	0.60 J	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
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
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
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
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
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	1.6	1.7	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	2.9	5.0	4.6	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	0.69 J	1.1	1.2	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
cis-1,2-Dichloroethene	5	180 D	76	80	120 D	18	1.0 U	1.0 U	1.0 U	260 D	400 D	350 D	1.4	990 D
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
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
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
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	3.9	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.2	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
Isopropylbenzene (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
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
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
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
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
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
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	0.95 J	2.1	2.0	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	0.57 J
trans-1,2-Dichloroethene	5	2.9	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	3.4	1.5	1.0 U	1.5
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
Trichloroethene	5	32	16	15	45	25	1.4	1.0 U	1.0 U	300 D	450 D	410 D	1.8	1.9
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	0.94 J	1.1	1.0 U	1.0 U
Vinyl chloride	2	3.7	1.4	1.3	12	1.0 U	1.0 U	1.0 U	1.0 U	43	85	75	4.7	11
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
Total VOCs		3047	2227	2062	332	117	7	10	9	1560	2917	2567	16	1015
Total VOCs (w/o Acetone or Methylene Chloride)		3047	2221	2056	322	107	1	0	1	1554	2906	2554	9	1010

Notes

- - Concentration exceeds NYSDEC Class GA Standard
- U - Compound was not detected at the indicated concentration
- J - Compound detected below the reporting limit or concentration is estimated for TICS.
- B - Analyte detected in the method blank and sample
- E - Estimated value.
- D- Result of diluted sample shown
- * - Laboratory control sample/duplicate exceeds control limits.
- 2-Sample DUP-02 is a duplicate sample from 4009-25D
- 3-Sample DUP-01 is a duplicate sample from 4009-29I

Table 2-5 Summary of Groundwater Results
Remedial Site Optimization Report/ First Quarter 2014
Vestal Water Supply Site
Site Number 7-04-009A

Sample ID Sampling Date Screened Interval Units	NYSDEC GA Standard ug/L	ERT-1D 2/20/2014 Deep ug/L	ERT-3S 2/20/2014 Shallow ug/L	ERT-3I 2/20/2014 Intermediate ug/L	ERT-3D 2/20/2014 Deep ug/L	ERT-4S 2/20/2014 Shallow ug/L	ERT-4I 2/20/2014 Intermediate ug/L	ERT-4D 2/20/2014 Deep ug/L	ERT-7 2/20/2014 Intermediate ug/L	ERT-8 2/20/2014 Intermediate ug/L	1-1A(INF) 2/21/2014 Deep ug/L
1,1,1-Trichloroethane	5	1.0 U	5100 D	2800 D	16	310000 D	4800	4100	4.1	1.0 U	120 D
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	49	80 U	50 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.0 U	3.0	1.6	1.0 U	96	80 U	50 U	1.0 U	1.0 U	2.1
1,1,2-Trichloroethane	1	1.0 U	1.0 U	1.0 U	1.0 U	10000 U	80 U	50 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	570 D	150 D	1100 E	290	150	1500	76	44	17
1,1-Dichloroethene	5	1.0 U	720 D	160 D	8.3	10000 U	310	230	1.0 U	1.0 U	9.3
1,2,3-Trimethylbenzene		1.0 U	1.0 U	1.0 U	1.0 U	30	80 U	50 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	26	80 U	50 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	24	80 U	50 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	5.0 U	80 U	50 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	5.0 U	80 U	50 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	42	80 U	50 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.2	1.0 U	2.3	64	80 U	50 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	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	50	10 U	10 U	3.1 J	1.4 J	50 U	800 U	500 U	10 U	10 U	10 U
2-Hexanone	50*	5.0 U	5.0 U	5.0 U	5.0 U	25 U	400 U	250 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	25 U	400 U	250 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1.0 U	1.0 U	1.0 U	1.0 U	4.0 J	80 U	50 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	5.0 U	80 U	50 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	7.8	80 U	50 U	1.0 U	1.0 U	1.0 U
Acetone	50*	8.1 J	5.8 J	8.8 J	7.1 J	50 U	800 U	500 U	7.5 J	8.9 J	10 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	14	80 U	50 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	11	80 U	50 U	1.0 U	1.0 U	1.0 U
Bromoform	50*	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Carbon disulfide		1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 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	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	76	3.3	21	5.0 U	80 U	50 U	1.0 U	28	0.5 J
Chloroform	7	1.0 U	2.4	0.82 J	1.0 U	120	80 U	50 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.9	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	7.7	23	3.9	1.0 U	110	80 U	100	8.5	2.5	39
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	23	80 U	50 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	5	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Methyl Acetate		2.5 U	2.5 U	2.5 U	2.5 U	13 U	200 U	130 U	2.5 U	2.5 U	2.5 U
Methyl Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	10000 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	8.6	0.77 J	0.61 J	10000 U	80 U	50 U	2.6	1.0 U	1.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.9
Styrene	5	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	2.3	1.3	1.0 U	120	80 U	50 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	460	80 U	50 U	0.54 J	0.77 J	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 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	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.6	28	8.3	1.0 U	510000 D	80 U	80	7.9	0.53 J	43
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	80 U	50 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.9	1.0 U	2.1	5.0 U	80 U	50 U	1.0 U	2.5	4.6
Xylenes, Total		2.0 U	2.0 U	2.0 U	2.0 U	110	160 U	100 U	2.0 U	2.0 U	2.0 U
Total VOCs		17	6542	3144	1159	821601	5260	6010	107	87	237
Total VOCs (w/o Acetone or Methylene Chloride)		9	6528	3134	1151	821601	5260	6010	97	78	237

Notes

- Concentration exceeds NYSDEC Class GA Standard
- U - Compound was not detected at the indicated concentration
- J - Compound detected below the reporting limit or concentration is estimated for TICS.
- B - Analyte detected in the method blank and sample
- E - Estimated value.
- D- Result of diluted sample shown
- * - Laboratory control sample/duplicate exceeds control limits.
- 2-Sample DUP-02 is a duplicate sample from 4009-25D
- 3-Sample DUP-01 is a duplicate sample from 4009-29I

Appendix A

Boring Logs

BORING/WELL CONSTRUCTION LOG

PROJECT NAME Vestal Water Supply DATE STARTED / COMPLETED 12/11/2013 / 12/12/2013
 PROJECT NUMBER 00266401.0000 SURFACE ELEV. / RISER ELEV. 821.84 / S-824.48, D-824.39 ft. AMSL
 CLIENT NYSDEC 7-04-009 DEPTH TO GROUNDWATER 14 ft. bgs (ATD) ft. btoc (Static)
 LOCATION Pump House Rd, Vestal, New York DRILLING CONTRACTOR Sterns Drilling
 TYPE OF RIG Versa Sonic - Truck mounted DRILLING METHOD 6 and 8" casing x 20' w/ 4" sampler x 10'
 DRILLERS Denny Cooper, Rich Benet LOGGED BY J. Brayer

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
816.8	5	GB-1	SS-2	5/5	3/3	428		0.0': Hand Cleared - SAND and SILT, fine, organics, trace medium sand	0.0	8 Inch Stick-up
								5.0': CLAYEY SILT - grey brown, moist	5.0	# 1 Silica Sand Pack
								6.0': Same as above - medium hardness, varved, grey to brown	6.0	
								7.0': SILT and SAND, fine some coarse Gravel, well rounded, organics	7.0	3/8" Granular Wyoming Bentonite Hole Plug
								8.0': SILT with some Clay, coarse gravel, organics	8.0	
								9.0': SILT and CLAY, medium hardness, moist, grey brown with brown Rizozone oxidation	9.0	
								10.0': Same as above	10.0	
								12.0': SILT and CLAY, some fine Sand, brown to red brown, loose, moist, slight petroleum odor, sheen on water in sample	12.0	
								14.0': SAND and SILT, brown, wet, soft with increasing softness with depth	14.0	# 1 Silica Sand Pack
								16.0': SAND, fine, some Silt and clay, grey, wet	16.0	2 "Sch 40 PVC 10 Slot
								18.0': Same as above with trace pieces of Wood	18.0	
									20.0	End Cap
									20.2	
										# 1 Silica Sand Pack
									23.0	
806.8	15		SS-3	6/10		6.4				
801.8	20		SS-4	6/10		0				
796.8	25									

BORING/WELL LOG VESTAL WATER SUPPLY NYSDEC.GPJ_MP_DATA.GDT 5/27/2014 2:38:24 PM

Notes:
Screen set 10-20' bgs and 45-50' bgs. Area wide visual investigation of source of Petroleum odor. Land owner notified. 80 Gallons of water used in drilling of this boring. SS # = Sonic Sample number.

▽ Water Level Reading at time of drilling.
▼ Water Level Reading after drilling.



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-23

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/11/2013 / 12/12/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.84 / S-824.48, D-824.39 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								18.0': Same as above with trace pieces of Wood		
						0		28.0': Same as above, no organics	28.0	
791.8	30							30.0': GRAVEL, coarse and COBBLES some Silt, loose, wet	30.0	
			SS-5		8/10			31.0': SAND and SILT some Clay, brown to grey brown, loose, rapid dilatancy, wet	31.0	
786.8	35									
						0		38.0': Same as above	38.0	
781.8	40									
			SS-6		5.5/10			45.0': Same as above with Gravel, medium to coarse, grey, wet	45.0	
776.8	45							46.0': SAND, medium to coarse, and Gravel, well washed, Green grey, wet, coarse gravels begin at 47 feet bgs	46.0	
						0		48.0': GRAVEL, medium to coarse with fine Sand and Silt, trace Cobbles grey, wet, very loose	48.0	
771.8	50							50.0': TILL - Hard - very dense, grey to blue grey, medium to coarse Gravel with Cobbles, dry	50.0	
									50.2	End Cap
									53.0	# 1 Silica Sand Pack
766.8	55		SS-7		7/10					

← 3/8" Granular Wyoming Bentonite Hole Plug

← # 1 Silica Sand Pack

← 2" Sch 40 PVC 10 Slot

← 50.0
50.2 End Cap

← # 1 Silica Sand Pack



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-23

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/11/2013 / 12/12/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.84 / S-824.48, D-824.39 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								50.0': TILL - Hard - very dense, grey to blue grey, medium to coarse Gravel with Cobbles, dry		
						0		58.0': TILL - Same as above	58.0	
761.8	60		SS-8		6/10					
756.8	65					0		68.0': TILL - Same as above	68.0	
751.8	70							70.5': Pulverized Bedrock - dry	70.5	
								72.0': TILL - Dry, same as Till above	72.0	
746.8	75		SS-9		6/10			73.0': Pulverized Bedrock - Cobble size pieces of bedrock to dust, dry, angular chips of bedrock	73.0	
								76.0': Pulverized Bedrock - Coarse gravel in size, angular fragments	76.0	
						0		78.0': BEDROCK - Full diameter sample of Shale Bedrock. Hard Drilling.	78.0	
741.8	80		SS-10		4/4					
									82.0	3/8" Granular Wyoming Bentonite Hole Plug
								END OF BORING 82 ft.	82.0	
736.8										



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.
4009-24

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/13/2013 / 12/13/2013**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **822.70 / 822.32 ft. AMSL**
 CLIENT **NYSDEC 7-04-009** DEPTH TO GROUNDWATER **14 ft. bgs (ATD) ft. btoc (Static)**
 LOCATION **Pump House Rd, Vestal, New York** DRILLING CONTRACTOR **Sterns Drilling**
 TYPE OF RIG **Versa Sonic - Truck mounted** DRILLING METHOD **6 and 8" casing x 20' w/ 4" sampler x 10'**
 DRILLERS **Denny Cooper, Rich Benet** LOGGED BY **J. Brayer**

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
817.7	5	GB-1	5/5	0				0.0': Hand Cleared - FILL - Cobbles with coarse Sand and Silt, brown, moist, dense, pieces of lumber, glass and brick.	0.5	12" flush mount
		SS-2	1/3	0				5.0': FILL - Gravel, coarse with silt and sand, light brown, Wet, pieces of wood and concrete.	3.0	# 1 Silica Sand Pack
812.7	10	SS-3	1/10	0				8.0': FILL - Concrete in sampling shoe, fine Sand and Silt, some coarse Gravel, very soft, wet, light brown grading downward to dark grey. Sample taken at interface.	12.0	3/8" Granular Wyoming Bentonite Hole Plug
807.7	15								18.0	
802.7	20	SS-4	0/10					18.0': No Recovery - Concrete in tip of Sampler, may have been pushed down from the above fill material through native soil. Drill crew attempted to clear obstruction.		# 1 Silica Sand Pack
797.7	25									2" Sch 40 PVC 10 Slot

BORING/WELL LOG VESTAL WATER SUPPLY NYSDEC.GPJ_MP_DATA.GDT 5/27/2014 2:38:32 PM

Notes:
Screen set 15-25' bgs. Location: 10' SE of chain link fence gate post. Measuring point marked with white paint marker. Approx. 16.8 feet to the East of 4009-5. 219 Gallons of water used in drilling of this boring. SS # = Sonic Sample number.

▽ Water Level Reading at time of drilling.
▼ Water Level Reading after drilling.

Continued Next Page

BORING/WELL CONSTRUCTION LOG

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/13/2013 / 12/13/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **822.70 / 822.32 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								18.0': No Recovery - Concrete in tip of Sampler, may have been pushed down from the above fill material through native soil. Drill crew attempted to clear obstruction.		25.9 End Cap 25.2
						0		28.0': GRAVEL - coarse and medium Sand, some Silt, brown, wet, loose	28.0	<p># 1 Silica Sand Pack</p> <p>28.0</p> <p>3/8" Granular Wyoming Bentonite Hole Plug</p>
							29.0': SAND and SILT - flowing Sand, grey brown, wet, soft	29.0		
792.7	30		SS-5		5/10		30.0': SAND - medium, some coarse Gravel, loose, brown, moist	30.0		
							31.0': SAND and SILT - flowing Sand, trace medium Gravel, wet, grey, soft	31.0		
							32.0': SAND and GRAVEL - medium to coarse, some Silt, loose	32.0		
							34.0': SAND and SILT - fine, trace medium to coarse Gravel	34.0		
787.7	35						34.5': SAND and GRAVEL - coarse, loose, grey, well rounded to sub-rounded, well graded, wet	34.5		
							37.0': SAND and SILT - fine, soft, some coarse Gravel, rounded, grey brown	37.0		
						0	38.0': GRAVEL - coarse, rounded, and fine Sand some silt, flowing sands, rapid dilatancy (flows when agitated, solid when at rest), very soft, grey wet.	38.0		
782.7	40						40.0': SAND and SILT - flowing sands, rapid dilatancy soils, very soft, grey, wet	40.0		
							41.0': SAND and SILT - fine, increasing in size with depth, brown, soft, wet	41.0		
			SS-6		6.5/10				46.0	
777.7	45							46.0': Same as above	46.0	
									48.0	
772.7	50					0		48.0': Same as above - with lenses of medium Sand .05' thick, wet, dark brown to light brown	48.0	
			SS-7		6/10					
767.7	55									



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-24

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/13/2013 / 12/13/2013**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **822.70 / 822.32 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
									56.0	
						0		56.0': TILL - sub-rounded to angular coarse Gravel and Cobbles, with Silt and Clay increasing density with depth, grey, moist	58.0	
762.7	60		SS-8		6.5/10			58.0': TILL - Cobbles with coarse Gravel, sub-rounded to rounded to angular, some silt and clay with trace fine to medium sand, grey, moist		
757.7	65					0			68.0	
752.7	70							68.0': TILL - Same as above		
									76.0	
747.7	75		SS-9		9/10			76.0': BEDROCK - Shale fragments with pulverized Shale, full diameter sample of Bedrock.	78.0	
742.7								END OF BORING 78 ft.		
737.7										

BORING/WELL CONSTRUCTION LOG

PROJECT NAME	Vestal Water Supply	DATE STARTED / COMPLETED	12/14/2014 / 12/15/2013
PROJECT NUMBER	00266401.0000	SURFACE ELEV. / RISER ELEV.	823.91 / S-823.61 D-823.57 ft. AMSL
CLIENT	NYSDEC 7-04-009	DEPTH TO GROUNDWATER	14 ft. bgs (ATD) ft. btoc (Static)
LOCATION	Pump House Rd, Vestal, New York	DRILLING CONTRACTOR	Sterns Drilling
TYPE OF RIG	Versa Sonic - Truck mounted	DRILLING METHOD	6 and 8" casing x 20' w/ 4" sampler x 10'
DRILLERS	Denny Cooper, Rich Benet	LOGGED BY	J. Brayer

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								0.0': Hand Cleared - ASPHALT - medium to coarse gravel, black, dense	1.0	0.4' 12" flush mount
								1.0': GRAVEL - coarse, and Sand, medium to coarse, some silt, brown	2.0	# 1 Silica Sand Pack
			GB-1		5/5			2.0': SAND and SILT, poorly graded with trace medium to coarse gravel, moist, brown	3.0	
818.9	5					0		5.0': SAND and SILT, brown, moist, soft, trace organics	5.0	3/8" Granular Wyoming Bentonite Hole Plug
			SS-2		1/4				8.0	
813.9	10					0		9.0': COBBLES with Silt and fine sand, moist, light brown, low plasticity, soft	9.0	
								11.0': SAND and SILT - fine, varved Silt, red brown to brown laminations, moist	11.0	
			SS-3		6/10			13.0': SAND and SILT - fine, grey, to red brown mottling in matrix, moist to wet	13.0	
808.9	15							16.0': SAND and SILT - fine, brown, wet, soft, trace organics	16.0	# 1 Silica Sand Pack
									16.0	2" Sch 40 PVC 10 Slot
								18.0': SAND and SILT - some medium to coarse Gravel, rounded to well rounded, brown, moist, trace organics, soft to medium hard	18.0	
803.9	20					0		19.0': GRAVEL - medium to coarse, well rounded, little medium to coarse Sand, trace Silt, well graded, wet, grey-brown. *Cobble in sampling shoe*	19.0	
			SS-4		4/10				21.0	21.2 End Cap
									23.0	# 1 Silica Sand Pack
798.9	25									3/8" Granular Wyoming

BORING/WELL LOG VESTAL WATER SUPPLY NYSDEC.GPJ_MP_DATA.GDT 5/27/2014 2:38:34 PM

Notes:
Screen set 11-21' bgs and 27-37' bgs. When installing deep well high water pressure in aquifer flushed in around well pushing in gravel. Well over drilled and reinstalled using additional head pressure. Location: 23' from tree, 16.5' from ct line of road.

- ▽ Water Level Reading at time of drilling.
- ▼ Water Level Reading after drilling.

BORING/WELL CONSTRUCTION LOG

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/14/2014 / 12/15/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **823.91 / S-823.61 D-823.57 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								19.0': GRAVEL - medium to coarse, well rounded, little medium to coarse Sand, trace Silt, well graded, wet, grey-brown. *Cobble in sampling shoe*		25.0 Bentonite Hole Plug
793.9	30					0		29.0': Same as above	29.0	
788.9	35		SS-5		6.5/10			33.5': SAND and GRAVEL - medium to coarse, poorly sorted, dark grey, wet	33.5	# 1 Silica Sand Pack 2 "Sch 40 PVC 10 Slot
								37.0': TILL - light green grey, hard Cobbles, medium to coarse Gravel, moist	37.0	37.0 End Cap 37.2
783.9	40					0		39.0': TILL - Gravels, medium to coarse and Silt, well rounded to sub-angular, some clay and cobbles, hard, grey, moist to dry with depth	39.0	# 1 Silica Sand Pack
778.9	45		SS-6		10/10			49.0': TILL - Gravel, medium to coarse, angular to sub-rounded, some Cobbles, pieces of fractured top of Bedrock, grey, moist, hard	49.0	
768.9	55		SS-7		5/10			54.0': TILL - same as above but dry	54.0	3/8" Granular Wyoming



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-25

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/14/2014 / 12/15/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **823.91 / S-823.61 D-823.57 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								54.0': TILL - same as above but dry		Bentonite Hole Plug
763.9	60					0		59.0': TILL - same as above with increased pieces of fractured top of Bedrock	59.0	
758.9	65		SS-8		10/10			66.0': Fractured Top of Bedrock - Till with pieces of Shale Bedrock	66.0	
								67.0': BEDROCK - Shale, full diameter core samples with pulverized shale dust.	67.0	
753.9								END OF BORING 69 ft.	69.0	69.0
748.9										
743.9										
738.9										

BORING/WELL CONSTRUCTION LOG

PROJECT NAME Vestal Water Supply DATE STARTED / COMPLETED 12/16/2013 / 12/17/2013
 PROJECT NUMBER 00266401.0000 SURFACE ELEV. / RISER ELEV. 821.59 / 824.31 ft. AMSL
 CLIENT NYSDEC 7-04-009 DEPTH TO GROUNDWATER 14 ft. bgs (ATD) ft. btoc (Static)
 LOCATION Pump House Rd, Vestal, New York DRILLING CONTRACTOR Sterns Drilling
 TYPE OF RIG Versa Sonic - Truck mounted DRILLING METHOD 6 and 8" casing x 20' w/ 4" sampler x 10'
 DRILLERS Denny Cooper, Rich Benet LOGGED BY J. Brayer

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
816.6	5	GB-1	5/5	0				0.0': Hand Cleared - SAND and SILT, fine with medium to coarse gravel, rounded to sub-rounded, red borwn, medium dense, dry	5.0	Concrete for Protective Casing # 1 Silica Sand Pack
		SS-2	4/4	0				5.0': SAND and SILT - fine, medium dense, brown, moist, trace organics and some medium Gravel, well rounded, 8.1-9.0' mottled Silts, red brown and grey	9.0	
811.6	10	SS-3	5/10					9.0': SAND and SILT - fine, medium dense to soft, brown, moist, laminations, black brown, less than one hundredth of a foot thick.	14.0	
806.6	15							14.0': SAND - fine but larger than above, Wet, some Silt, red brown laminations	15.0	
								15.0': GRAVEL - medium to coarse, sub-rounded to rounded with fine sand and silt, brown to red brown, wet	16.5	
								16.5': SAND and GRAVEL - trace fine Gravel, well graded to rounded, brown, wet	19.0	
801.6	20	SS-4	3/10					19.0': *COBBLE stuck in sampling shoe* Same as above		Quik-Grout 150 LBS/ 50 Gal water
796.6	25									

BORING/WELL LOG VESTAL WATER SUPPLY NYSDEC.GPJ_MP_DATA.GDT 5/27/2014 2:38:36 PM

Notes:

Screen set 46-56', During development, water cleared quickly. Natural Sand Pack (51-56'). Formation wouldn't collapse for remaining of screen. #1 sand installed (51-43') 293 Gallons of water used in drilling of this boring. SS # = Sonic Sample number.

- ▽ Water Level Reading at time of drilling.
- ▼ Water Level Reading after drilling.



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-26

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/16/2013 / 12/17/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.59 / 824.31 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								19.0': *COBBLE stuck in sampling shoe* Same as above		
791.6	30					0		29.0': GRAVEL - medium to coarse, well rounded to rounded, some medium to coarse Sand, some cobbles little silt. * Cobble stuck in sampling shoe after some sample recovery.* Gravels are multi-colored	29.0	
786.6	35		SS-5		2/10					
781.6	40					0		39.0': GRAVEL - medium to coarse, well rounded and medium to coarse Sand, trace Silt, little fine Sand, brown, multi-colored gravels	39.0	
776.6	45		SS-6		2/10					40.7 3/8" Granular Wyoming Bentonite Hole Plug 43.0
771.6	50					0		49.0': GRAVEL - medium to coarse, rounded, some medium Sand, loose, some silts, grey to grey brown, wet	49.0	46.0 # 1 Silica Sand Pack 2" Sch 40 PVC 10 Slot
766.6	55		SS-7		5/10					

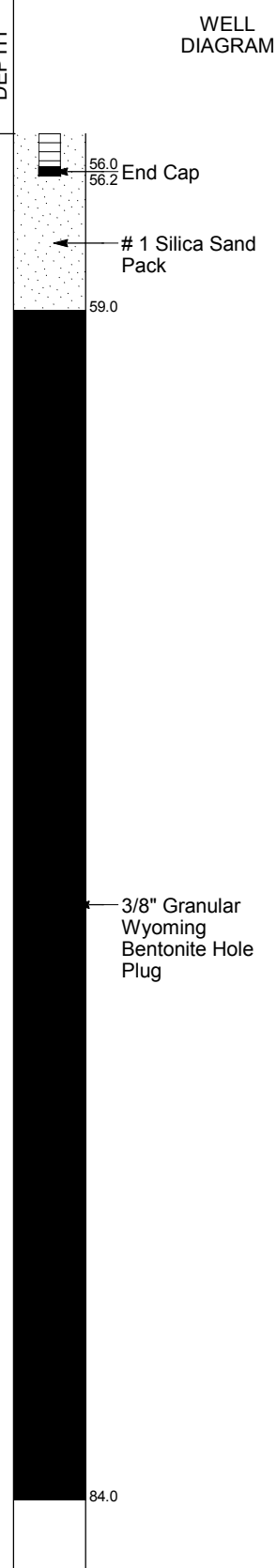
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BORING/WELL CONSTRUCTION LOG

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/16/2013 / 12/17/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.59 / 824.31 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								56.0': TILL - red brown (56-57'), gray (57-59'), dense, coarse Gravels, angular, moist	56.0	 <p>56.0 56.2 End Cap</p> <p># 1 Silica Sand Pack</p> <p>59.0</p> <p>69.0</p> <p>72.0</p> <p>74.0</p> <p>74.5</p> <p>79.0</p> <p>82.0</p> <p>84.0</p> <p>3/8" Granular Wyoming Bentonite Hole Plug</p>
						0		59.0': TILL - brown to grey, dense, angular, medium to coarse Gravel moist (59-63') Dry, very dense, cobble size pieces of Bedrock, grey brown (63-69')	59.0	
761.6	60		SS-8		10/10					
756.6	65					0				
751.6	70							69.0': TILL - dense, moist, grey	69.0	
								72.0': TILL - very dense, dry, same as above	72.0	
			SS-9		10/10			74.0': TILL - moist same as above, very hard drilling	74.0	
746.6	75							74.5': TILL - moist, dense to very dense, trace pieces of Bedrock at (78-79')	74.5	
								79.0': Fractured top of Bedrock - (79-82')	79.0	
741.6	80		SS-10		5/5			82.0': BEDROCK - Full diameter sample core pieces of Shale bedrock, pulverized Shale.	82.0	
736.6								END OF BORING 84 ft.	84.0	



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-27

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/18/2013 / 12/19/2013**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **823.06 / S-826.19, I-826.03, D-825.87 ft. AMSL**
 CLIENT **NYSDEC 7-04-009** DEPTH TO GROUNDWATER **14 ft. bgs (ATD) ft. btoc (Static)**
 LOCATION **Pump House Rd, Vestal, New York** DRILLING CONTRACTOR **Sterns Drilling**
 TYPE OF RIG **Versa Sonic - Truck mounted** DRILLING METHOD **6 and 8" casing x 20' w/ 4" sampler x 10'**
 DRILLERS **Denny Cooper, Rich Benet** LOGGED BY **J. Brayer**

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
818.1	5	GB-1		5/5		0		0.0': Hand Cleared - SAND and SILT, fine, brown, moist, trace fine to medium Gravel, some clay, medium dense	5.0	
		SS-2		4/4		0		5.0': SAND and SILT, moist, trace clay, medium dense, some laminations of silt at 8-9' bgs, black to red brown	9.0	
813.1	10							9.0': Same as above	13.0	
		SS-3		4/10				13.0': GRAVEL - well rounded, and Silt, wet, red brown, soft to medium dense	14.0	
808.1	15							14.0': Same as above - less silt, medium dense to loose	15.0	
								15.0': GRAVEL - well rounded, and Sand, fine to medium, some silt, brown, wet	19.0	
803.1	20					.3		19.0': GRAVEL - medium to coarse, well rounded, some medium to coarse Sand, trace silt, red-brown, loose, wet,	22.0	
		SS-4		6/10				22.0': SAND - medium, and Gravel, medium to coarse, brown, loose, wet	23.0	
								23.0': SAND - medium, trace medium Gravel, brown to red brown, loose, wet		
798.1	25									

BORING/WELL LOG VESTAL WATER SUPPLY NYSDEC.GPJ_MP_DATA.GDT 5/27/2014 2:38:40 PM

Notes:
Screen set 40-50', 65-75', 85-95' Location: Along walking path North of Rt. 17 overpass. 8" stickup. Used extra head pressure to set wells to avoid formation flush-in. 85 Gallons of water used in drilling of this boring. SS # = Sonic Sample number.

- ▽ Water Level Reading at time of drilling.
- ▼ Water Level Reading after drilling.

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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-27

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/18/2013 / 12/19/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **823.06 / S-826.19, I-826.03, D-825.87 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								23.0': SAND - medium, trace medium Gravel, brown to red brown, loose, wet	27.0	
						.3		27.0': GRAVEL - coarse, some medium Sand, some silt lenses, 0.2' thick alternating loose to medium dense, wet	29.0	
793.1	30							29.0': SAND and SILT - medium, brown, wet, loose	31.0	
								31.0': SAND and SILT - fine, some Clay, wet, loose to medium dense	33.5	
			SS-5		8/10			33.5': CLAY - clay lense, red brown to pink, soft, wet	33.8	
788.1	35							33.8': SILT and SAND - fine, red brown, soft	35.0	
								35.0': SILT and SAND - coarse to fine	36.0	
								36.0': SAND - fine, trace Silt, grey with lenses of Silt and fine Sand, brown, wet, plastic	36.1	
								38.0': SAND and SILT - fine, brown, wet, plastic, change to medium Sand, trace Silt at 39'	38.0	
783.1	40					0		39.0': SAND and SILT - coarse, loose, brown, wet	39.5	
								39.5': SAND and SILT loose, light brown to dark brown with depth	40.0	
								40.0': SAND and SILT - coarse, loose, light brown	42.0	
								42.0': SAND and SILT - fine, trace medium to coarse Gravel with trace Cobbles, light brown, wet loose to medium dense	44.0	# 1 Silica Sand Pack
778.1	45		SS-6		8/10			44.0': SAND and SILT - coarse, loose, light brown	45.0	
								45.0': SAND and SILT - fine, light brown, medium dense, wet	47.0	
								47.0': SAND - medium, very loose, trace Silt, dark brown	47.5	
								47.5': SAND and SILT - fine, alternating lenses of dark brown to light brown	49.0	
773.1	50					0		49.0': SAND - medium to fine, some Silt, brown, wet, loose	50.0	
									50.2	End Cap
										# 1 Silica Sand Pack
768.1	55		SS-7		8/10				53.3	

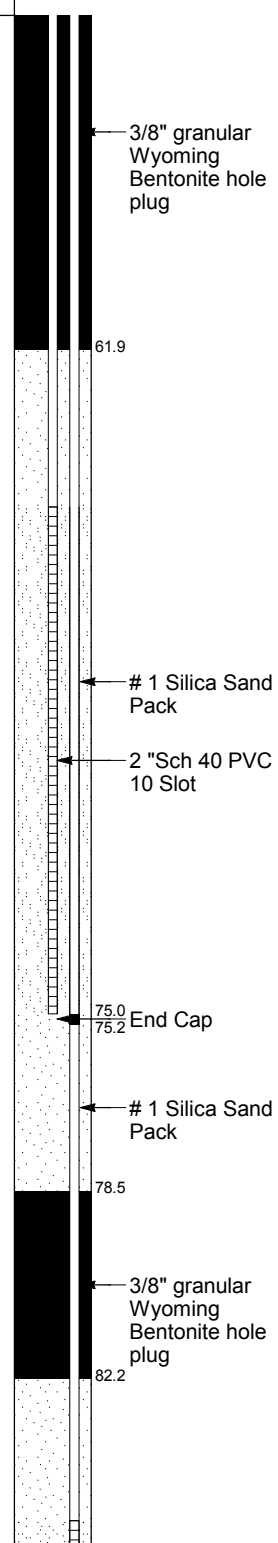
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BORING/WELL CONSTRUCTION LOG

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/18/2013 / 12/19/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **823.06 / S-826.19, I-826.03, D-825.87 ft. AMSL**

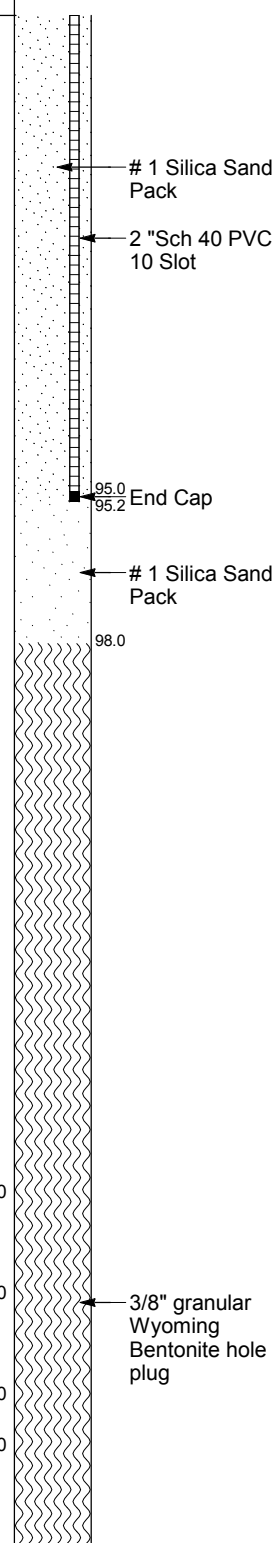
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ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								49.0': SAND - medium to fine, some Silt, brown, wet, loose	56.0	
								56.0': SAND - medium, brown, very loose, wet		
						0		58.0': SILTY CLAY - with lense of fine to medium Sand	58.0	
								59.0': SAND and SILT - fine to medium, brown, loose, wet	59.0	
763.1	60							61.0': SAND - medium, trace Silt, loose, wet brown	61.0	
			SS-8		8/10			63.0': SAND and SILT - fine to medium, brown, loose, wet	63.0	
758.1	65							65.0': SAND - medium, trace Silt, loose, wet, dark brown	65.0	
						0		68.5': SAND - fine, some Silt, brown, medium dense	68.5	
								69.0': SAND and SILT - fine to medium, brown, loose, wet	69.0	
753.1	70							72.0': SAND and SILT - fine, brown, loose, wet	72.0	
								73.0': SAND - fine to medium, trace Silt, dark brown, loose, wet	73.0	
748.1	75		SS-9		8/10			75.0' End Cap	75.0	
								75.2' End Cap	75.2	
								78.0': SAND and SILT - fine, with medium Sand lenses	78.0	
						0		78.5' End Cap	78.5	
743.1	80							79.0': SAND - coarse, some medium Sand, trace Silt, dark brown, loose, wet	79.0	
								82.0': SAND and SILT - medium, brown, medium dense, wet	82.0	
								82.2' End Cap	82.2	
								84.0': SILT - lenses of silt and clay, light brown	84.0	
738.1	85		SS-10		8/10			85.0': SAND and SILT - medium, dark brown, loose, wet	85.0	

BORING/WELL CONSTRUCTION LOG

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/18/2013 / 12/19/2013**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **823.06 / S-826.19, I-826.03, D-825.87 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								86.0': SAND and SILT - fine, light brown, wet, medium dense	86.0	 <p># 1 Silica Sand Pack</p> <p>2 "Sch 40 PVC 10 Slot</p> <p>95.0 End Cap</p> <p>95.2</p> <p># 1 Silica Sand Pack</p> <p>98.0</p> <p>3/8" granular Wyoming Bentonite hole plug</p>
						0		88.0': SAND and SILT - medium to fine, dark brown, loose, wet	88.0	
								89.0': SAND - medium to coarse, trace Silt, dark brown, loose,	89.0	
733.1	90							90.0': SAND and SILT - fine, loose to medium dense	90.0	
			SS-11		7/10			94.0': SAND and SILT - fine, grey loose to medium dense, pieces of fractured bedrock, angular	94.0	
728.1	95							95.0': TILL - dense to very dense, moist to dry with depth	95.0	
								98.0': TILL - shale pieces of bedrock, fractured bedrock from cobble size to dust	98.0	
723.1	100					0		99.0': TILL - Dense to very dense, moist to dry, both rounded and angular Gravel in Silt and Clay, grey to blue grey	99.0	
			SS-12		8/10			109.0': COBBLE - pulverized cobble or boulder, hard drilling	109.0	
718.1	105							111.0': TILL - Same as above	111.0	
								113.0': Till - Fractured pieces of bedrock, full diameter core sample of bed rock	113.0	
713.1	110							114.0': TILL - Same as above - hard drilling	114.0	
			SS-13		10/10					
708.1	115									



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-27

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **12/18/2013 / 12/19/2013**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **823.06 / S-826.19, I-826.03, D-825.87 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
703.1	120					0		114.0': TILL - Same as above - hard drilling	119.0	
								119.0': Till - Same as above - hard drilling	121.0	
		SS-14			6/6			121.0': Till - Same as above - hard drilling	122.0	
								122.0': BEDROCK - full bore sample, 2 feet of shale bedrock	124.0	
698.1								END OF BORING 124 ft.		124.0
693.1										
688.1										
683.1										
678.1										



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BORING/WELL No.

4009-28

PROJECT NAME Vestal Water Supply DATE STARTED / COMPLETED 1/6/2014 / 1/9/2014
 PROJECT NUMBER 00266401.0000 SURFACE ELEV. / RISER ELEV. 821.93 / 821.59 ft. AMSL
 CLIENT NYSDEC 7-04-009 DEPTH TO GROUNDWATER 13.5 ft. bgs (ATD) ft. btoc (Static)
 LOCATION Pump House Rd, Vestal, New York DRILLING CONTRACTOR Sterns Drilling
 TYPE OF RIG Versa Sonic - Truck mounted DRILLING METHOD 6 and 8" casing x 20' w/ 4" sampler x 10'
 DRILLERS Denny Cooper, Rich Benet LOGGED BY J. Brayer

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
816.9	5		GB-1		5/5	0		2.0': Hand Cleared - SILTY CLAY and coarse Gravel and cobbles, some medium to fine sand and silt, trace organics	5.0	<p>12" flush mount # 1 Silica Sand Pack 3.0</p>
								5.0': GRAVEL - coarse and Silt, moist, brown	6.0	
			SS-2		3/4			6.0': SAND and SILT - fine, grey transitioning to red brown, moist, medium dense	7.0	
								7.0': Same as above - but red brown	9.0	
811.9	10					0		9.0': SAND and SILT - fine, varved, red brown to black, moist, medium dense	12.0	
806.9	15		SS-3		7/10			12.0': Same as above - but with medium Sand increasing with depth. Saturated. Water table 13-14'bgs, red brown oxidized rhizomes in varves	19.0	
								19.0': SAND and SILT - fine, varved, red brown, varved transitioning to medium to coarse Gravel	20.0	
801.9	20							20.0': COBBLES - rounded, some medium to coarse Gravel, rounded to sub-rounded, some medium to coarse sand, trace silt, loose, red brown, wet,		
796.9	25		SS-4		3/10					

BORING/WELL LOG VESTAL WATER SUPPLY NYSDEC.GPJ_MP_DATA.GDT 5/27/2014 2:38:44 PM

Notes:
 Screen set 129-139' Location: 75.5' NW of the NW corner of the baseball backstop and approx 4' off of the edge of pavement. Well is in line with a pole on opposite side of levee. 3x3' concrete pad. 460 Gallons of water used in drilling. SS# = Sonic sample.

▽ Water Level Reading at time of drilling.
 ▼ Water Level Reading after drilling.

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BORING/WELL No.

4009-28

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **1/6/2014 / 1/9/2014**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.93 / 821.59 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
						0		20.0': COBBLES - rounded, some medium to coarse Gravel, rounded to sub-rounded, some medium to coarse sand, trace silt, loose, red brown, wet,	29.0	
791.9	30							29.0': GRAVEL - medium to coarse and coarse Sand, some medium Sand, trace fine Sand and Silt, red brown, loose, moist		
786.9	35		SS-5		3/10			37.0': SAND - fine to medium, grey to purple grey, organics - tree bark and twigs, some Silt with trace coarse Gravel, rounded, moist	37.0	
						0		38.0': GRAVEL - medium to coarse, some medium Sand, some Silt transitioning to medium Sand, little Silt	38.0	
781.9	40							39.0': SAND - fine some Silt and Clay, soft, dark grey, plastic, wet	39.0	
								42.0': SAND - medium, trace Silt, organics	42.0	
776.9	45		SS-6		8/10			42.5': SAND- fine, some Silt and Clay, soft, varved, dark grey to black, wet, increasing Clay content with depth, trace organics in black medium Sand lenses	42.5	
						0		49.0': Same as above - but with trace Gravel, coarse, rounded transitioning to SILTY CLAY, dark grey	49.0	
771.9	50									
766.9	55		SS-7		8/10					

Continued Next Page



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-28

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **1/6/2014 / 1/9/2014**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.93 / 821.59 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								49.0': Same as above - but with trace Gravel, coarse, rounded transitioning to SILTY CLAY, dark grey		
						0		58.0': GRAVEL - coarse some medium to coarse Sand, some Silt, red brown, very loose, wet	58.0	
761.9	60							59.0': GRAVEL - medium to coarse, some medium to coarse Sand, some silt, well rounded, very loose, red brown, wet	59.0	
			SS-8		4/10					
756.9	65							65.0': GRAVEL - fine to coarse, Sand, medium to coarse, well rounded, trace Silt, some Cobbles, red brown, wet, well graded	65.0	
						0				
751.9	70							69.0': SAND - coarse to medium Gravel, well graded, wet, loose	69.0	
			SS-9		8/10			73.0': GRAVEL - coarse at interface transitioning to fine Sand, dense, trace Silt, sub-rounded	73.0	
746.9	75							74.0': SAND and SILT, fine, dark brown, wet, loose	74.0	
								76.0': SAND - fine, and coarse Gravel, some Cobbles, trace Silt, loose, red brown, to brown with depth.	76.0	
						0				
741.9	80							79.0': SAND - coarse, trace medium Gravel, rounded, trace Silt, dark brown, well graded, loose, wet	79.0	
736.9	85		SS-10		7/10					

Quik-Grout 150 LBS/ 50 Gal water

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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-28

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **1/6/2014 / 1/9/2014**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.93 / 821.59 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								79.0': SAND - coarse, trace medium Gravel, rounded, trace Silt, dark brown, well graded, loose, wet	88.0	
						0		88.0': SAND - medium to fine, with medium Gravel, some Silt, well rounded, dense, red brown to brown, wet	89.0	
731.9	90				2/10			89.0': GRAVEL - Cobble in sampler - medium Sand, to coarse Gravel, well rounded, some Cobbles		
726.9	95		SS-11							
						0			99.0	
721.9	100							99.0': GRAVEL - medium to coarse, some fine Sand and Silt, wet, loose	101.0	
					6/10			101.0': SAND - coarse, grey brown, some medium to coarse Gravel, well rounded, wet loose	105.0	
716.9	105		SS-12					105.0': SAND - coarse, trace Silt, brown, wet, loose	109.0	
						0				
711.9	110							109.0': Same as above - with medium to coarse gravel, well rounded, loose		
					5/10					
706.9	115		SS-13							

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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-28

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **1/6/2014 / 1/9/2014**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.93 / 821.59 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
						0		109.0': Same as above - with medium to coarse gravel, well rounded, loose	119.0	
701.9	120							119.0': SAND - coarse, some Gravel, fine to coarse, well rounded, little Silt, loose, brown, wet	120.8	
			SS-14		7/10			124.0': SAND - coarse, and Silt, some Clay, loose, grey brown	124.0	3/8" Granular Wyoming Bentonite Hole Plug
696.9	125							126.0': GRAVEL- fine to medium and Silty Clay, loose grey brown, wet, coarsens downward, with less Silty Clay	126.0	
						0		129.0': SAND - coarse, and fine to medium Gravel with trace Silt, loose, wet	129.0	
691.9	130							130.0': GRAVEL - medium to coarse, sub-rounded, some Silt, loose, brown, wet	130.0	
			SS-15		5/10			136.0': GRAVEL- coarse some medium to coarse Sand, little Silt, loose to medium dense, sub-rounded, (Till like)	136.0	# 1 Silica Sand Pack 2 "Sch 40 PVC 10 Slot
686.9	135							139.0': Same as above - but loose	139.0	End Cap
681.9	140							142.0': GRAVEL - medium to coarse some Silt, dense, moist, well rounded, grey to red brown	139.2	# 1 Silica Sand Pack
			SS-16		6/10			144.0': GRAVEL - medium, sub-rounded to rounded, trace to some silt with depth, loose, wet	144.0	
676.9	145									

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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-28

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **1/6/2014 / 1/9/2014**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.93 / 821.59 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
						0		144.0': GRAVEL - medium, sub-rounded to rounded, trace to some silt with depth, loose, wet	149.0	
671.9	150					0		149.0': GRAVEL - medium, with coarse Gravel, rounded, some coarse to medium Sand, trace Silt, loose, wet	151.0	
			SS-17		7/10			151.0': GRAVEL - fine to medium, rounded, some coarse Sand and Gravel, trace Silts, brown to grey brown, loose, wet		
666.9	155					0				
661.9	160					0				
			SS-18		6/10					
656.9	165					0				
651.9	170					0		171.0': GRAVEL - Same as above but well graded	171.0	
								172.0': SAND - coarse, some Silt, loose to medium dense, well graded, dark grey, wet,	172.0	
646.9	175		SS-19		8/10				176.0	

← 3/8" Granular Wyoming Bentonite Hole Plug



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-28

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **1/6/2014 / 1/9/2014**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **821.93 / 821.59 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
641.9	180					0		176.0': SAND - medium, grey to dark grey, well graded, loose, wet 177.0': Same as above - but brown	177.0	
								179.0': Same as above - but dark grey and medium dense, moist	179.0	
636.9	185		SS-20		8/10			184.0': Till - Dense to very dense with depth, moist to dry, light grey to aqua blue, fractured Shale Bedrock with Cobbles, very hard drilling	184.0	
631.9			SS			0		189.0': END OF BORING 189 ft.	189.0	
626.9										
621.9										
616.9										



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-29

PROJECT NAME Vestal Water Supply DATE STARTED / COMPLETED 1/10/2014 / 1/11/2014
 PROJECT NUMBER 00266401.0000 SURFACE ELEV. / RISER ELEV. 826.19 / S-825.77, I-825.68, D-825.67 ft. AMSL
 CLIENT NYSDEC 7-04-009 DEPTH TO GROUNDWATER 12.5 ft. bgs (ATD) ft. btoc (Static)
 LOCATION Pump House Rd, Vestal, New York DRILLING CONTRACTOR Sterns Drilling
 TYPE OF RIG Versa Sonic - Truck mounted DRILLING METHOD 6 and 8" casing x 20' w/ 4" sampler x 10'
 DRILLERS Denny Cooper, Rich Benet LOGGED BY J. Brayer

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
821.2	5	GB-1	5/5	0				0.0': Hand cleared - SILTY CLAY and medium to coarse Gravel, trace organics	0.4	12" flush mount # 1 Silica Sand Pack
816.2	10	SS-2	3/4	0				5.0': Same as above - some coarse black Sand and Silt (possibly coal ash) at 6' bgs	9.0	
811.2	15	SS-3	6/10	0				9.0': SAND - fine, silty, soft with medium Sand lenses, red brown to dark brown with medium Sand lenses. Wet, at 12-13' bgs (SAMPLE TAKEN 12-13' bgs)		
806.2	20	SS-4	6/10					19.0': Same as above		Quik-Grout 150 LBS/ 50 Gal water
801.2	25								25.0	

Notes:
Screen set 40-50', 60-70', 85-95' Sample Taken 12-13' bgs. Location: 28' from light pole and 39' from Photo shop sign (close to being in line) 216 Gallons of water used in drilling of this boring. SS # = Sonic Sample number.

- ▽ Water Level Reading at time of drilling.
- ▼ Water Level Reading after drilling.

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BORING/WELL LOG VESTAL WATER SUPPLY NYSDEC.GPJ_MP_DATA.GDT 5/27/2014 2:38:49 PM



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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-29

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **1/10/2014 / 1/11/2014**
PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **826.19 / S-825.77, I-825.68, D-825.67 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								55.0': SAND - coarse to fine Gravel, grading downward, some Silt, trace medium Gravel, decreasing Silt with depth, dark brown, loose, wet, PID 1.0 and PID Head Space 11.7 ppm		3/8" Granular Wyoming Bentonite Hole Plug
766.2	60					1		59.0': SAND - medium, some Silt, wet, trace coarse Gravel, dark brown, PID 0.5	59.0	
761.2	65		SS-8		3/10			62.0': SAND - coarse, trace Silt, well graded, dark brown, wet, PID 1.0	62.0	# 1 Silica Sand Pack
										2" Sch 40 PVC 10 Slot
756.2	70					1.3		68.0': GRAVEL - medium to coarse, sub-rounded to rounded, some Silt, dark brown, very loose, wet PID 0.1	68.0	
								69.0': SAND - coarse to fine Gravel, some silt, rounded, grey-brown loose, wet	69.0	
									70.0	End Cap
								71.0': GRAVEL - fine to medium increasing Silt, rounded to sub-rounded, PID 0.8	71.0	# 1 Silica Sand Pack
751.2	75		SS-9		3/10			75.0': GRAVEL - coarse to fine and silty Sand, medium dense, grey brown, moist, PID 0.6	75.0	
								77.0': GRAVEL - coarse and Silt, loose, well rounded, grey brown, wet, PID 1.3	77.0	
746.2	80					0		79.0': No Recovery - Rock in sampler shoe, Cobble size, well rounded	79.0	3/8" Granular Wyoming Bentonite Hole Plug
741.2	85		SS-10		0/10				82.4	

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BORING/WELL CONSTRUCTION LOG

BORING/WELL No.

4009-29

PROJECT NAME **Vestal Water Supply** DATE STARTED / COMPLETED **1/10/2014 / 1/11/2014**
 PROJECT NUMBER **00266401.0000** SURFACE ELEV. / RISER ELEV. **826.19 / S-825.77, I-825.68, D-825.67 ft. AMSL**

Continued from Previous Page

ELEV. (ft.)	DEPTH (ft. BGS)	SAMPLER	SAMPLE ID.	BLOW COUNTS	RECOVERY (ft.) / RQD	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
						0		79.0': No Recovery - Rock in sampler shoe, Cobble size, well rounded	89.0	<p># 1 Silica Sand Pack</p> <p>2 "Sch 40 PVC 10 Slot</p> <p>95.0 95.2 End Cap</p> <p># 1 Silica Sand Pack</p> <p>98.0 98.2</p> <p>3/8" Granular Wyoming Bentonite Hole Plug</p>
736.2	90		SS-11		6/10			89.0': SAND and SILT - medium to fine, some clay, low plasticity, dark grey, soft, wet		
731.2	95							95.0': SAND - medium, slightly coarser than above, little clay, nonplastic, dark grey, soft, wet	95.0	
						0		98.0': SAND - Medium, dark grey, medium dense, some Silt, moist	98.0	
726.2	100							99.0': SAND - Medium, well graded, dark grey, soft, moist	99.0	
								101.0': TILL- Moist to dry with depth, light grey to dark grey, Dense to very dense. Hard Drilling	101.0	
721.2	105		SS-12		9/10					
						0				
716.2								END OF BORING 109 ft.	109.0	
711.2										

Appendix B

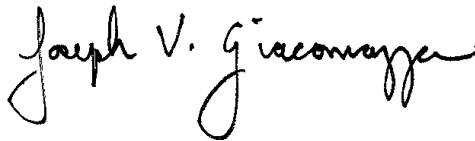
Analytical Reporting Forms

ANALYTICAL REPORT

Job Number: 480-59007-1

Job Description: Vestal Well 1-1A Sampling LMCO

For:
ARCADIS U.S. Inc
855 Route 146
Suite 210
Clifton Park, NY 12065
Attention: Jeremy Wyckoff



Approved for release.
Joe V Giacomazza
Project Management Assistant II
5/9/2014 4:46 PM

Designee for
Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
05/09/2014

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298
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Job Narrative
480-59007-1

Receipt

The samples were received on 5/1/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC/MS VOA

Method(s) 8260C: The large number of analytes included in the continuing calibration verification (CCV) for 179534 gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes are outside the method-defined %D criteria. (CCVIS 480-179534/2)

No other analytical or quality issues were noted.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1

SDG No.: _____

Instrument ID: HP5975D Analysis Batch Number: 177332Lab Sample ID: IC 480-177332/5 Client Sample ID: _____Date Analyzed: 04/22/14 05:39 Lab File ID: D1210.D GC Column: RTX-CLPII ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	1.81	Baseline	quirkp	04/22/14 12:36
Acetone	2.60	Peak Tail	quirkp	04/22/14 12:38
Methyl acetate	2.87	Baseline	quirkp	04/22/14 12:34
2-Methyl-2-propanol	3.10	Coelution	BrandtT	04/22/14 17:49
Acrylonitrile	3.18	Peak Tail	quirkp	04/22/14 12:34
2-Butanone (MEK)	4.00	Peak Tail	quirkp	04/22/14 12:42
1,4-Dioxane	5.42	Missed Peak	quirkp	04/22/14 11:28

Lab Sample ID: IC 480-177332/6 Client Sample ID: _____Date Analyzed: 04/22/14 06:01 Lab File ID: D1211.D GC Column: RTX-CLPII ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	1.80	Baseline	quirkp	04/22/14 12:43
2-Methyl-2-propanol	3.09	Coelution	BrandtT	04/22/14 17:50
1,4-Dioxane	5.41	Peak Tail	BrandtT	04/22/14 17:37

Lab Sample ID: IC 480-177332/7 Client Sample ID: _____Date Analyzed: 04/22/14 06:22 Lab File ID: D1212.D GC Column: RTX-CLPII ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	2.94	Peak Tail	quirkp	04/22/14 12:44
2-Methyl-2-propanol	3.09	Coelution	BrandtT	04/22/14 17:50
1,4-Dioxane	5.42	Peak Tail	quirkp	04/22/14 11:31

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1

SDG No.: _____

Instrument ID: HP5975D Analysis Batch Number: 177332Lab Sample ID: ICIS 480-177332/8 Client Sample ID: _____Date Analyzed: 04/22/14 06:43 Lab File ID: D1213.D GC Column: RTX-CLPII ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Methyl-2-propanol	3.09	Coelution	BrandtT	04/22/14 17:50
1,4-Dioxane	5.40	Peak Tail	quirkp	04/22/14 11:32

Lab Sample ID: IC 480-177332/9 Client Sample ID: _____Date Analyzed: 04/22/14 07:04 Lab File ID: D1214.D GC Column: RTX-CLPII ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.40	Peak Tail	quirkp	04/22/14 11:33

Lab Sample ID: IC 480-177332/10 Client Sample ID: _____Date Analyzed: 04/22/14 07:25 Lab File ID: D1215.D GC Column: RTX-CLPII ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Methyl-2-propanol	3.09	Coelution	BrandtT	04/22/14 17:51
1,4-Dioxane	5.40	Peak Tail	quirkp	04/22/14 12:47

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1

SDG No.: _____

Instrument ID: HP5975D Analysis Batch Number: 179534Lab Sample ID: CCVIS 480-179534/2 Client Sample ID: _____Date Analyzed: 05/01/14 20:06 Lab File ID: D1598.D GC Column: RTX-CLPII ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.40	Peak Tail	cwiklinc	05/02/14 02:17

SAMPLE SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-59007-1	1-2	Water	04/23/2014 1340	05/01/2014 0900
480-59007-2	1-3	Water	04/23/2014 1545	05/01/2014 0900
480-59007-3	TRIP BLANK	Water	04/23/2014 0000	05/01/2014 0900

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
---------------	------------------	--------	-----------	-----------------	-------	--------

No Detections

METHOD SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL BUF	SW846 8260C	
Purge and Trap	TAL BUF		SW846 5030C

Lab References:

TAL BUF = TestAmerica Buffalo

Method References:

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

METHOD / ANALYST SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Method	Analyst	Analyst ID
SW846 8260C	Quirk, Patrick J	PJQ

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Client Sample ID: 1-2

Lab Sample ID: 480-59007-1

Date Sampled: 04/23/2014 1340

Client Matrix: Water

Date Received: 05/01/2014 0900

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-179534	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D1619.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	05/02/2014 0353			Final Weight/Volume:	5 mL
Prep Date:	05/02/2014 0353				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trimethylbenzene	1.0	U	0.75	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dibromoethane	1.0	U	0.73	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3,5-Trimethylbenzene	1.0	U	0.77	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	10	U	3.0	10
Benzene	1.0	U	0.41	1.0
Bromodichloromethane	1.0	U	0.39	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dibromochloromethane	1.0	U	0.32	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	0.50	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	1.0	U	0.36	1.0
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Client Sample ID: 1-2

Lab Sample ID: 480-59007-1

Date Sampled: 04/23/2014 1340

Client Matrix: Water

Date Received: 05/01/2014 0900

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-179534	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D1619.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	05/02/2014 0353			Final Weight/Volume:	5 mL
Prep Date:	05/02/2014 0353				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0
Xylenes, Total	2.0	U	0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		66 - 137
4-Bromofluorobenzene (Surr)	114		73 - 120
Toluene-d8 (Surr)	94		71 - 126
Dibromofluoromethane (Surr)	95		60 - 140

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Client Sample ID: 1-3

Lab Sample ID: 480-59007-2

Date Sampled: 04/23/2014 1545

Client Matrix: Water

Date Received: 05/01/2014 0900

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-179534	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D1620.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	05/02/2014 0414			Final Weight/Volume:	5 mL
Prep Date:	05/02/2014 0414				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trimethylbenzene	1.0	U	0.75	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dibromoethane	1.0	U	0.73	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3,5-Trimethylbenzene	1.0	U	0.77	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	10	U	3.0	10
Benzene	1.0	U	0.41	1.0
Bromodichloromethane	1.0	U	0.39	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dibromochloromethane	1.0	U	0.32	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	0.50	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	1.0	U	0.36	1.0
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Client Sample ID: 1-3

Lab Sample ID: 480-59007-2

Date Sampled: 04/23/2014 1545

Client Matrix: Water

Date Received: 05/01/2014 0900

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-179534	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D1620.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	05/02/2014 0414			Final Weight/Volume:	5 mL
Prep Date:	05/02/2014 0414				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0
Xylenes, Total	2.0	U	0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		66 - 137
4-Bromofluorobenzene (Surr)	114		73 - 120
Toluene-d8 (Surr)	93		71 - 126
Dibromofluoromethane (Surr)	91		60 - 140

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-59007-3

Date Sampled: 04/23/2014 0000

Client Matrix: Water

Date Received: 05/01/2014 0900

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-179534	Instrument ID: HP5975D	
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: D1621.D	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 05/02/2014 0435		Final Weight/Volume: 5 mL	
Prep Date: 05/02/2014 0435			

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trimethylbenzene	1.0	U	0.75	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dibromoethane	1.0	U	0.73	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3,5-Trimethylbenzene	1.0	U	0.77	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	10	U	3.0	10
Benzene	1.0	U	0.41	1.0
Bromodichloromethane	1.0	U	0.39	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dibromochloromethane	1.0	U	0.32	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	0.50	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	1.0	U	0.36	1.0
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-59007-3

Date Sampled: 04/23/2014 0000

Client Matrix: Water

Date Received: 05/01/2014 0900

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-179534	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D1621.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	05/02/2014 0435			Final Weight/Volume:	5 mL
Prep Date:	05/02/2014 0435				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0
Xylenes, Total	2.0	U	0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83		66 - 137
4-Bromofluorobenzene (Surr)	113		73 - 120
Toluene-d8 (Surr)	92		71 - 126
Dibromofluoromethane (Surr)	91		60 - 140

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
480-59007-1	1-2	95	86	94	114
480-59007-2	1-3	91	85	93	114
480-59007-3	TRIP BLANK	91	83	92	113
MB 480-179534/5		95	86	92	106
LCS 480-179534/4		94	87	94	112
LCSD 480-179534/25		92	85	95	115

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	66-137
TOL = Toluene-d8 (Surr)	71-126
BFB = 4-Bromofluorobenzene (Surr)	73-120

Quality Control Results

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Method Blank - Batch: 480-179534

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-179534/5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 05/01/2014 2121
 Prep Date: 05/01/2014 2121
 Leach Date: N/A

Analysis Batch: 480-179534
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5975D
 Lab File ID: D1601.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,1,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trimethylbenzene	1.0	U	0.75	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dibromoethane	1.0	U	0.73	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3,5-Trimethylbenzene	1.0	U	0.77	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	10	U	3.0	10
Benzene	1.0	U	0.41	1.0
Bromodichloromethane	1.0	U	0.39	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dibromochloromethane	1.0	U	0.32	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	0.50	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	1.0	U	0.36	1.0
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0

Quality Control Results

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Method Blank - Batch: 480-179534

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 480-179534/5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 05/01/2014 2121
 Prep Date: 05/01/2014 2121
 Leach Date: N/A

Analysis Batch: 480-179534
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: HP5975D
 Lab File ID: D1601.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0
Xylenes, Total	2.0	U	0.66	2.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	66 - 137
4-Bromofluorobenzene (Surr)	106	73 - 120
Toluene-d8 (Surr)	92	71 - 126
Dibromofluoromethane (Surr)	95	60 - 140

Quality Control Results

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 480-179534**

**Method: 8260C
Preparation: 5030C**

LCS Lab Sample ID:	LCS 480-179534/4	Analysis Batch:	480-179534	Instrument ID:	HP5975D
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	D1600.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	05/01/2014 2100	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	05/01/2014 2100				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 480-179534/25	Analysis Batch:	480-179534	Instrument ID:	HP5975D
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	D1602.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	05/01/2014 2156	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	05/01/2014 2156				5 mL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
1,1-Dichloroethane	104	103	71 - 129	1	20		
1,1-Dichloroethene	102	102	58 - 121	0	16		
1,2,4-Trimethylbenzene	102	103	76 - 121	0	20		
1,2-Dichlorobenzene	101	101	80 - 124	0	20		
1,2-Dichloroethane	104	100	75 - 127	4	20		
Benzene	104	104	71 - 124	0	13		
Chlorobenzene	99	101	72 - 120	2	25		
cis-1,2-Dichloroethene	105	104	74 - 124	2	15		
Ethylbenzene	100	102	77 - 123	2	15		
Methyl tert-butyl ether	103	99	64 - 127	4	37		
Tetrachloroethene	101	102	74 - 122	1	20		
Toluene	100	101	80 - 122	1	15		
trans-1,2-Dichloroethene	106	104	73 - 127	1	20		
Trichloroethene	105	105	74 - 123	0	16		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87	85	66 - 137
4-Bromofluorobenzene (Surr)	112	115	73 - 120
Toluene-d8 (Surr)	94	95	71 - 126
Dibromofluoromethane (Surr)	94	92	60 - 140

Quality Control Results

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-179534**

**Method: 8260C
Preparation: 5030C**

LCS Lab Sample ID: LCS 480-179534/4 Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 05/01/2014 2100
 Prep Date: 05/01/2014 2100
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 480-179534/25
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 05/01/2014 2156
 Prep Date: 05/01/2014 2156
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
1,1-Dichloroethane	25.0	25.0	26.0	25.7
1,1-Dichloroethene	25.0	25.0	25.4	25.4
1,2,4-Trimethylbenzene	25.0	25.0	25.6	25.6
1,2-Dichlorobenzene	25.0	25.0	25.2	25.3
1,2-Dichloroethane	25.0	25.0	26.0	25.1
Benzene	25.0	25.0	26.0	25.9
Chlorobenzene	25.0	25.0	24.9	25.3
cis-1,2-Dichloroethene	25.0	25.0	26.4	25.9
Ethylbenzene	25.0	25.0	25.1	25.6
Methyl tert-butyl ether	25.0	25.0	25.8	24.8
Tetrachloroethene	25.0	25.0	25.3	25.5
Toluene	25.0	25.0	24.9	25.2
trans-1,2-Dichloroethene	25.0	25.0	26.4	26.1
Trichloroethene	25.0	25.0	26.4	26.3

DATA REPORTING QUALIFIERS

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Lab Section	Qualifier	Description
GC/MS VOA	U	Analyzed for but not detected.

Quality Control Results

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:480-179534					
LCS 480-179534/4	Lab Control Sample	T	Water	8260C	
LCSD 480-179534/25	Lab Control Sample Duplicate	T	Water	8260C	
MB 480-179534/5	Method Blank	T	Water	8260C	
480-59007-1	1-2	T	Water	8260C	
480-59007-2	1-3	T	Water	8260C	
480-59007-3	TRIP BLANK	T	Water	8260C	

Report Basis

T = Total

Quality Control Results

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Laboratory Chronicle

Lab ID: 480-59007-1

Client ID: 1-2

Sample Date/Time: 04/23/2014 13:40

Received Date/Time: 05/01/2014 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-59007-A-1		480-179534		05/02/2014 03:53	1	TAL BUF	PJQ
A:8260C	480-59007-A-1		480-179534		05/02/2014 03:53	1	TAL BUF	PJQ

Lab ID: 480-59007-2

Client ID: 1-3

Sample Date/Time: 04/23/2014 15:45

Received Date/Time: 05/01/2014 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-59007-A-2		480-179534		05/02/2014 04:14	1	TAL BUF	PJQ
A:8260C	480-59007-A-2		480-179534		05/02/2014 04:14	1	TAL BUF	PJQ

Lab ID: 480-59007-3

Client ID: TRIP BLANK

Sample Date/Time: 04/23/2014 00:00

Received Date/Time: 05/01/2014 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-59007-A-3		480-179534		05/02/2014 04:35	1	TAL BUF	PJQ
A:8260C	480-59007-A-3		480-179534		05/02/2014 04:35	1	TAL BUF	PJQ

Lab ID: MB

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	MB 480-179534/5		480-179534		05/01/2014 21:21	1	TAL BUF	PJQ
A:8260C	MB 480-179534/5		480-179534		05/01/2014 21:21	1	TAL BUF	PJQ

Lab ID: LCS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	LCS 480-179534/4		480-179534		05/01/2014 21:00	1	TAL BUF	PJQ
A:8260C	LCS 480-179534/4		480-179534		05/01/2014 21:00	1	TAL BUF	PJQ

Quality Control Results

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Laboratory Chronicle

Lab ID: LCSD

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	LCSD 480-179534/25		480-179534		05/01/2014 21:56	1	TAL BUF	PJQ
A:8260C	LCSD 480-179534/25		480-179534		05/01/2014 21:56	1	TAL BUF	PJQ

Lab References:

TAL BUF = TestAmerica Buffalo

Certification Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Well 1-1A Sampling LMCO

TestAmerica Job ID: 480-59007-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas DEQ	State Program	6	88-0686
TestAmerica Buffalo	California	State Program	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAP	4	E87672
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Georgia	State Program	4	N/A
TestAmerica Buffalo	Illinois	NELAP	5	200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAP	7	E-10187
TestAmerica Buffalo	Kentucky (DW)	State Program	4	90029
TestAmerica Buffalo	Kentucky (UST)	State Program	4	30
TestAmerica Buffalo	Louisiana	NELAP	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY00044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAP	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAP	1	2337
TestAmerica Buffalo	New Hampshire	NELAP	1	2973
TestAmerica Buffalo	New Jersey	NELAP	2	NY455
TestAmerica Buffalo	New York	NELAP	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAP	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAP	3	68-00281
TestAmerica Buffalo	Rhode Island	State Program	1	LAO00328
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAP	6	T104704412-11-2
TestAmerica Buffalo	USDA	Federal		P330-11-00386
TestAmerica Buffalo	Virginia	NELAP	3	460185
TestAmerica Buffalo	Washington	State Program	10	C784
TestAmerica Buffalo	West Virginia DEP	State Program	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method 8260C

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): RTX-CLPII ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
1-2	480-59007-1	95	86	94	114
1-3	480-59007-2	91	85	93	114
TRIP BLANK	480-59007-3	91	83	92	113
	MB 480-179534/5	95	86	92	106
	LCS 480-179534/4	94	87	94	112
	LCSD 480-179534/25	92	85	95	115

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

QC LIMITS

60-140
66-137
71-126
73-120

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: D1600.D
 Lab ID: LCS 480-179534/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethane	25.0	26.0	104	71-129	
1,1-Dichloroethene	25.0	25.4	102	58-121	
1,2,4-Trimethylbenzene	25.0	25.6	102	76-121	
1,2-Dichlorobenzene	25.0	25.2	101	80-124	
1,2-Dichloroethane	25.0	26.0	104	75-127	
Benzene	25.0	26.0	104	71-124	
Chlorobenzene	25.0	24.9	99	72-120	
cis-1,2-Dichloroethene	25.0	26.4	105	74-124	
Ethylbenzene	25.0	25.1	100	77-123	
Methyl tert-butyl ether	25.0	25.8	103	64-127	
Tetrachloroethene	25.0	25.3	101	74-122	
Toluene	25.0	24.9	100	80-122	
trans-1,2-Dichloroethene	25.0	26.4	106	73-127	
Trichloroethene	25.0	26.4	105	74-123	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: D1602.D

Lab ID: LCSD 480-179534/25 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1-Dichloroethane	25.0	25.7	103	1	20	71-129	
1,1-Dichloroethene	25.0	25.4	102	0	16	58-121	
1,2,4-Trimethylbenzene	25.0	25.6	103	0	20	76-121	
1,2-Dichlorobenzene	25.0	25.3	101	0	20	80-124	
1,2-Dichloroethane	25.0	25.1	100	4	20	75-127	
Benzene	25.0	25.9	104	0	13	71-124	
Chlorobenzene	25.0	25.3	101	2	25	72-120	
cis-1,2-Dichloroethene	25.0	25.9	104	2	15	74-124	
Ethylbenzene	25.0	25.6	102	2	15	77-123	
Methyl tert-butyl ether	25.0	24.8	99	4	37	64-127	
Tetrachloroethene	25.0	25.5	102	1	20	74-122	
Toluene	25.0	25.2	101	1	15	80-122	
trans-1,2-Dichloroethene	25.0	26.1	104	1	20	73-127	
Trichloroethene	25.0	26.3	105	0	16	74-123	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Lab File ID: D1601.D Lab Sample ID: MB 480-179534/5
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: HP5975D Date Analyzed: 05/01/2014 21:21
 GC Column: RTX-CLPII ID: 0.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-179534/4	D1600.D	05/01/2014 21:00
	LCSD 480-179534/25	D1602.D	05/01/2014 21:56
1-2	480-59007-1	D1619.D	05/02/2014 03:53
1-3	480-59007-2	D1620.D	05/02/2014 04:14
TRIP BLANK	480-59007-3	D1621.D	05/02/2014 04:35

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Lab File ID: D1207.D BFB Injection Date: 04/22/2014
 Instrument ID: HP5975D BFB Injection Time: 04:32
 Analysis Batch No.: 177332

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.1
75	30.0 - 60.0 % of mass 95	50.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.5 (0.7)1
174	50.0 - 120.00 % of mass 95	78.5
175	5.0 - 9.0 % of mass 174	6.0 (7.6)1
176	95.0 - 101.0 % of mass 174	76.8 (97.9)1
177	5.0 - 9.0 % of mass 176	5.1 (6.6)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-177332/4	D1209.D	04/22/2014	05:18
	IC 480-177332/5	D1210.D	04/22/2014	05:39
	IC 480-177332/6	D1211.D	04/22/2014	06:01
	IC 480-177332/7	D1212.D	04/22/2014	06:22
	ICIS 480-177332/8	D1213.D	04/22/2014	06:43
	IC 480-177332/9	D1214.D	04/22/2014	07:04
	IC 480-177332/10	D1215.D	04/22/2014	07:25

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Lab File ID: D1597.D BFB Injection Date: 05/01/2014
 Instrument ID: HP5975D BFB Injection Time: 19:44
 Analysis Batch No.: 179534

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.4
75	30.0 - 60.0 % of mass 95	49.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.5 (0.6)1
174	50.0 - 120.00 % of mass 95	81.0
175	5.0 - 9.0 % of mass 174	5.8 (7.2)1
176	95.0 - 101.0 % of mass 174	78.0 (96.3)1
177	5.0 - 9.0 % of mass 176	5.2 (6.7)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-179534/2	D1598.D	05/01/2014	20:06
	LCS 480-179534/4	D1600.D	05/01/2014	21:00
	MB 480-179534/5	D1601.D	05/01/2014	21:21
	LCSD 480-179534/25	D1602.D	05/01/2014	21:56
1-2	480-59007-1	D1619.D	05/02/2014	03:53
1-3	480-59007-2	D1620.D	05/02/2014	04:14
TRIP BLANK	480-59007-3	D1621.D	05/02/2014	04:35

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Sample No.: ICIS 480-177332/8 Date Analyzed: 04/22/2014 06:43
 Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53(mm)
 Lab File ID (Standard): D1213.D Heated Purge: (Y/N) N
 Calibration ID: 18122

	FB		CBZ		DCB	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	151606	4.83	293975	7.15	255178	9.06
UPPER LIMIT	303212	5.33	587950	7.65	510356	9.56
LOWER LIMIT	75803	4.33	146988	6.65	127589	8.56
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCVIS 480-179534/2	171609	4.82	351145	7.15	313760	9.05

FB = Fluorobenzene (IS)
 CBZ = Chlorobenzene-d5
 DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Sample No.: CCVIS 480-179534/2 Date Analyzed: 05/01/2014 20:06
 Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53(mm)
 Lab File ID (Standard): D1598.D Heated Purge: (Y/N) N
 Calibration ID: 18125

	FB		CBZ		DCB		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	171609	4.82	351145	7.15	313760	9.05	
UPPER LIMIT	343218	5.32	702290	7.65	627520	9.55	
LOWER LIMIT	85805	4.32	175573	6.65	156880	8.55	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-179534/4	158333	4.82	328372	7.15	285095	9.05	
MB 480-179534/5	154152	4.82	306125	7.15	268218	9.05	
LCSD 480-179534/25	158435	4.82	318078	7.15	278417	9.05	
480-59007-1	1-2	149016	4.83	288801	7.15	255531	9.05
480-59007-2	1-3	157708	4.83	312971	7.15	274940	9.05
480-59007-3	TRIP BLANK	154332	4.83	305404	7.15	265823	9.05

FB = Fluorobenzene (IS)
 CBZ = Chlorobenzene-d5
 DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: 1-2 Lab Sample ID: 480-59007-1
 Matrix: Water Lab File ID: D1619.D
 Analysis Method: 8260C Date Collected: 04/23/2014 13:40
 Sample wt/vol: 5(mL) Date Analyzed: 05/02/2014 03:53
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.23
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.41
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.73
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.79
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.72
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.77
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.78
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.84
78-93-3	2-Butanone (MEK)	10	U	10	1.3
591-78-6	2-Hexanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1
67-64-1	Acetone	10	U	10	3.0
71-43-2	Benzene	1.0	U	1.0	0.41
75-27-4	Bromodichloromethane	1.0	U	1.0	0.39
75-25-2	Bromoform	1.0	U	1.0	0.26
74-83-9	Bromomethane	1.0	U	1.0	0.69
75-15-0	Carbon disulfide	1.0	U	1.0	0.19
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.27
108-90-7	Chlorobenzene	1.0	U	1.0	0.75
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.34
74-87-3	Chloromethane	1.0	U	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.36
110-82-7	Cyclohexane	1.0	U	1.0	0.18
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: 1-2 Lab Sample ID: 480-59007-1
 Matrix: Water Lab File ID: D1619.D
 Analysis Method: 8260C Date Collected: 04/23/2014 13:40
 Sample wt/vol: 5(mL) Date Analyzed: 05/02/2014 03:53
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.74
98-82-8	Isopropylbenzene	1.0	U	1.0	0.79
79-20-9	Methyl acetate	2.5	U	2.5	0.50
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.16
108-87-2	Methylcyclohexane	1.0	U	1.0	0.16
75-09-2	Methylene Chloride	1.0	U	1.0	0.44
100-42-5	Styrene	1.0	U	1.0	0.73
127-18-4	Tetrachloroethene	1.0	U	1.0	0.36
108-88-3	Toluene	1.0	U	1.0	0.51
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.37
79-01-6	Trichloroethene	1.0	U	1.0	0.46
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.88
75-01-4	Vinyl chloride	1.0	U	1.0	0.90
1330-20-7	Xylenes, Total	2.0	U	2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		66-137
460-00-4	4-Bromofluorobenzene (Surr)	114		73-120
2037-26-5	Toluene-d8 (Surr)	94		71-126
1868-53-7	Dibromofluoromethane (Surr)	95		60-140

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\1619.D
 Lims ID: 480-59007-A-1 Lab Sample ID: 480-59007-1
 Client ID: 1-2
 Sample Type: Client
 Inject. Date: 02-May-2014 03:53:30 ALS Bottle#: 18 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-59007-A-1
 Misc. Info.: 480-0031670-022
 Operator ID: CDC Instrument ID: HP5975D
 Method: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 02-May-2014 10:09:45 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK035

First Level Reviewer: quirkp

Date: 02-May-2014 10:11:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.819	0.006	98	149016	25.0	
* 2 Chlorobenzene-d5	82	7.147	7.147	0.000	87	288801	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.050	9.049	0.001	96	255531	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.337	0.006	58	210020	23.6	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.587	0.006	0	124609	21.4	
\$ 5 Toluene-d8 (Surr)	98	6.014	6.007	0.007	94	756347	23.5	
\$ 6 4-Bromofluorobenzene (Surr	174	8.099	8.098	0.001	88	274738	28.6	
10 Dichlorodifluoromethane	85		1.325					
12 Chloromethane	50		1.435					
13 Vinyl chloride	62		1.539					
14 Bromomethane	94		1.801					
15 Chloroethane	64		1.898					
17 Trichlorofluoromethane	101		2.118					
22 1,1-Dichloroethene	96		2.490					
21 1,1,2-Trichloro-1,2,2-trif	101		2.545					
23 Acetone	43		2.587					
26 Carbon disulfide	76		2.667					
27 Methyl acetate	43		2.856					
30 Methylene Chloride	84		2.935					
32 Methyl tert-butyl ether	73		3.136					
34 trans-1,2-Dichloroethene	96		3.142					
39 1,1-Dichloroethane	63		3.490					
45 cis-1,2-Dichloroethene	96		3.959					
43 2-Butanone (MEK)	43		3.983					
50 Chloroform	83		4.209					
51 1,1,1-Trichloroethane	97		4.319					
52 Cyclohexane	56		4.337					
55 Carbon tetrachloride	117		4.435					
57 Benzene	78		4.605					
58 1,2-Dichloroethane	62		4.648					
1 1,4-Difluorobenzene	114		4.904					

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95		5.093					
64 Methylcyclohexane	83		5.203					
65 1,2-Dichloropropane	63		5.276					
68 Dichlorobromomethane	83		5.501					
72 cis-1,3-Dichloropropene	75		5.825					
73 4-Methyl-2-pentanone (MIBK)	43		5.934					
74 Toluene	92		6.062					
77 trans-1,3-Dichloropropene	75		6.257					
79 1,1,2-Trichloroethane	83		6.410					
81 Tetrachloroethene	166		6.483					
80 2-Hexanone	43		6.580					
83 Chlorodibromomethane	129		6.721					
84 Ethylene Dibromide	107		6.806					
87 Chlorobenzene	112		7.172					
88 Ethylbenzene	91		7.239					
90 m-Xylene & p-Xylene	106		7.330					
91 o-Xylene	106		7.653					
92 Styrene	104		7.672					
95 Bromoform	173		7.861					
94 Isopropylbenzene	105		7.946					
97 1,1,2,2-Tetrachloroethane	83		8.239					
102 1,3,5-Trimethylbenzene	105		8.422					
107 1,2,4-Trimethylbenzene	105		8.739					
111 1,3-Dichlorobenzene	146		8.995					
113 1,4-Dichlorobenzene	146		9.068					
116 1,2-Dichlorobenzene	146		9.385					
117 1,2-Dibromo-3-Chloropropan	75		10.055					
119 1,2,4-Trichlorobenzene	180		10.726					
S 124 Xylenes, Total	1		30.000					

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1619.D

Injection Date: 02-May-2014 03:53:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: 480-59007-A-1

Lab Sample ID: 480-59007-1

Worklist Smp#: 22

Client ID: 1-2

Purge Vol: 5.000 mL

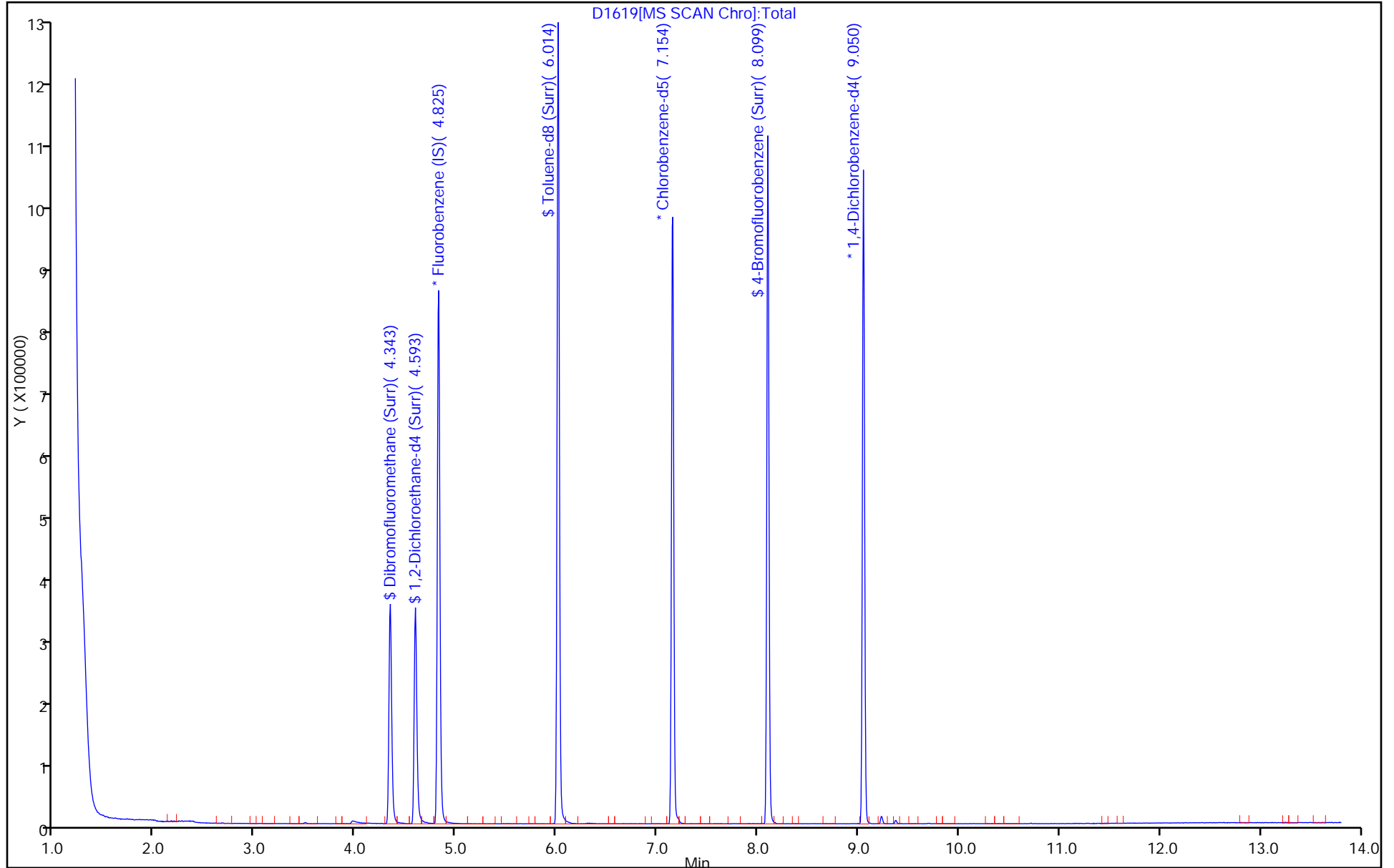
Dil. Factor: 1.0000

ALS Bottle#: 18

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: 1-3 Lab Sample ID: 480-59007-2
 Matrix: Water Lab File ID: D1620.D
 Analysis Method: 8260C Date Collected: 04/23/2014 15:45
 Sample wt/vol: 5(mL) Date Analyzed: 05/02/2014 04:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.23
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.41
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.73
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.79
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.72
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.77
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.78
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.84
78-93-3	2-Butanone (MEK)	10	U	10	1.3
591-78-6	2-Hexanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1
67-64-1	Acetone	10	U	10	3.0
71-43-2	Benzene	1.0	U	1.0	0.41
75-27-4	Bromodichloromethane	1.0	U	1.0	0.39
75-25-2	Bromoform	1.0	U	1.0	0.26
74-83-9	Bromomethane	1.0	U	1.0	0.69
75-15-0	Carbon disulfide	1.0	U	1.0	0.19
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.27
108-90-7	Chlorobenzene	1.0	U	1.0	0.75
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.34
74-87-3	Chloromethane	1.0	U	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.36
110-82-7	Cyclohexane	1.0	U	1.0	0.18
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: 1-3 Lab Sample ID: 480-59007-2
 Matrix: Water Lab File ID: D1620.D
 Analysis Method: 8260C Date Collected: 04/23/2014 15:45
 Sample wt/vol: 5(mL) Date Analyzed: 05/02/2014 04:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.74
98-82-8	Isopropylbenzene	1.0	U	1.0	0.79
79-20-9	Methyl acetate	2.5	U	2.5	0.50
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.16
108-87-2	Methylcyclohexane	1.0	U	1.0	0.16
75-09-2	Methylene Chloride	1.0	U	1.0	0.44
100-42-5	Styrene	1.0	U	1.0	0.73
127-18-4	Tetrachloroethene	1.0	U	1.0	0.36
108-88-3	Toluene	1.0	U	1.0	0.51
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.37
79-01-6	Trichloroethene	1.0	U	1.0	0.46
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.88
75-01-4	Vinyl chloride	1.0	U	1.0	0.90
1330-20-7	Xylenes, Total	2.0	U	2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		66-137
460-00-4	4-Bromofluorobenzene (Surr)	114		73-120
2037-26-5	Toluene-d8 (Surr)	93		71-126
1868-53-7	Dibromofluoromethane (Surr)	91		60-140

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\1620.D
 Lims ID: 480-59007-A-2 Lab Sample ID: 480-59007-2
 Client ID: 1-3
 Sample Type: Client
 Inject. Date: 02-May-2014 04:14:30 ALS Bottle#: 19 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-59007-A-2
 Misc. Info.: 480-0031670-023
 Operator ID: CDC Instrument ID: HP5975D
 Method: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 02-May-2014 10:09:45 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK035

First Level Reviewer: quirkp

Date: 02-May-2014 10:12:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.819	0.006	98	157708	25.0	
* 2 Chlorobenzene-d5	82	7.153	7.147	0.006	86	312971	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.049	9.049	0.000	96	274940	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.337	0.006	58	214416	22.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.587	0.006	0	130308	21.1	
\$ 5 Toluene-d8 (Surr)	98	6.013	6.007	0.006	93	812576	23.3	
\$ 6 4-Bromofluorobenzene (Surr	174	8.098	8.098	0.000	88	295562	28.4	
10 Dichlorodifluoromethane	85		1.325					
12 Chloromethane	50		1.435					
13 Vinyl chloride	62		1.539					
14 Bromomethane	94		1.801					
15 Chloroethane	64		1.898					
17 Trichlorofluoromethane	101		2.118					
22 1,1-Dichloroethene	96		2.490					
21 1,1,2-Trichloro-1,2,2-trif	101		2.545					
23 Acetone	43		2.587					
26 Carbon disulfide	76		2.667					
27 Methyl acetate	43		2.856					
30 Methylene Chloride	84		2.935					
32 Methyl tert-butyl ether	73		3.136					
34 trans-1,2-Dichloroethene	96		3.142					
39 1,1-Dichloroethane	63		3.490					
45 cis-1,2-Dichloroethene	96		3.959					
43 2-Butanone (MEK)	43		3.983					
50 Chloroform	83		4.209					
51 1,1,1-Trichloroethane	97		4.319					
52 Cyclohexane	56		4.337					
55 Carbon tetrachloride	117		4.435					
57 Benzene	78		4.605					
58 1,2-Dichloroethane	62		4.648					
1 1,4-Difluorobenzene	114		4.904					

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95		5.093					
64 Methylcyclohexane	83		5.203					
65 1,2-Dichloropropane	63		5.276					
68 Dichlorobromomethane	83		5.501					
72 cis-1,3-Dichloropropene	75		5.825					
73 4-Methyl-2-pentanone (MIBK)	43		5.934					
74 Toluene	92		6.062					
77 trans-1,3-Dichloropropene	75		6.257					
79 1,1,2-Trichloroethane	83		6.410					
81 Tetrachloroethene	166		6.483					
80 2-Hexanone	43		6.580					
83 Chlorodibromomethane	129		6.721					
84 Ethylene Dibromide	107		6.806					
87 Chlorobenzene	112		7.172					
88 Ethylbenzene	91		7.239					
90 m-Xylene & p-Xylene	106		7.330					
91 o-Xylene	106		7.653					
92 Styrene	104		7.672					
95 Bromoform	173		7.861					
94 Isopropylbenzene	105		7.946					
97 1,1,2,2-Tetrachloroethane	83		8.239					
102 1,3,5-Trimethylbenzene	105		8.422					
107 1,2,4-Trimethylbenzene	105		8.739					
111 1,3-Dichlorobenzene	146		8.995					
113 1,4-Dichlorobenzene	146		9.068					
116 1,2-Dichlorobenzene	146		9.385					
117 1,2-Dibromo-3-Chloropropan	75		10.055					
119 1,2,4-Trichlorobenzene	180		10.726					
S 124 Xylenes, Total	1		30.000					

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1620.D

Injection Date: 02-May-2014 04:14:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: 480-59007-A-2

Lab Sample ID: 480-59007-2

Worklist Smp#: 23

Client ID: 1-3

Purge Vol: 5.000 mL

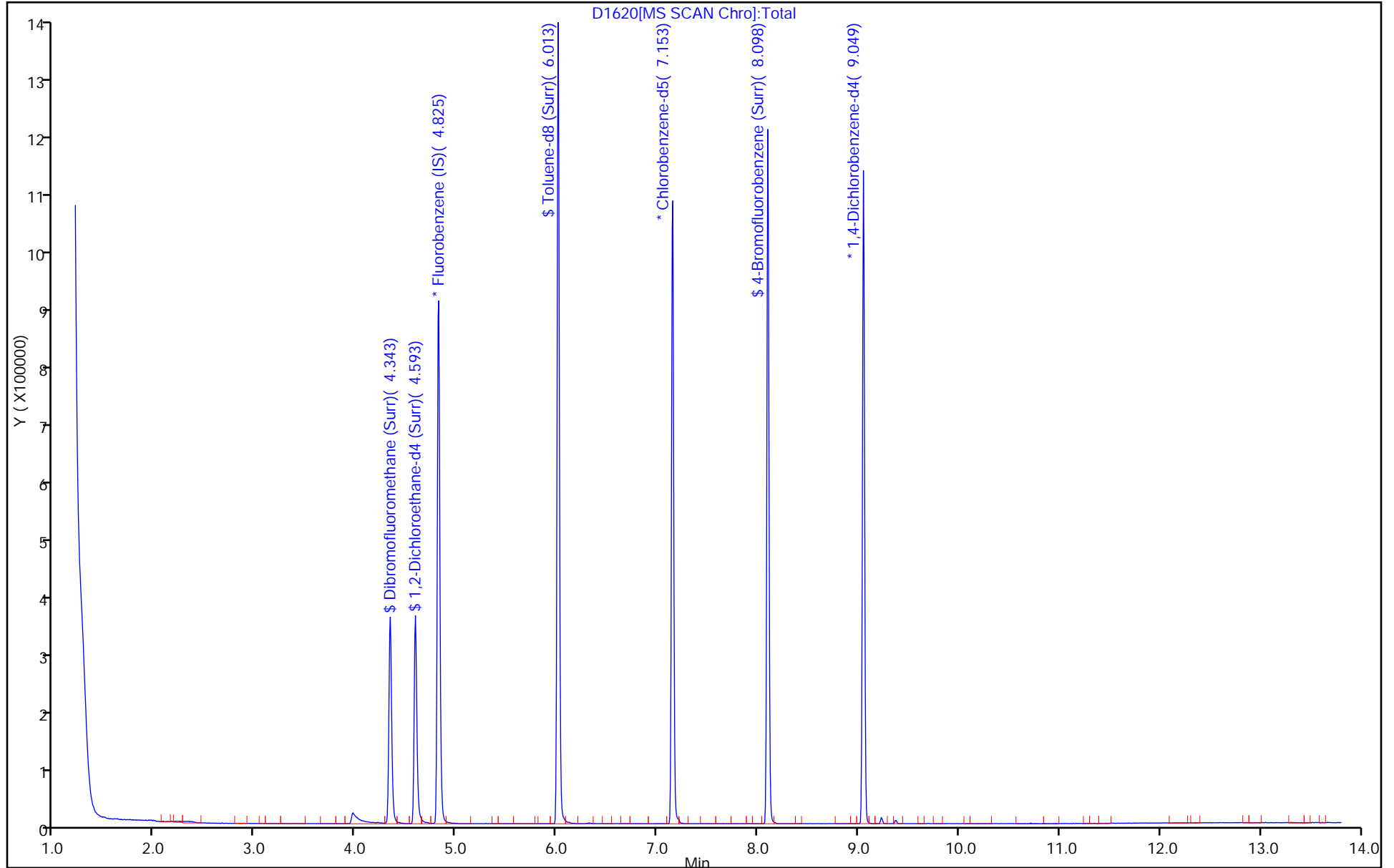
Dil. Factor: 1.0000

ALS Bottle#: 19

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: TRIP BLANK Lab Sample ID: 480-59007-3
 Matrix: Water Lab File ID: D1621.D
 Analysis Method: 8260C Date Collected: 04/23/2014 00:00
 Sample wt/vol: 5(mL) Date Analyzed: 05/02/2014 04:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.23
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.41
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.73
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.79
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.72
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.77
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.78
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.84
78-93-3	2-Butanone (MEK)	10	U	10	1.3
591-78-6	2-Hexanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1
67-64-1	Acetone	10	U	10	3.0
71-43-2	Benzene	1.0	U	1.0	0.41
75-27-4	Bromodichloromethane	1.0	U	1.0	0.39
75-25-2	Bromoform	1.0	U	1.0	0.26
74-83-9	Bromomethane	1.0	U	1.0	0.69
75-15-0	Carbon disulfide	1.0	U	1.0	0.19
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.27
108-90-7	Chlorobenzene	1.0	U	1.0	0.75
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.34
74-87-3	Chloromethane	1.0	U	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.36
110-82-7	Cyclohexane	1.0	U	1.0	0.18
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: TRIP BLANK Lab Sample ID: 480-59007-3
 Matrix: Water Lab File ID: D1621.D
 Analysis Method: 8260C Date Collected: 04/23/2014 00:00
 Sample wt/vol: 5(mL) Date Analyzed: 05/02/2014 04:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.74
98-82-8	Isopropylbenzene	1.0	U	1.0	0.79
79-20-9	Methyl acetate	2.5	U	2.5	0.50
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.16
108-87-2	Methylcyclohexane	1.0	U	1.0	0.16
75-09-2	Methylene Chloride	1.0	U	1.0	0.44
100-42-5	Styrene	1.0	U	1.0	0.73
127-18-4	Tetrachloroethene	1.0	U	1.0	0.36
108-88-3	Toluene	1.0	U	1.0	0.51
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.37
79-01-6	Trichloroethene	1.0	U	1.0	0.46
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.88
75-01-4	Vinyl chloride	1.0	U	1.0	0.90
1330-20-7	Xylenes, Total	2.0	U	2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		66-137
460-00-4	4-Bromofluorobenzene (Surr)	113		73-120
2037-26-5	Toluene-d8 (Surr)	92		71-126
1868-53-7	Dibromofluoromethane (Surr)	91		60-140

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\1621.D
 Lims ID: 480-59007-A-3 Lab Sample ID: 480-59007-3
 Client ID: TRIP BLANK
 Sample Type: Client
 Inject. Date: 02-May-2014 04:35:30 ALS Bottle#: 20 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-59007-A-3
 Misc. Info.: 480-0031670-024
 Operator ID: CDC Instrument ID: HP5975D
 Method: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 02-May-2014 10:09:45 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK035

First Level Reviewer: quirkp

Date: 02-May-2014 10:12:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.819	0.006	98	154332	25.0	
* 2 Chlorobenzene-d5	82	7.153	7.147	0.006	86	305404	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.049	9.049	0.000	96	265823	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.337	0.006	58	209500	22.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.587	0.006	0	124510	20.6	
\$ 5 Toluene-d8 (Surr)	98	6.013	6.007	0.006	94	782924	23.0	
\$ 6 4-Bromofluorobenzene (Surr	174	8.098	8.098	0.000	88	286046	28.2	
10 Dichlorodifluoromethane	85		1.325					
12 Chloromethane	50		1.435					
13 Vinyl chloride	62		1.539					
14 Bromomethane	94		1.801					
15 Chloroethane	64		1.898					
17 Trichlorofluoromethane	101		2.118					
22 1,1-Dichloroethene	96		2.490					
21 1,1,2-Trichloro-1,2,2-trif	101		2.545					
23 Acetone	43		2.587					
26 Carbon disulfide	76		2.667					
27 Methyl acetate	43		2.856					
30 Methylene Chloride	84		2.935					
32 Methyl tert-butyl ether	73		3.136					
34 trans-1,2-Dichloroethene	96		3.142					
39 1,1-Dichloroethane	63		3.490					
45 cis-1,2-Dichloroethene	96		3.959					
43 2-Butanone (MEK)	43		3.983					
50 Chloroform	83		4.209					
51 1,1,1-Trichloroethane	97		4.319					
52 Cyclohexane	56		4.337					
55 Carbon tetrachloride	117		4.435					
57 Benzene	78		4.605					
58 1,2-Dichloroethane	62		4.648					
1 1,4-Difluorobenzene	114		4.904					

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95		5.093					
64 Methylcyclohexane	83		5.203					
65 1,2-Dichloropropane	63		5.276					
68 Dichlorobromomethane	83		5.501					
72 cis-1,3-Dichloropropene	75		5.825					
73 4-Methyl-2-pentanone (MIBK)	43		5.934					
74 Toluene	92		6.062					
77 trans-1,3-Dichloropropene	75		6.257					
79 1,1,2-Trichloroethane	83		6.410					
81 Tetrachloroethene	166		6.483					
80 2-Hexanone	43		6.580					
83 Chlorodibromomethane	129		6.721					
84 Ethylene Dibromide	107		6.806					
87 Chlorobenzene	112		7.172					
88 Ethylbenzene	91		7.239					
90 m-Xylene & p-Xylene	106		7.330					
91 o-Xylene	106		7.653					
92 Styrene	104		7.672					
95 Bromoform	173		7.861					
94 Isopropylbenzene	105		7.946					
97 1,1,2,2-Tetrachloroethane	83		8.239					
102 1,3,5-Trimethylbenzene	105		8.422					
107 1,2,4-Trimethylbenzene	105		8.739					
111 1,3-Dichlorobenzene	146		8.995					
113 1,4-Dichlorobenzene	146		9.068					
116 1,2-Dichlorobenzene	146		9.385					
117 1,2-Dibromo-3-Chloropropan	75		10.055					
119 1,2,4-Trichlorobenzene	180		10.726					
S 124 Xylenes, Total	1		30.000					

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1621.D

Injection Date: 02-May-2014 04:35:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: 480-59007-A-3

Lab Sample ID: 480-59007-3

Worklist Smp#: 24

Client ID: TRIP BLANK

Purge Vol: 5.000 mL

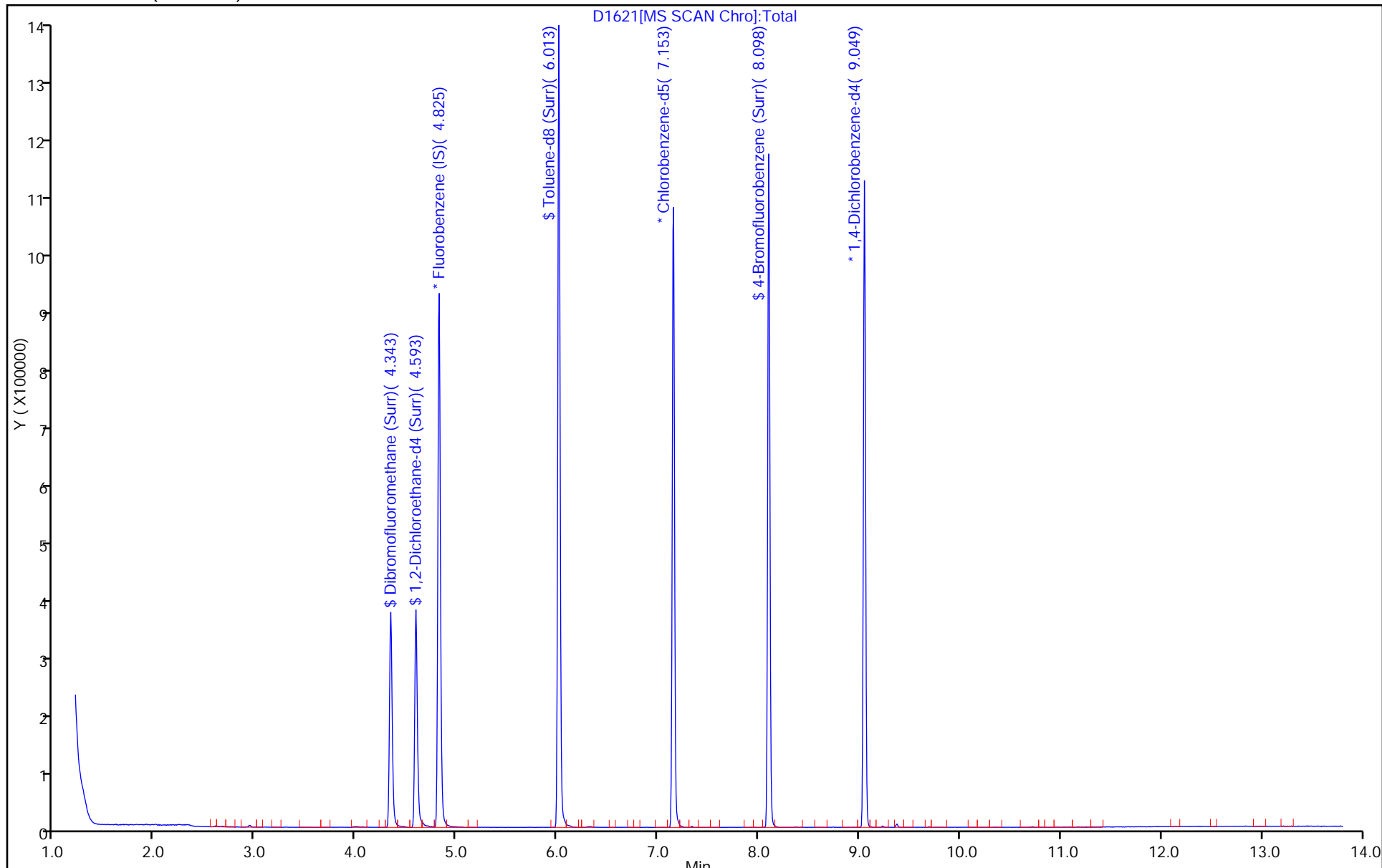
Dil. Factor: 1.0000

ALS Bottle#: 20

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1 Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18 Calibration End Date: 04/22/2014 07:25 Calibration ID: 18122

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-177332/5	D1210.D
Level 2	IC 480-177332/6	D1211.D
Level 3	IC 480-177332/7	D1212.D
Level 4	IC 480-177332/4	D1209.D
Level 5	ICIS 480-177332/8	D1213.D
Level 6	IC 480-177332/9	D1214.D
Level 7	IC 480-177332/10	D1215.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	1.4387 1.4699	1.5727 1.3434	1.4500		1.5448	Ave	1.4699			0.1000	5.6		20.0				
Chloromethane	2.5250 2.0526	2.3817 1.8199	2.1284		2.1719	Ave	2.1799			0.1000	11.0		20.0				
Vinyl chloride	2.1435 1.9146	2.0790 1.7299	1.9143	2.5795	2.0240	Ave	2.0550			0.1000	13.0		20.0				
Butadiene	2.3464 1.9126	2.2711 1.7245	2.0062		2.0365	Ave	2.0495				11.0		20.0				
Bromomethane	1.1142 1.0073	1.1173 0.9168	0.9734		1.0928	Ave	1.0370			0.1000	8.1		20.0				
Chloroethane	1.1285 1.1053	1.2525 1.0103	1.1134		1.1645	Ave	1.1291			0.1000	7.0		20.0				
Dichlorofluoromethane	2.6748 2.5457	2.7736 2.2324	2.4972		2.6866	Ave	2.5684				7.5		20.0				
Trichlorofluoromethane	1.2752 1.8228	1.6104 1.7137	1.5162		1.8100	Ave	1.6247			0.1000	13.0		20.0				
Ethyl ether	1.5462 1.5274	1.5820 1.3992	1.5230		1.5526	Ave	1.5218				4.2		20.0				
Acrolein	0.1621 0.1980	0.1720 0.1931	0.1738		0.1969	Ave	0.1827				8.3		20.0				
1,1-Dichloroethene	1.6190 1.5010	1.5781 1.3444	1.4675		1.5329	Ave	1.5071			0.1000	6.4		20.0				
1,1,2-Trichloro-1,2,2-trifluoroethane	1.4993 1.5657	1.6987 1.4517	1.5617		1.6261	Ave	1.5672			0.1000	5.6		20.0				
Acetone	0.6131 0.3512	0.4544 0.3924	0.4150		0.4283	Ave	0.4424			0.1000	20.0		20.0				
Iodomethane	2.7043 2.5633	2.7216 2.2646	2.5136		2.6599	Ave	2.5712				6.6		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Buffalo

Job No.: 480-59007-1

Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D

GC Column: RTX-CLPII

ID: 0.53 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18

Calibration End Date: 04/22/2014 07:25

Calibration ID: 18122

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Carbon disulfide	5.5381 5.2787	5.7440 4.6449	5.1698		5.4673	Ave		5.3071			0.1000	7.2	20.0				
Allyl chloride	3.1499 2.9348	3.1427 2.6510	2.9119		3.0052	Ave		2.9659				6.2	20.0				
Methyl acetate	1.4032 1.3080	1.4134 1.4542	1.4001		1.3796	Ave		1.3931			0.1000	3.5	20.0				
Methylene Chloride	1.7259 1.5859	1.7633 1.4850	1.6387		1.7163	Ave		1.6525			0.1000	6.3	20.0				
2-Methyl-2-propanol	0.0954 0.0699	0.0972 0.0771	0.0925		0.0886	Ave		0.0868				13.0	20.0				
Methyl tert-butyl ether	5.0800 5.1893	5.3569 4.5977	5.1222		5.2667	Ave		5.1021			0.1000	5.2	20.0				
trans-1,2-Dichloroethene	1.6032 1.5903	1.7002 1.4175	1.5935		1.6402	Ave		1.5908			0.1000	5.9	20.0				
Acrylonitrile	0.7792 0.6214	0.7117 0.6187	0.6715	0.9391	0.6482	Ave		0.7128				16.0	20.0				
Hexane	3.0496 2.7515	3.0408 2.5184	2.7164		2.7871	Ave		2.8106				7.3	20.0				
1,1-Dichloroethane	3.3844 3.1873	3.4560 2.8490	3.1954		3.2900	Ave		3.2270			0.2000	6.6	20.0				
Vinyl acetate	4.0862 3.7542	3.9220 3.7109	3.9507		3.7706	Ave		3.8658				3.7	20.0				
2,2-Dichloropropane	1.6890 1.5329	1.7686 1.2658	1.5777		1.6510	Ave		1.5808				11.0	20.0				
cis-1,2-Dichloroethene	1.7392 1.7109	1.8476 1.5498	1.7055		1.7942	Ave		1.7245			0.1000	5.9	20.0				
2-Butanone (MEK)	1.0137 0.8523	0.9093 0.8597	0.8555		0.8661	Ave		0.8928			0.1000	7.0	20.0				
Chlorobromomethane	0.8774 0.8582	0.9075 0.7906	0.8580		0.8815	Ave		0.8622				4.6	20.0				
Tetrahydrofuran	0.6950 0.5339	0.6203 0.5428	0.5937		0.5480	Ave		0.5890				10.0	20.0				
Chloroform	3.0017 2.8462	3.0724 2.5562	2.8532		2.9228	Ave		2.8754			0.2000	6.2	20.0				
1,1,1-Trichloroethane	2.3191 2.3254	2.4962 2.0556	2.3180		2.3930	Ave		2.3179			0.1000	6.3	20.0				
Cyclohexane	3.4808 3.2841	3.6123 2.9625	3.3140		3.4144	Ave		3.3447			0.1000	6.6	20.0				
Carbon tetrachloride	2.1792 2.1339	2.2813 1.9448	2.1265		2.1746	Ave		2.1401			0.1000	5.2	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1 Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18 Calibration End Date: 04/22/2014 07:25 Calibration ID: 18122

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	2.3141 2.1256	2.2999 1.9443	2.1448		2.1730	Ave		2.1670			6.2		20.0				
Isobutyl alcohol	0.0762 0.0702	0.0712 0.0715	0.0682		0.0740	Ave		0.0719			4.0		20.0				
Benzene	6.6282 6.1465	6.6624 5.6821	6.2507		6.2329	Ave		6.2671		0.5000	5.7		20.0				
1,2-Dichloroethane	2.5068 2.2466	2.4540 2.1642	2.4769		2.3238	Ave		2.3620		0.1000	5.9		20.0				
n-Heptane	3.1104 3.1741	3.5957 3.0304	3.2950		3.1938	Ave		3.2332			6.1		20.0				
Trichloroethene	1.7014 1.5758	1.7044 1.4799	1.6208		1.6180	Ave		1.6167		0.2000	5.2		20.0				
Methylcyclohexane	3.0377 2.9386	3.1690 2.6855	2.8965		2.9946	Ave		2.9536		0.1000	5.5		20.0				
1,2-Dichloropropane	1.7782 1.7105	1.7928 1.6426	1.7555		1.7247	Ave		1.7340		0.1000	3.1		20.0				
Dibromomethane	1.0500 1.0151	1.0768 0.9628	1.0523		1.0227	Ave		1.0299		0.1000	3.9		20.0				
1,4-Dioxane	0.0020 0.0065	0.0057 0.0061	0.0063		0.0067	Lin1	-0.071	0.0063						0.9980		0.9900	
Bromodichloromethane	2.3176 2.1897	2.2869 2.0920	2.2192		2.2134	Ave		2.2198		0.2000	3.6		20.0				
2-Chloroethyl vinyl ether	1.1855 1.1830	1.2264 1.2318	1.2676		1.1842	Ave		1.2131			2.9		20.0				
cis-1,3-Dichloropropene	2.7669 2.6304	2.7131 2.5821	2.7230	3.9396	2.6513	Ave		2.8580		0.2000	17.0		20.0				
4-Methyl-2-pentanone (MIBK)	1.0205 1.0475	1.0932 1.0416	1.1016		1.0672	Ave		1.0619		0.1000	3.0		20.0				
Toluene	2.0519 1.9037	1.9933 1.8569	1.9444		1.9177	Ave		1.9447		0.4000	3.6		20.0				
trans-1,3-Dichloropropene	1.2134 1.1979	1.2004 1.2132	1.2262	1.6737	1.1954	Ave		1.2743		0.1000	14.0		20.0				
Ethyl methacrylate	1.0767 1.1315	1.1297 1.1645	1.1705		1.1213	Ave		1.1324			3.0		20.0				
1,1,2-Trichloroethane	0.6435 0.6053	0.6123 0.6050	0.6298		0.6059	Ave		0.6170		0.1000	2.6		20.0				
Tetrachloroethene	0.8868 0.8312	0.8680 0.8015	0.8513		0.8379	Ave		0.8461		0.2000	3.5		20.0				
1,3-Dichloropropane	1.3402 1.2612	1.2829 1.2736	1.3210		1.2689	Ave		1.2913			2.5		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1 Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18 Calibration End Date: 04/22/2014 07:25 Calibration ID: 18122

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
2-Hexanone	0.7610 0.6936	0.7292 0.7220	0.7520		0.7044	Ave		0.7270			0.1000	3.6	20.0				
Dibromochloromethane	0.8315 0.8653	0.8311 0.8616	0.8484		0.8552	Ave		0.8488			0.1000	1.7	20.0				
1,2-Dibromoethane	0.7787 0.7746	0.7841 0.7737	0.7970		0.7754	Ave		0.7806				1.1	20.0				
Chlorobenzene	2.2762 2.1594	2.2109 2.0951	2.2037		2.1659	Ave		2.1852			0.5000	2.8	20.0				
1,1,1,2-Tetrachloroethane	0.7681 0.7923	0.7991 0.7459	0.7833		0.7922	Ave		0.7802				2.6	20.0				
Ethylbenzene	3.8054 3.6407	3.7227 3.5112	3.7283		3.6558	Ave		3.6773			0.1000	2.7	20.0				
m,p-Xylene	1.4312 1.4244	1.4542 1.3698	1.4407		1.4306	Ave		1.4252			0.1000	2.0	20.0				
o-Xylene	1.4474 1.4159	1.4335 1.3324	1.4366		1.4248	Ave		1.4151			0.3000	3.0	20.0				
Styrene	2.4251 2.4086	2.4115 2.3380	2.4406		2.4007	Ave		2.4041			0.3000	1.5	20.0				
Bromoform	0.5240 0.5838	0.5323 0.5892	0.5608		0.5706	Ave		0.5601			0.1000	4.8	20.0				
Isopropylbenzene	4.4115 4.4197	4.3560 4.2087	4.3422		4.3776	Ave		4.3526			0.1000	1.8	20.0				
Bromobenzene	1.0295 1.0519	1.0269 1.0355	1.0309		1.0292	Ave		1.0340				0.9	20.0				
1,1,2,2-Tetrachloroethane	1.2515 1.2571	1.2365 1.2460	1.2487		1.2398	Ave		1.2466			0.3000	0.6	20.0				
1,2,3-Trichloropropane	0.3928 0.3670	0.3512 0.3644	0.3700		0.3630	Ave		0.3681				3.7	20.0				
trans-1,4-Dichloro-2-butene	0.1719 0.3689	0.2425 0.4034	0.2939		0.3336	Lin1	-0.364	0.3855						0.9930		0.9900	
N-Propylbenzene	5.2577 5.1046	5.0865 4.8475	5.0930		5.0505	Ave		5.0733				2.6	20.0				
2-Chlorotoluene	0.9664 0.9861	0.9961 0.9360	0.9747		0.9867	Ave		0.9743				2.2	20.0				
1,3,5-Trimethylbenzene	3.6159 3.6294	3.6121 3.3548	3.6035		3.6202	Ave		3.5726				3.0	20.0				
4-Chlorotoluene	1.0667 1.0046	1.0165 0.9763	1.0066		0.9820	Ave		1.0088				3.2	20.0				
tert-Butylbenzene	0.7706 0.7602	0.7304 0.7155	0.7626		0.7427	Ave		0.7470				2.8	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1 Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18 Calibration End Date: 04/22/2014 07:25 Calibration ID: 18122

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,2,4-Trimethylbenzene	3.7341 3.7036	3.6948 3.4613	3.7475		3.7088	Ave		3.6750			2.9		20.0				
sec-Butylbenzene	4.6551 4.6370	4.6105 4.2088	4.6224		4.6286	Ave		4.5604			3.8		20.0				
4-Isopropyltoluene	3.9109 3.8685	3.9134 3.4430	3.8953		3.8483	Ave		3.8132			4.8		20.0				
1,3-Dichlorobenzene	2.0411 1.9244	1.9705 1.8686	1.9775		1.9177	Ave		1.9500		0.6000	3.1		20.0				
1,4-Dichlorobenzene	2.0464 1.9449	1.9594 1.8986	1.9735		1.9204	Ave		1.9572		0.5000	2.6		20.0				
n-Butylbenzene	3.6259 3.6288	3.6628 3.1675	3.6148		3.6026	Ave		3.5504			5.3		20.0				
1,2-Dichlorobenzene	1.9902 1.9050	1.9024 1.8120	1.9115		1.8968	Ave		1.9030		0.4000	3.0		20.0				
1,2-Dibromo-3-Chloropropane	0.2428 0.2642	0.2492 0.2630	0.2555		0.2579	Ave		0.2554		0.0500	3.2		20.0				
1,2,4-Trichlorobenzene	1.3342 1.4092	1.3505 1.2850	1.3622		1.3883	Ave		1.3549		0.2000	3.2		20.0				
Hexachlorobutadiene	0.7235 0.7183	0.7079 0.5802	0.6963	1.1017	0.7022	Lin1	0.2008	0.6361						0.9900		0.9900	
Naphthalene	3.3948 3.7696	3.5451 3.6454	3.6018		3.7252	Ave		3.6137			3.7		20.0				
1,2,3-Trichlorobenzene	1.2070 1.2869	1.2548 1.2150	1.2434		1.2767	Ave		1.2473			2.6		20.0				
Dibromofluoromethane (Surr)	1.4290 1.4847	1.5795 1.3768	1.4836	1.5524	1.5235	Ave		1.4899			4.7		20.0				
1,2-Dichloroethane-d4 (Surr)	0.9555 0.9547	1.0193 0.9293	0.9787	1.0345	0.9656	Ave		0.9768			3.8		20.0				
Toluene-d8 (Surr)	2.7252 2.7679	2.8353 2.7811	2.8358	2.7916	2.7906	Ave		2.7896			1.4		20.0				
4-Bromofluorobenzene (Surr)	0.8051 0.8289	0.8394 0.8408	0.8498	0.8281	0.8243	Ave		0.8309			1.7		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo

Job No.: 480-59007-1

Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D

GC Column: RTX-CLPII

ID: 0.53 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18

Calibration End Date: 04/22/2014 07:25

Calibration ID: 18122

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-177332/5	D1210.D
Level 2	IC 480-177332/6	D1211.D
Level 3	IC 480-177332/7	D1212.D
Level 4	IC 480-177332/4	D1209.D
Level 5	ICIS 480-177332/8	D1213.D
Level 6	IC 480-177332/9	D1214.D
Level 7	IC 480-177332/10	D1215.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	9409 458380	46300 907834	92410		234194	1.00 50.0	5.00 100	10.0		25.0
Chloromethane	FB	Ave	16513 640091	70115 1229847	135651		329272	1.00 50.0	5.00 100	10.0		25.0
Vinyl chloride	FB	Ave	14018 597066	61206 1169031	122006	6274	306848	1.00 50.0	5.00 100	10.0	0.400	25.0
Butadiene	FB	Ave	15345 596433	66859 1165407	127858		308740	1.00 50.0	5.00 100	10.0		25.0
Bromomethane	FB	Ave	7287 314124	32892 619547	62037		165682	1.00 50.0	5.00 100	10.0		25.0
Chloroethane	FB	Ave	7380 344695	36873 682720	70961		176552	1.00 50.0	5.00 100	10.0		25.0
Dichlorofluoromethane	FB	Ave	17493 793861	81654 1508593	159156		407312	1.00 50.0	5.00 100	10.0		25.0
Trichlorofluoromethane	FB	Ave	8340 568439	47409 1158080	96629		274403	1.00 50.0	5.00 100	10.0		25.0
Ethyl ether	FB	Ave	10112 476321	46574 945583	97068		235384	1.00 50.0	5.00 100	10.0		25.0
Acrolein	FB	Ave	5302 308680	25319 652389	55393		149245	5.00 250	25.0 500	50.0		125
1,1-Dichloroethene	FB	Ave	10588 468095	46458 908533	93526		232392	1.00 50.0	5.00 100	10.0		25.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	9805 488252	50010 981002	99530		246523	1.00 50.0	5.00 100	10.0		25.0
Acetone	FB	Ave	20047 547613	66887 1325887	132249		324637	5.00 250	25.0 500	50.0		125
Iodomethane	FB	Ave	17686 799364	80122 1530338	160199		403262	1.00 50.0	5.00 100	10.0		25.0
Carbon disulfide	FB	Ave	36219 1646136	169102 3138933	329484		828882	1.00 50.0	5.00 100	10.0		25.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1 Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18 Calibration End Date: 04/22/2014 07:25 Calibration ID: 18122

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Allyl chloride	FB	Ave	20600 915210	92519 1791502	185581		455604	1.00 50.0	5.00 100	10.0		25.0
Methyl acetate	FB	Ave	45885 2039523	208043 4913667	446164		1045785	5.00 250	25.0 500	50.0		125
Methylene Chloride	FB	Ave	11287 494547	51910 1003559	104437		260208	1.00 50.0	5.00 100	10.0		25.0
2-Methyl-2-propanol	FB	Ave	6236 218032	28610 521052	58923		134309	10.0 500	50.0 1000	100		250
Methyl tert-butyl ether	FB	Ave	33223 1618277	157704 3107060	326454		798456	1.00 50.0	5.00 100	10.0		25.0
trans-1,2-Dichloroethene	FB	Ave	10485 495926	50054 957897	101557		248657	1.00 50.0	5.00 100	10.0		25.0
Acrylonitrile	FB	Ave	50958 1937802	209514 4181132	427963	22842	982756	10.0 500	50.0 1000	100	4.00	250
Hexane	FB	Ave	19944 858037	89521 1701900	173126		422548	1.00 50.0	5.00 100	10.0		25.0
1,1-Dichloroethane	FB	Ave	22134 993941	101743 1925309	203652		498779	1.00 50.0	5.00 100	10.0		25.0
Vinyl acetate	FB	Ave	53447 2341434	230927 5015523	503581		1143280	2.00 100	10.0 200	20.0		50.0
2,2-Dichloropropane	FB	Ave	11046 478032	52067 855391	100553		250308	1.00 50.0	5.00 100	10.0		25.0
cis-1,2-Dichloroethene	FB	Ave	11374 533524	54393 1047331	108696		272017	1.00 50.0	5.00 100	10.0		25.0
2-Butanone (MEK)	FB	Ave	33148 1328924	133850 2904903	272631		656505	5.00 250	25.0 500	50.0		125
Chlorobromomethane	FB	Ave	5738 267629	26717 534258	54683		133644	1.00 50.0	5.00 100	10.0		25.0
Tetrahydrofuran	FB	Ave	9090 333001	36520 733659	75680		166174	2.00 100	10.0 200	20.0		50.0
Chloroform	FB	Ave	19631 887590	90450 1727462	181844		443121	1.00 50.0	5.00 100	10.0		25.0
1,1,1-Trichloroethane	FB	Ave	15167 725160	73487 1389106	147730		362792	1.00 50.0	5.00 100	10.0		25.0
Cyclohexane	FB	Ave	22764 1024130	106346 2001980	211209		517647	1.00 50.0	5.00 100	10.0		25.0
Carbon tetrachloride	FB	Ave	14252 665455	67160 1314262	135529		329687	1.00 50.0	5.00 100	10.0		25.0
1,1-Dichloropropene	FB	Ave	15134 662875	67707 1313931	136694		329444	1.00 50.0	5.00 100	10.0		25.0
Isobutyl alcohol	FB	Ave	12465 546929	52380 1208353	108704		280549	25.0 1250	125 2500	250		625

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo

Job No.: 480-59007-1

Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D

GC Column: RTX-CLPII

ID: 0.53 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18

Calibration End Date: 04/22/2014 07:25

Calibration ID: 18122

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	43348 1916774	196139 3839816	398373		944941	1.00 50.0	5.00 100	10.0		25.0
1,2-Dichloroethane	FB	Ave	16394 700584	72246 1462512	157860		352305	1.00 50.0	5.00 100	10.0		25.0
n-Heptane	FB	Ave	20342 989842	105856 2047890	209998		484203	1.00 50.0	5.00 100	10.0		25.0
Trichloroethene	FB	Ave	11127 491395	50178 1000093	103295		245299	1.00 50.0	5.00 100	10.0		25.0
Methylcyclohexane	FB	Ave	19866 916377	93295 1814791	184602		453993	1.00 50.0	5.00 100	10.0		25.0
1,2-Dichloropropane	FB	Ave	11629 533403	52779 1110031	111882		261475	1.00 50.0	5.00 100	10.0		25.0
Dibromomethane	FB	Ave	6867 316540	31701 650613	67064		155040	1.00 50.0	5.00 100	10.0		25.0
1,4-Dioxane	CBZ	Lin1	512 77641	6674 154903	15738		39487	20.0 1000	100 2000	200		500
Bromodichloromethane	FB	Ave	15157 682850	67325 1413737	141438		335572	1.00 50.0	5.00 100	10.0		25.0
2-Chloroethyl vinyl ether	FB	Ave	7753 368909	36105 832430	80788		179530	1.00 50.0	5.00 100	10.0		25.0
cis-1,3-Dichloropropene	FB	Ave	18095 820283	79874 1744911	173543	9582	401946	1.00 50.0	5.00 100	10.0	0.400	25.0
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	66268 3142650	321478 6658761	685812		1568610	5.00 250	25.0 500	50.0		125
Toluene	CBZ	Ave	26649 1142285	117239 2374063	242092		563752	1.00 50.0	5.00 100	10.0		25.0
trans-1,3-Dichloropropene	CBZ	Ave	15759 718792	70599 1551135	152671	8411	351420	1.00 50.0	5.00 100	10.0	0.400	25.0
Ethyl methacrylate	CBZ	Ave	13983 678964	66444 1488862	145739		329641	1.00 50.0	5.00 100	10.0		25.0
1,1,2-Trichloroethane	CBZ	Ave	8357 363206	36014 773547	78412		178134	1.00 50.0	5.00 100	10.0		25.0
Tetrachloroethene	CBZ	Ave	11517 498722	51054 1024788	105988		246331	1.00 50.0	5.00 100	10.0		25.0
1,3-Dichloropropane	CBZ	Ave	17406 756764	75455 1628339	164468		373028	1.00 50.0	5.00 100	10.0		25.0
2-Hexanone	CBZ	Ave	49415 2080827	214427 4615423	468121		1035406	5.00 250	25.0 500	50.0		125
Dibromochloromethane	CBZ	Ave	10583 508847	47902 1079568	103513		246368	0.980 49.0	4.90 98.0	9.80		24.5
1,2-Dibromoethane	CBZ	Ave	10113 464761	46118 989173	99231		227957	1.00 50.0	5.00 100	10.0		25.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1 Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18 Calibration End Date: 04/22/2014 07:25 Calibration ID: 18122

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBZ	Ave	29562 1295709	130036 2678680	274374		636707	1.00 50.0	5.00 100	10.0		25.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	9976 475428	47002 953672	97528		232895	1.00 50.0	5.00 100	10.0		25.0
Ethylbenzene	CBZ	Ave	49422 2184549	218952 4489153	464193		1074726	1.00 50.0	5.00 100	10.0		25.0
m,p-Xylene	CBZ	Ave	18587 854697	85529 1751372	179380		420560	1.00 50.0	5.00 100	10.0		25.0
o-Xylene	CBZ	Ave	18798 849618	84312 1703457	178863		418865	1.00 50.0	5.00 100	10.0		25.0
Styrene	CBZ	Ave	31495 1445235	141835 2989169	303872		705745	1.00 50.0	5.00 100	10.0		25.0
Bromoform	CBZ	Ave	6805 350309	31307 753327	69826		167744	1.00 50.0	5.00 100	10.0		25.0
Isopropylbenzene	DCB	Ave	50013 2251373	225174 4476317	475767		1117068	1.00 50.0	5.00 100	10.0		25.0
Bromobenzene	DCB	Ave	11671 535837	53085 1101326	112950		262636	1.00 50.0	5.00 100	10.0		25.0
1,1,2,2-Tetrachloroethane	DCB	Ave	14188 640375	63921 1325230	136822		316361	1.00 50.0	5.00 100	10.0		25.0
1,2,3-Trichloropropane	DCB	Ave	4453 186945	18154 387611	40543		92625	1.00 50.0	5.00 100	10.0		25.0
trans-1,4-Dichloro-2-butene	DCB	Lin1	1949 187908	12534 429004	32204		85137	1.00 50.0	5.00 100	10.0		25.0
N-Propylbenzene	DCB	Ave	59606 2600245	262938 5155710	558025		1288764	1.00 50.0	5.00 100	10.0		25.0
2-Chlorotoluene	DCB	Ave	10956 502319	51490 995563	106794		251781	1.00 50.0	5.00 100	10.0		25.0
1,3,5-Trimethylbenzene	DCB	Ave	40993 1848759	186723 3568145	394823		923803	1.00 50.0	5.00 100	10.0		25.0
4-Chlorotoluene	DCB	Ave	12093 511750	52546 1038402	110289		250579	1.00 50.0	5.00 100	10.0		25.0
tert-Butylbenzene	DCB	Ave	8736 387252	37756 761043	83556		189523	1.00 50.0	5.00 100	10.0		25.0
1,2,4-Trimethylbenzene	DCB	Ave	42333 1886589	190998 3681390	410607		946399	1.00 50.0	5.00 100	10.0		25.0
sec-Butylbenzene	DCB	Ave	52775 2362030	238329 4476378	506463		1181127	1.00 50.0	5.00 100	10.0		25.0
4-Isopropyltoluene	DCB	Ave	44338 1970573	202298 3661930	426799		982005	1.00 50.0	5.00 100	10.0		25.0
1,3-Dichlorobenzene	DCB	Ave	23140 980271	101861 1987372	216674		489358	1.00 50.0	5.00 100	10.0		25.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1 Analy Batch No.: 177332

SDG No.: _____

Instrument ID: HP5975D GC Column: RTX-CLPII ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2014 05:18 Calibration End Date: 04/22/2014 07:25 Calibration ID: 18122

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCB	Ave	23200 990691	101286 2019278	216233		490053	1.00 50.0	5.00 100	10.0		25.0
n-Butylbenzene	DCB	Ave	41106 1848468	189344 3368934	396065		919298	1.00 50.0	5.00 100	10.0		25.0
1,2-Dichlorobenzene	DCB	Ave	22563 970401	98342 1927221	209441		484021	1.00 50.0	5.00 100	10.0		25.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	2753 134559	12881 279774	27990		65808	1.00 50.0	5.00 100	10.0		25.0
1,2,4-Trichlorobenzene	DCB	Ave	15126 717822	69811 1366703	149253		354271	1.00 50.0	5.00 100	10.0		25.0
Hexachlorobutadiene	DCB	Lin1	8202 365870	36594 617140	76287	4895	179176	1.00 50.0	5.00 100	10.0	0.400	25.0
Naphthalene	DCB	Ave	38487 1920172	183259 3877235	394643		950593	1.00 50.0	5.00 100	10.0		25.0
1,2,3-Trichlorobenzene	DCB	Ave	13684 655517	64866 1292237	136232		325788	1.00 50.0	5.00 100	10.0		25.0
Dibromofluoromethane (Surr)	FB	Ave	233644 231497	232502 232610	236389	235988	230968	25.0 25.0	25.0 25.0	25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	156226 148858	150037 156999	155938	157263	146396	25.0 25.0	25.0 25.0	25.0	25.0	25.0
Toluene-d8 (Surr)	CBZ	Ave	884815 830424	833797 888917	882694	876796	820354	25.0 25.0	25.0 25.0	25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	261418 248686	246845 268753	264503	260093	242328	25.0 25.0	25.0 25.0	25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1209.D
 Lims ID: IC 0.4
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-Apr-2014 05:18:30 ALS Bottle#: 2 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 0.4
 Misc. Info.: 480-0031313-004
 Operator ID: CDC Instrument ID: HP5975D
 Sublist: chrom-D-8260*sub13
 Method: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1209.D
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Apr-2014 00:44:34 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK037

First Level Reviewer: cwiklinc

Date: 23-Apr-2014 00:44:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.825	0.000	98	152014	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.153	7.154	-0.001	86	314088	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.055	9.056	-0.001	95	277702	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.343	0.000	80	235988	25.0	26.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.593	0.000	0	157263	25.0	26.5	
\$ 5 Toluene-d8 (Surr)	98	6.013	6.014	-0.001	93	876796	25.0	25.0	
\$ 6 4-Bromofluorobenzene (Surr	174	8.104	8.105	-0.001	89	260093	25.0	24.9	
10 Dichlorodifluoromethane	85		1.325						
12 Chloromethane	50		1.435						
13 Vinyl chloride	62	1.539	1.539	0.000	21	6274	0.4000	0.5021	
144 Butadiene	54		1.551						
14 Bromomethane	94		1.801						
15 Chloroethane	64		1.899						
16 Dichlorofluoromethane	67		2.081						
17 Trichlorofluoromethane	101		2.112						
18 Ethyl ether	59		2.307						
20 Acrolein	56		2.453						
22 1,1-Dichloroethene	96		2.496						
21 1,1,2-Trichloro-1,2,2-trif	101		2.545						
23 Acetone	43		2.593						
25 Iodomethane	142		2.630						
26 Carbon disulfide	76		2.673						
28 3-Chloro-1-propene	41		2.819						
27 Methyl acetate	43		2.862						
30 Methylene Chloride	84		2.941						
31 2-Methyl-2-propanol	59		3.087						
32 Methyl tert-butyl ether	73		3.142						
34 trans-1,2-Dichloroethene	96		3.148						
33 Acrylonitrile	53	3.178	3.173	0.005	98	22842	4.00	5.27	
35 Hexane	57		3.331						

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63		3.502						
37 Vinyl acetate	43		3.545						
44 2,2-Dichloropropane	77		3.941						
45 cis-1,2-Dichloroethene	96		3.965						
43 2-Butanone (MEK)	43		3.990						
48 Chlorobromomethane	128		4.154						
49 Tetrahydrofuran	42		4.191						
50 Chloroform	83		4.221						
51 1,1,1-Trichloroethane	97		4.325						
52 Cyclohexane	56		4.343						M
55 Carbon tetrachloride	117		4.441						
54 1,1-Dichloropropene	75		4.447						
53 Isobutyl alcohol	43		4.605						
57 Benzene	78		4.611						
58 1,2-Dichloroethane	62		4.654						
59 n-Heptane	43		4.770						
62 Trichloroethene	95		5.099						
64 Methylcyclohexane	83		5.209						
65 1,2-Dichloropropane	63		5.282						
67 Dibromomethane	93		5.386						
66 1,4-Dioxane	88		5.404						
68 Dichlorobromomethane	83		5.508						
69 2-Chloroethyl vinyl ether	63		5.721						
72 cis-1,3-Dichloropropene	75	5.837	5.831	0.006	53	9582	0.4000	0.5514	
73 4-Methyl-2-pentanone (MIBK)	43		5.940						
74 Toluene	92		6.068						
77 trans-1,3-Dichloropropene	75	6.269	6.264	0.005	65	8411	0.4000	0.5254	
75 Ethyl methacrylate	69		6.306						
79 1,1,2-Trichloroethane	83		6.416						
81 Tetrachloroethene	166		6.489						
82 1,3-Dichloropropane	76		6.538						
80 2-Hexanone	43		6.587						
83 Chlorodibromomethane	129		6.721						
84 Ethylene Dibromide	107		6.812						
87 Chlorobenzene	112		7.178						
88 Ethylbenzene	91		7.245						
89 1,1,1,2-Tetrachloroethane	131		7.245						
90 m-Xylene & p-Xylene	106		7.336						
91 o-Xylene	106		7.660						
92 Styrene	104		7.678						
95 Bromoform	173		7.867						
94 Isopropylbenzene	105		7.952						
101 Bromobenzene	156		8.227						
97 1,1,2,2-Tetrachloroethane	83		8.245						
100 1,2,3-Trichloropropane	110		8.275						
98 trans-1,4-Dichloro-2-buten	53		8.281						
99 N-Propylbenzene	91		8.288						
103 2-Chlorotoluene	126		8.373						
102 1,3,5-Trimethylbenzene	105		8.428						
105 4-Chlorotoluene	126		8.464						
106 tert-Butylbenzene	134		8.696						
107 1,2,4-Trimethylbenzene	105		8.745						

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105		8.879						
110 4-Isopropyltoluene	119		8.995						
111 1,3-Dichlorobenzene	146		9.001						
113 1,4-Dichlorobenzene	146		9.074						
115 n-Butylbenzene	91		9.336						
116 1,2-Dichlorobenzene	146		9.391						
117 1,2-Dibromo-3-Chloropropan	75		10.055						
119 1,2,4-Trichlorobenzene	180		10.732						
120 Hexachlorobutadiene	225	10.848	10.848	0.000	43	4895	0.4000	0.3770	
121 Naphthalene	128		10.939						
122 1,2,3-Trichlorobenzene	180		11.141						
S 125 1,2-Dichloroethene, Total	1		30.000						
S 126 1,3-Dichloropropene, Total	1				0			1.08	
S 123 Total BTEX	1		30.000						
S 124 Xylenes, Total	1		30.000						

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1209.D

Injection Date: 22-Apr-2014 05:18:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: IC 0.4

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

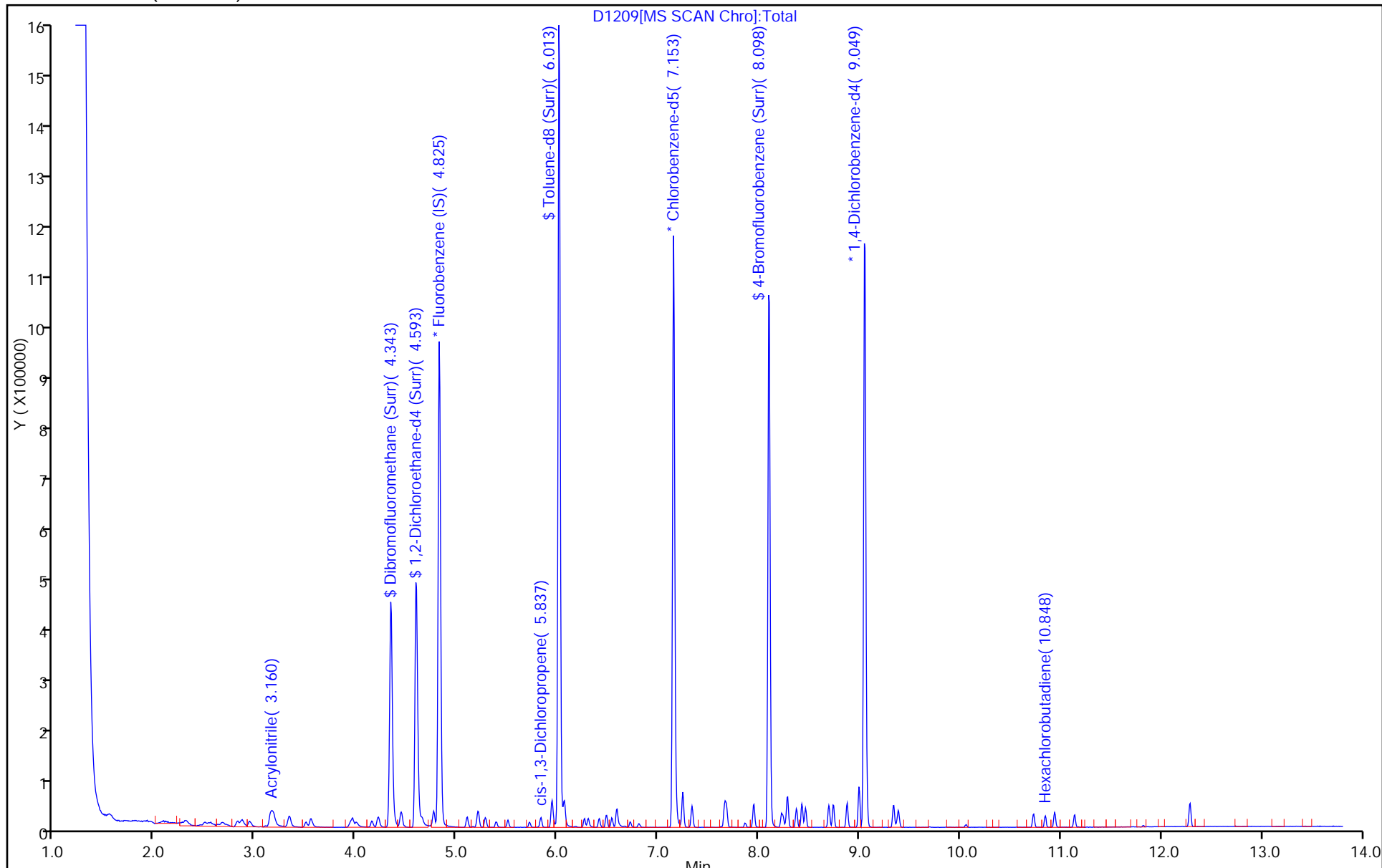
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1210.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-Apr-2014 05:39:30 ALS Bottle#: 3 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 480-0031313-005
 Operator ID: CDC Instrument ID: HP5975D
 Sublist: chrom-D-8260*sub13
 Method: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Apr-2014 00:44:38 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK037

First Level Reviewer: cwiklinc

Date: 23-Apr-2014 00:44:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.825	0.000	98	163498	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.153	7.154	-0.001	87	324684	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.056	9.056	0.000	95	283423	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.343	0.000	80	233644	25.0	24.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.593	0.000	0	156226	25.0	24.5	
\$ 5 Toluene-d8 (Surr)	98	6.020	6.014	0.006	93	884815	25.0	24.4	
\$ 6 4-Bromofluorobenzene (Surr	174	8.105	8.105	0.000	89	261418	25.0	24.2	
10 Dichlorodifluoromethane	85	1.325	1.325	0.000	27	9409	1.00	0.9788	
12 Chloromethane	50	1.435	1.435	0.000	77	16513	1.00	1.16	
13 Vinyl chloride	62	1.527	1.539	-0.012	43	14018	1.00	1.04	
144 Butadiene	54	1.563	1.551	0.012	96	15345	1.00	1.14	
14 Bromomethane	94	1.813	1.801	0.012	70	7287	1.00	1.07	M
15 Chloroethane	64	1.917	1.899	0.019	51	7380	1.00	1.00	
16 Dichlorofluoromethane	67	2.081	2.081	0.000	49	17493	1.00	1.04	
17 Trichlorofluoromethane	101	2.045	2.112	-0.067	38	8340	1.00	0.7849	
18 Ethyl ether	59	2.313	2.307	0.006	84	10112	1.00	1.02	
20 Acrolein	56	2.459	2.453	0.006	46	5302	5.00	4.44	
22 1,1-Dichloroethene	96	2.496	2.496	0.000	61	10588	1.00	1.07	
21 1,1,2-Trichloro-1,2,2-trif	101	2.551	2.545	0.006	43	9805	1.00	0.9567	
23 Acetone	43	2.600	2.593	0.007	73	20047	5.00	6.93	M
25 Iodomethane	142	2.630	2.630	0.000	75	17686	1.00	1.05	
26 Carbon disulfide	76	2.673	2.673	0.000	94	36219	1.00	1.04	
28 3-Chloro-1-propene	41	2.825	2.819	0.006	66	20600	1.00	1.06	
27 Methyl acetate	43	2.868	2.862	0.006	94	45885	5.00	5.04	M
30 Methylene Chloride	84	2.941	2.941	0.000	78	11287	1.00	1.04	
31 2-Methyl-2-propanol	59	3.099	3.087	0.012	50	6236	10.0	11.0	M
32 Methyl tert-butyl ether	73	3.148	3.142	0.006	87	33223	1.00	1.00	
34 trans-1,2-Dichloroethene	96	3.154	3.148	0.006	58	10485	1.00	1.01	
33 Acrylonitrile	53	3.179	3.173	0.006	98	50958	10.0	10.9	M
35 Hexane	57	3.337	3.331	0.006	90	19944	1.00	1.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.502	3.502	0.000	59	22134	1.00	1.05	
37 Vinyl acetate	43	3.551	3.545	0.006	95	53447	2.00	2.11	
44 2,2-Dichloropropane	77	3.941	3.941	0.000	68	11046	1.00	1.07	
45 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	60	11374	1.00	1.01	
43 2-Butanone (MEK)	43	4.002	3.990	0.012	95	33148	5.00	5.68	M
48 Chlorobromomethane	128	4.154	4.154	0.000	82	5738	1.00	1.02	
49 Tetrahydrofuran	42	4.209	4.191	0.018	67	9090	2.00	2.36	
50 Chloroform	83	4.221	4.221	0.000	72	19631	1.00	1.04	
51 1,1,1-Trichloroethane	97	4.325	4.325	0.000	71	15167	1.00	1.00	
52 Cyclohexane	56	4.343	4.343	0.000	34	22764	1.00	1.04	
55 Carbon tetrachloride	117	4.441	4.441	0.000	67	14252	1.00	1.02	
54 1,1-Dichloropropene	75	4.447	4.447	0.000	80	15134	1.00	1.07	
53 Isobutyl alcohol	43	4.611	4.605	0.006	28	12465	25.0	26.5	
57 Benzene	78	4.611	4.611	0.000	60	43348	1.00	1.06	
58 1,2-Dichloroethane	62	4.654	4.654	0.000	71	16394	1.00	1.06	
59 n-Heptane	43	4.770	4.770	0.000	90	20342	1.00	0.9620	
62 Trichloroethene	95	5.099	5.099	0.000	73	11127	1.00	1.05	
64 Methylcyclohexane	83	5.209	5.209	0.000	84	19866	1.00	1.03	
65 1,2-Dichloropropane	63	5.282	5.282	0.000	76	11629	1.00	1.03	
67 Dibromomethane	93	5.392	5.386	0.006	81	6867	1.00	1.02	
66 1,4-Dioxane	88	5.416	5.404	0.012	0	512	20.0	17.4	M
68 Dichlorobromomethane	83	5.507	5.508	-0.001	73	15157	1.00	1.04	
69 2-Chloroethyl vinyl ether	63	5.721	5.721	0.000	70	7753	1.00	0.9773	
72 cis-1,3-Dichloropropene	75	5.837	5.831	0.006	64	18095	1.00	0.9681	
73 4-Methyl-2-pentanone (MIBK)	43	5.946	5.940	0.006	95	66268	5.00	4.80	
74 Toluene	92	6.068	6.068	0.000	95	26649	1.00	1.06	
77 trans-1,3-Dichloropropene	75	6.270	6.264	0.006	72	15759	1.00	0.9522	
75 Ethyl methacrylate	69	6.306	6.306	0.000	74	13983	1.00	0.9508	
79 1,1,2-Trichloroethane	83	6.416	6.416	0.000	74	8357	1.00	1.04	
81 Tetrachloroethene	166	6.489	6.489	0.000	85	11517	1.00	1.05	
82 1,3-Dichloropropane	76	6.538	6.538	0.000	77	17406	1.00	1.04	
80 2-Hexanone	43	6.587	6.587	0.000	93	49415	5.00	5.23	
83 Chlorodibromomethane	129	6.721	6.721	0.000	57	10583	0.9800	0.9600	
84 Ethylene Dibromide	107	6.812	6.812	0.000	70	10113	1.00	1.00	
87 Chlorobenzene	112	7.178	7.178	0.000	88	29562	1.00	1.04	
89 1,1,1,2-Tetrachloroethane	131	7.245	7.245	0.000	22	9976	1.00	0.9846	
88 Ethylbenzene	91	7.245	7.245	0.000	97	49422	1.00	1.03	
90 m-Xylene & p-Xylene	106	7.336	7.336	0.000	0	18587	1.00	1.00	
91 o-Xylene	106	7.659	7.660	-0.001	91	18798	1.00	1.02	
92 Styrene	104	7.678	7.678	0.000	87	31495	1.00	1.01	
95 Bromoform	173	7.867	7.867	0.000	78	6805	1.00	0.9355	
94 Isopropylbenzene	105	7.952	7.952	0.000	90	50013	1.00	1.01	
101 Bromobenzene	156	8.226	8.227	-0.001	91	11671	1.00	1.00	
97 1,1,2,2-Tetrachloroethane	83	8.245	8.245	0.000	60	14188	1.00	1.00	
100 1,2,3-Trichloropropane	110	8.275	8.275	0.000	62	4453	1.00	1.07	
98 trans-1,4-Dichloro-2-buten	53	8.287	8.281	0.006	44	1949	1.00	1.39	
99 N-Propylbenzene	91	8.287	8.288	-0.001	96	59606	1.00	1.04	
103 2-Chlorotoluene	126	8.373	8.373	0.000	90	10956	1.00	0.99	
102 1,3,5-Trimethylbenzene	105	8.428	8.428	0.000	77	40993	1.00	1.01	
105 4-Chlorotoluene	126	8.464	8.464	0.000	88	12093	1.00	1.06	
106 tert-Butylbenzene	134	8.696	8.696	0.000	81	8736	1.00	1.03	
107 1,2,4-Trimethylbenzene	105	8.739	8.745	-0.006	89	42333	1.00	1.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.879	8.879	0.000	81	52775	1.00	1.02	
110 4-Isopropyltoluene	119	8.995	8.995	0.000	93	44338	1.00	1.03	
111 1,3-Dichlorobenzene	146	8.995	9.001	-0.006	63	23140	1.00	1.05	
113 1,4-Dichlorobenzene	146	9.074	9.074	0.000	77	23200	1.00	1.05	
115 n-Butylbenzene	91	9.342	9.336	0.006	91	41106	1.00	1.02	
116 1,2-Dichlorobenzene	146	9.391	9.391	0.000	86	22563	1.00	1.05	
117 1,2-Dibromo-3-Chloropropan	75	10.055	10.055	0.000	12	2753	1.00	0.9507	
119 1,2,4-Trichlorobenzene	180	10.732	10.732	0.000	73	15126	1.00	0.9847	
120 Hexachlorobutadiene	225	10.848	10.848	0.000	69	8202	1.00	0.8216	
121 Naphthalene	128	10.939	10.939	0.000	84	38487	1.00	0.9394	
122 1,2,3-Trichlorobenzene	180	11.141	11.141	0.000	67	13684	1.00	0.9677	
S 123 Total BTEX	1				0			5.17	
S 124 Xylenes, Total	1				0			2.03	
S 125 1,2-Dichloroethene, Total	1				0			2.02	
S 126 1,3-Dichloropropene, Total	1				0			1.92	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1210.D

Injection Date: 22-Apr-2014 05:39:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: IC

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

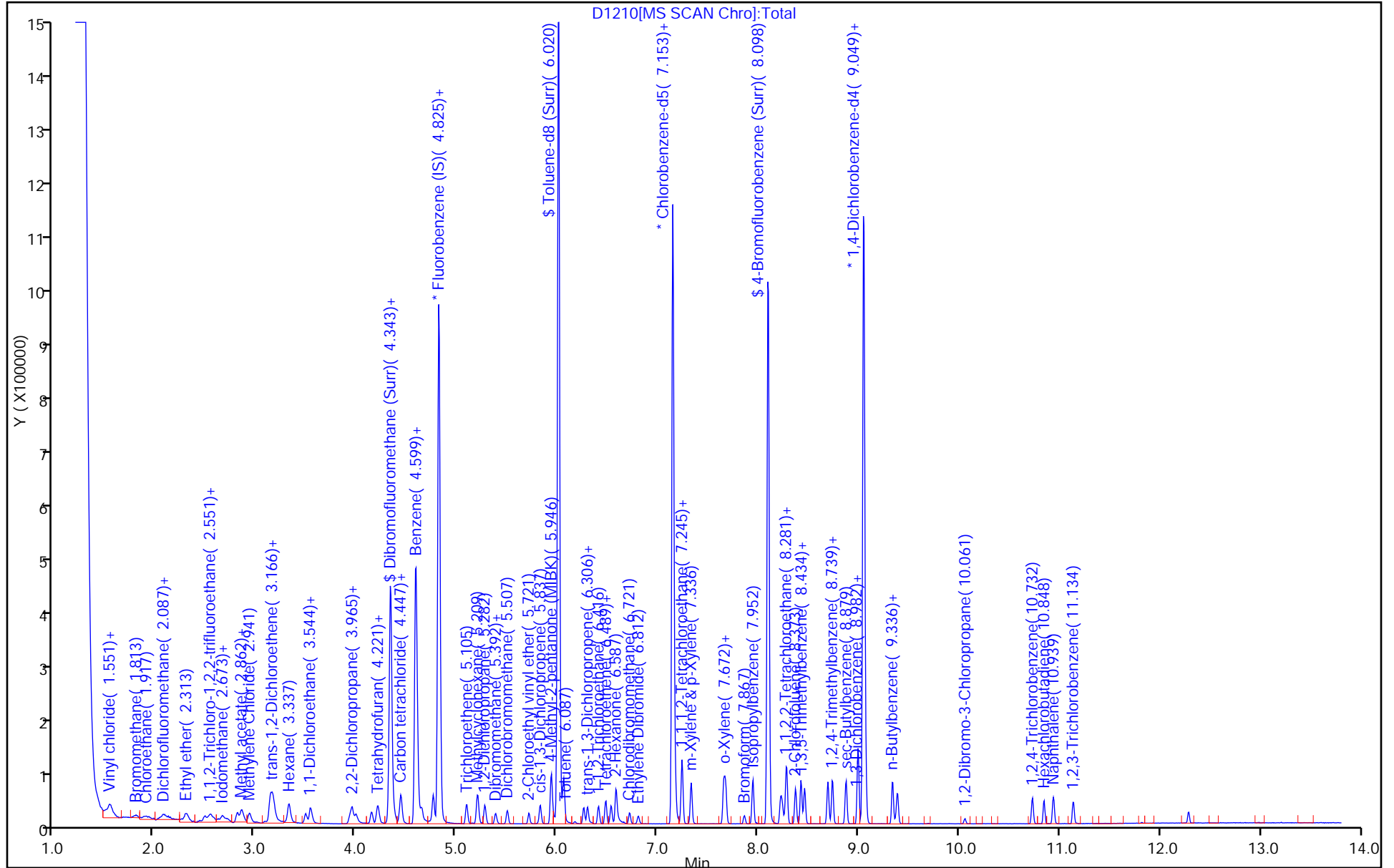
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



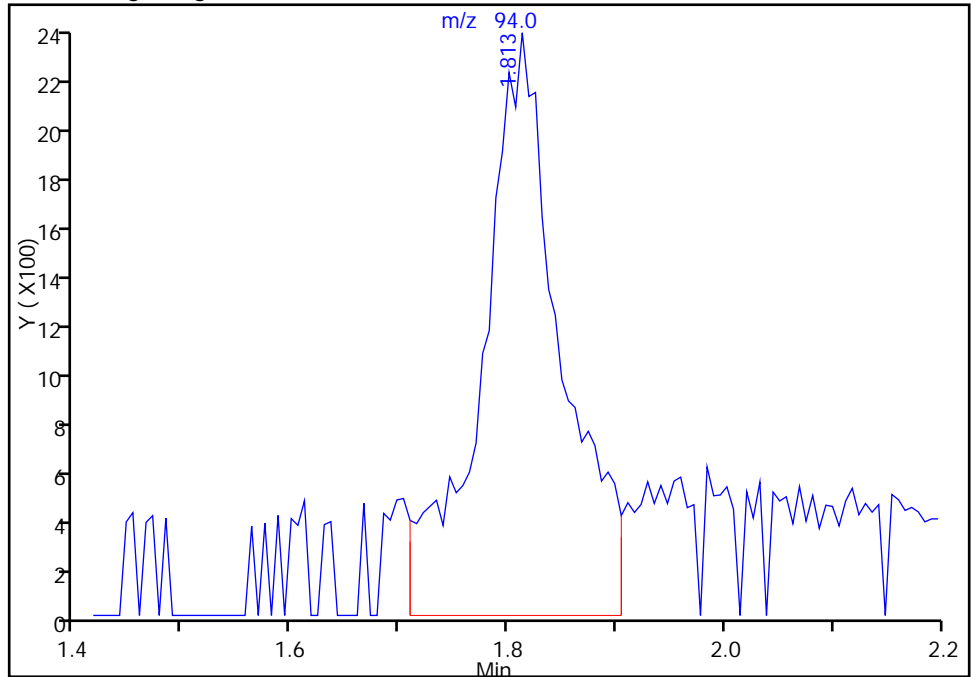
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1210.D
Injection Date: 22-Apr-2014 05:39:30 Instrument ID: HP5975D
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

14 Bromomethane, CAS: 74-83-9

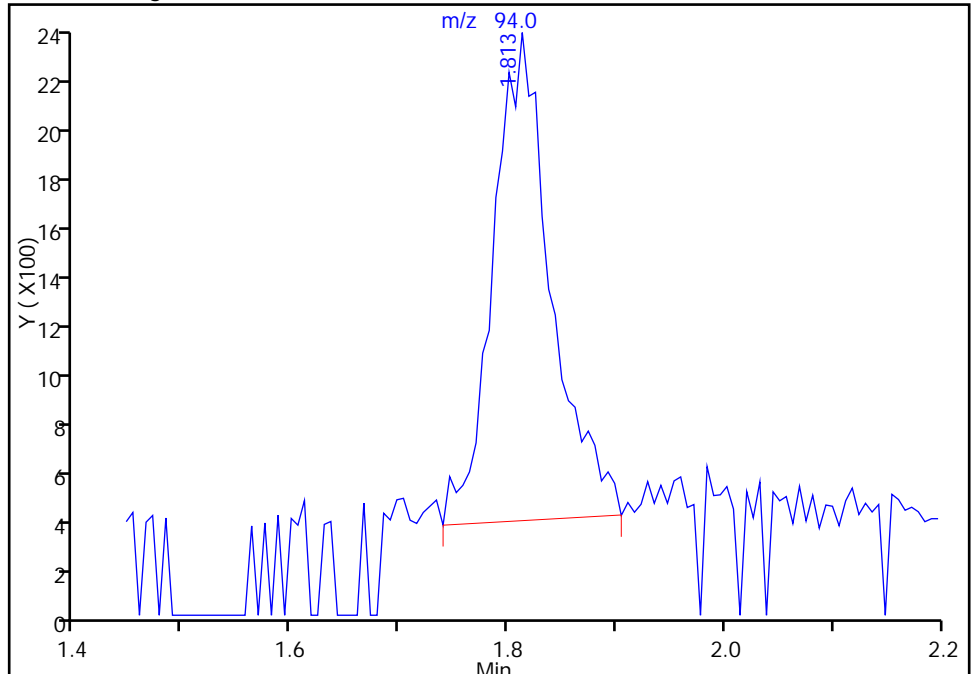
RT: 1.81
Response: 11960
Amount: 0.911441

Processing Integration Results



RT: 1.81
Response: 7287
Amount: 1.074507

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 12:36:52
Audit Action: Manually Integrated
Audit Reason: Baseline

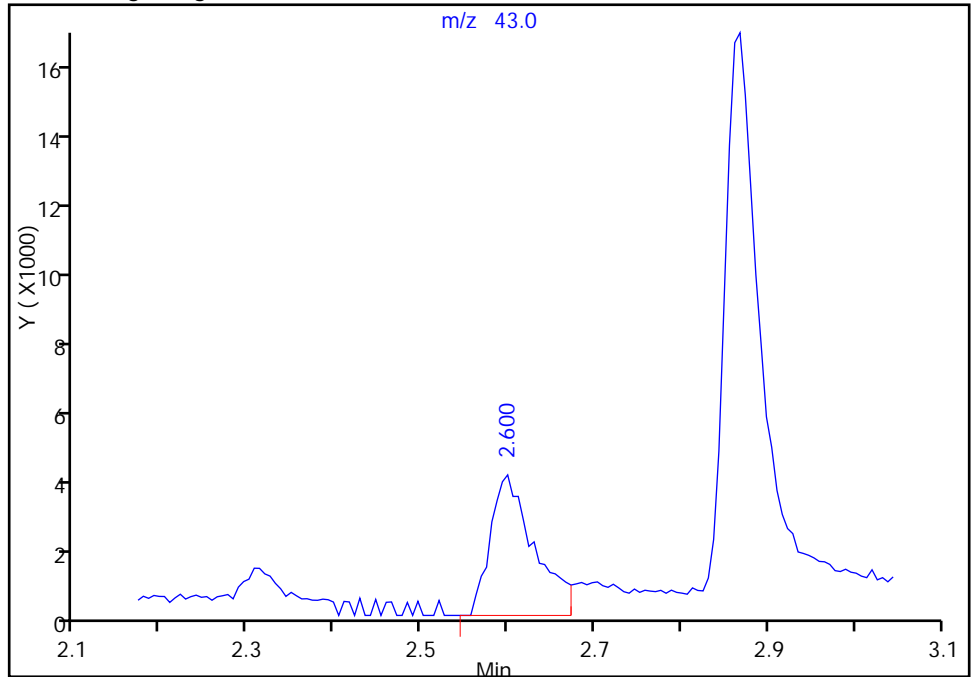
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1210.D
Injection Date: 22-Apr-2014 05:39:30 Instrument ID: HP5975D
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

23 Acetone, CAS: 67-64-1

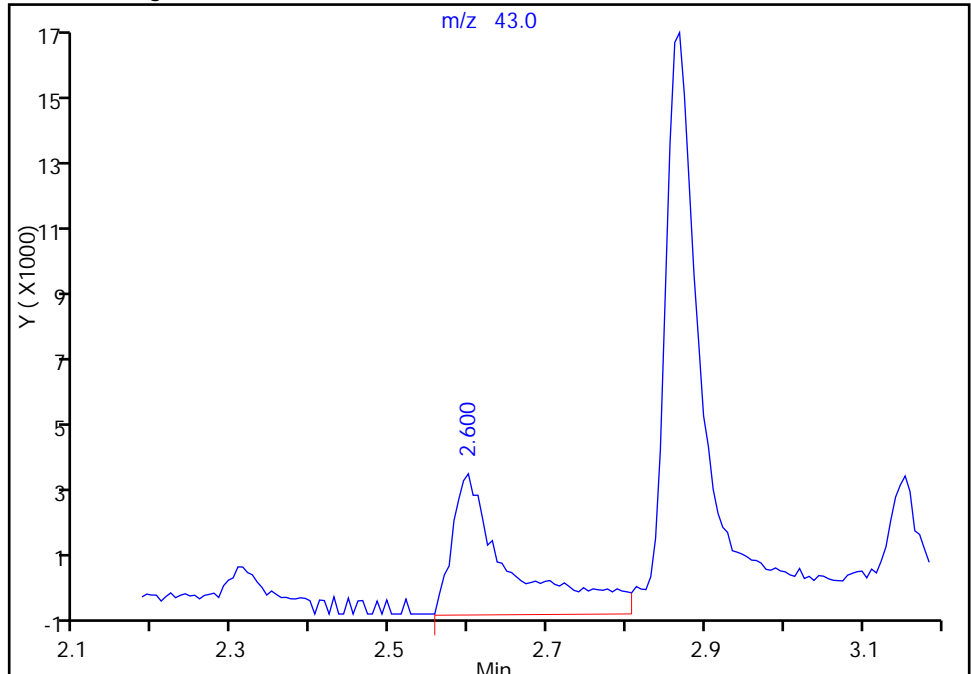
RT: 2.60
Response: 13829
Amount: 5.148661

Processing Integration Results



RT: 2.60
Response: 20047
Amount: 6.928988

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 12:38:00
Audit Action: Manually Integrated
Audit Reason: Peak Tail

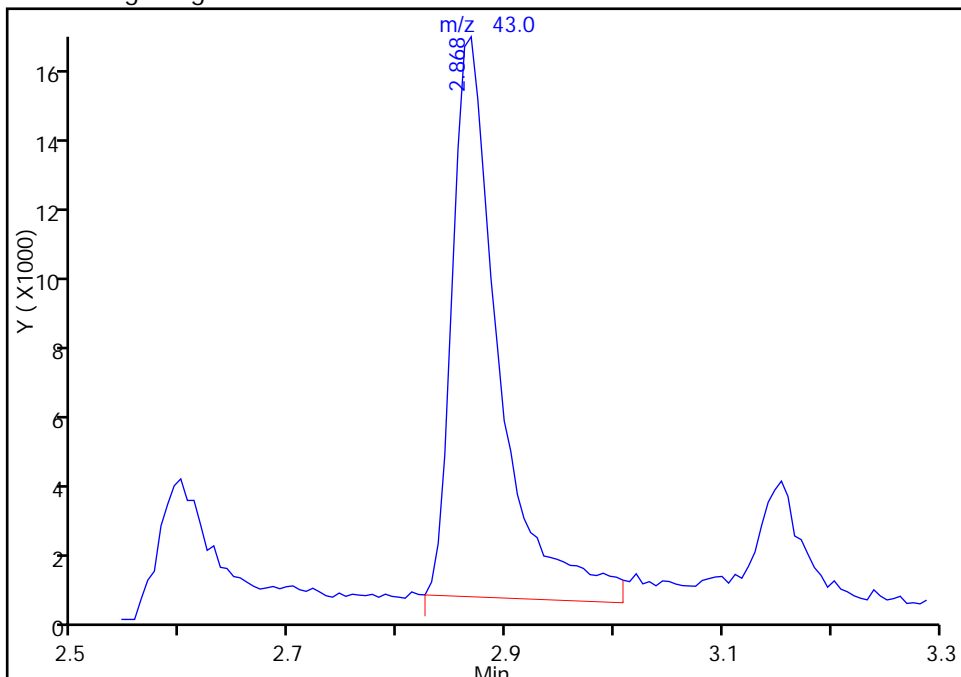
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1210.D
Injection Date: 22-Apr-2014 05:39:30 Instrument ID: HP5975D
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

27 Methyl acetate, CAS: 79-20-9

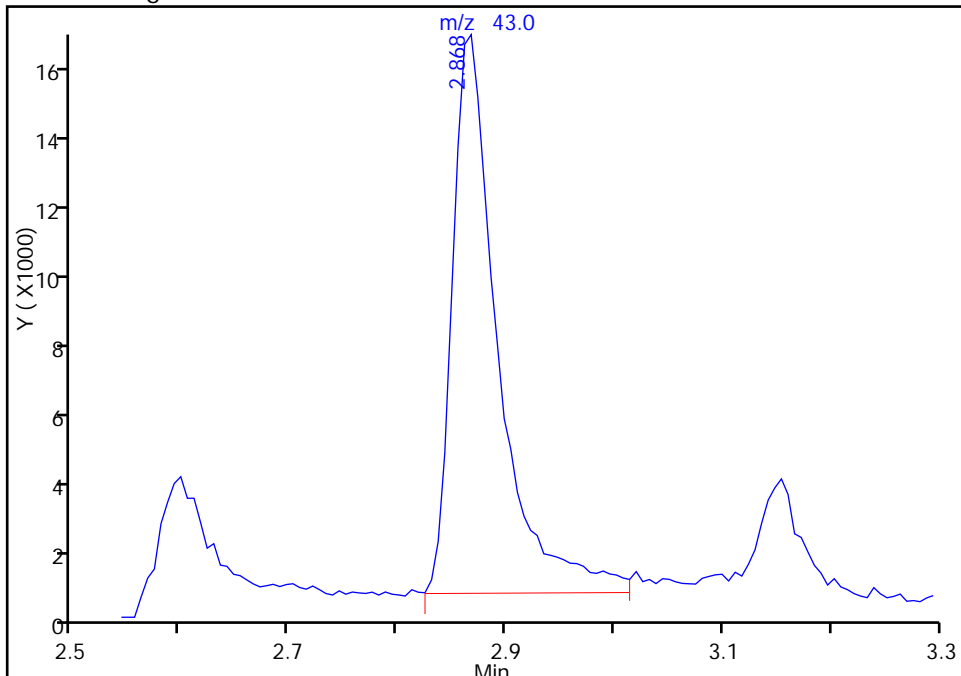
RT: 2.87
Response: 46891
Amount: 5.127925

Processing Integration Results



RT: 2.87
Response: 45885
Amount: 5.036380

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 12:34:59
Audit Action: Manually Integrated
Audit Reason: Baseline

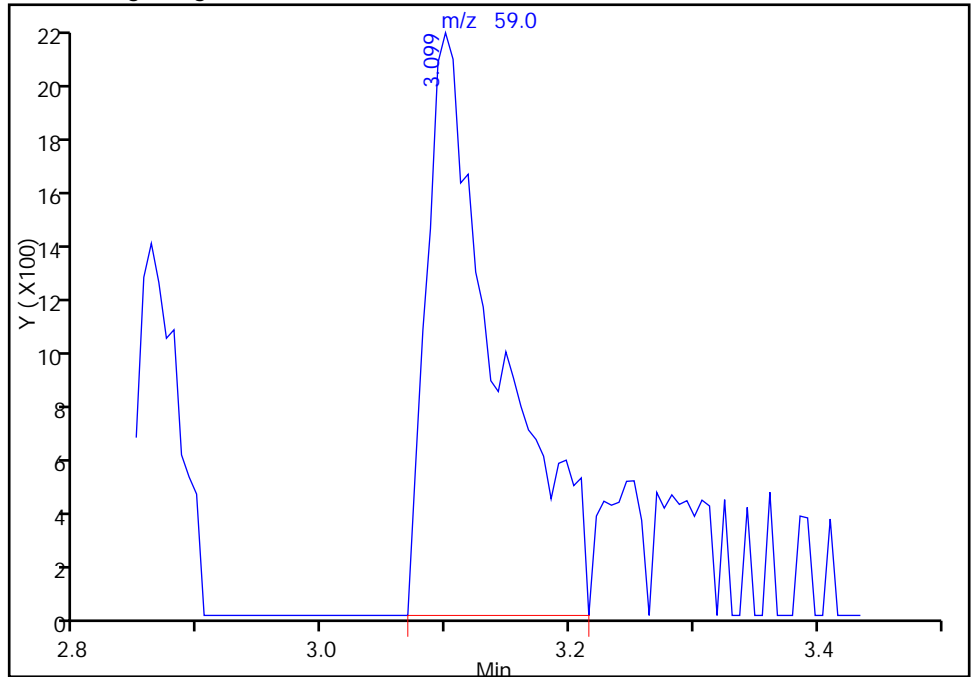
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1210.D
Injection Date: 22-Apr-2014 05:39:30 Instrument ID: HP5975D
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

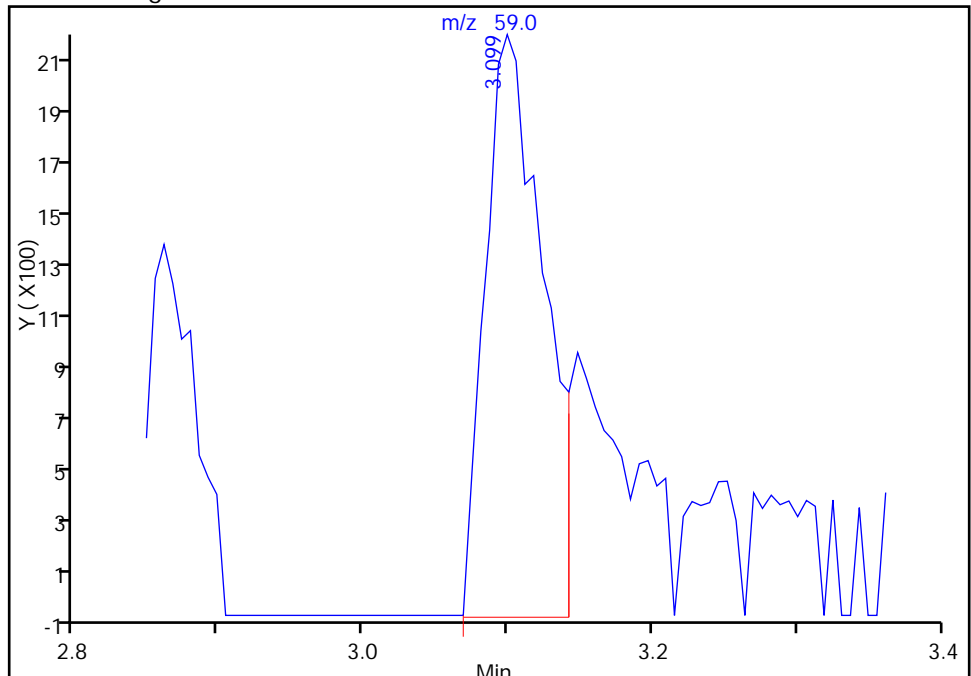
RT: 3.10
Response: 8856
Amount: 11.346050

Processing Integration Results



RT: 3.10
Response: 6236
Amount: 10.989588

Manual Integration Results



Reviewer: BrandtT, 22-Apr-2014 17:49:49
Audit Action: Manually Integrated
Audit Reason: Coelution

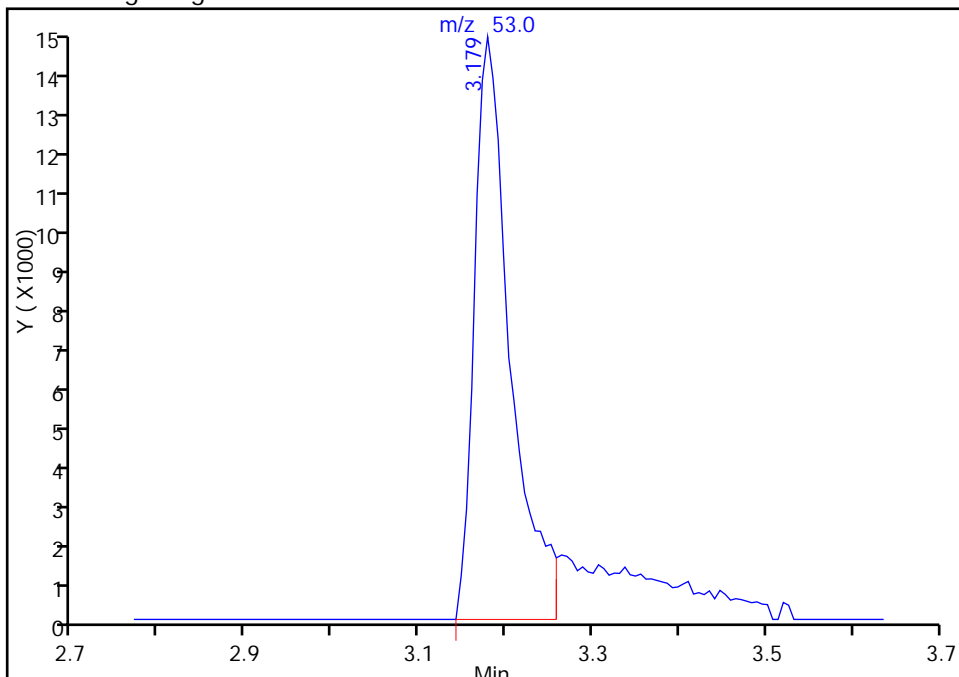
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1210.D
Injection Date: 22-Apr-2014 05:39:30 Instrument ID: HP5975D
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

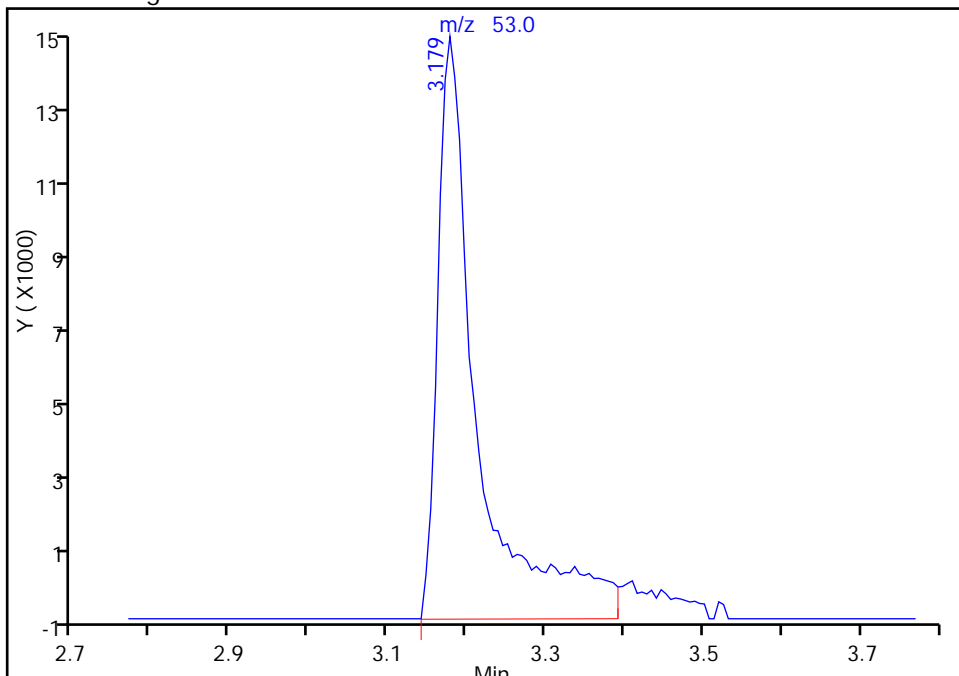
RT: 3.18
Response: 41514
Amount: 8.207523

Processing Integration Results



RT: 3.18
Response: 50958
Amount: 10.930799

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 12:34:59
Audit Action: Manually Integrated
Audit Reason: Peak Tail

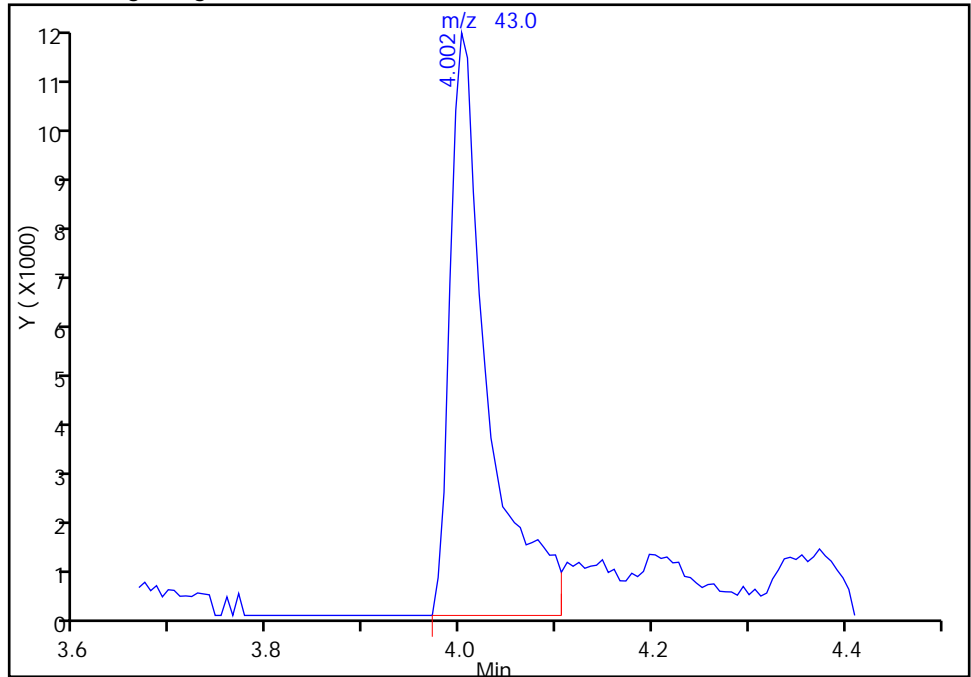
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1210.D
Injection Date: 22-Apr-2014 05:39:30 Instrument ID: HP5975D
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

43 2-Butanone (MEK), CAS: 78-93-3

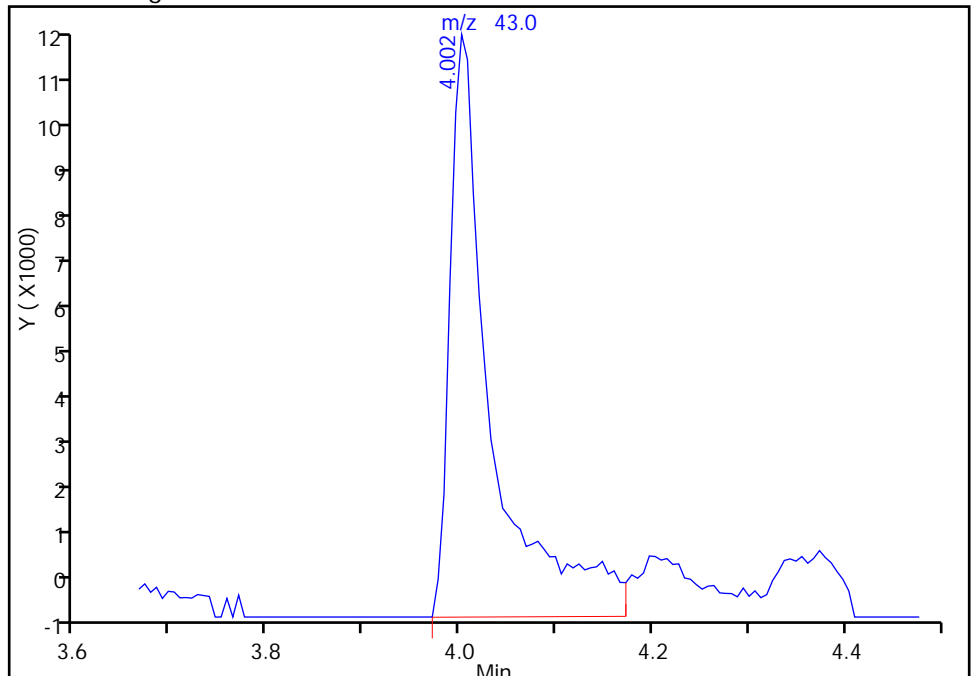
Processing Integration Results

RT: 4.00
Response: 29641
Amount: 5.180377



Manual Integration Results

RT: 4.00
Response: 33148
Amount: 5.677306



Reviewer: quirkp, 22-Apr-2014 12:42:09
Audit Action: Manually Integrated
Audit Reason: Peak Tail

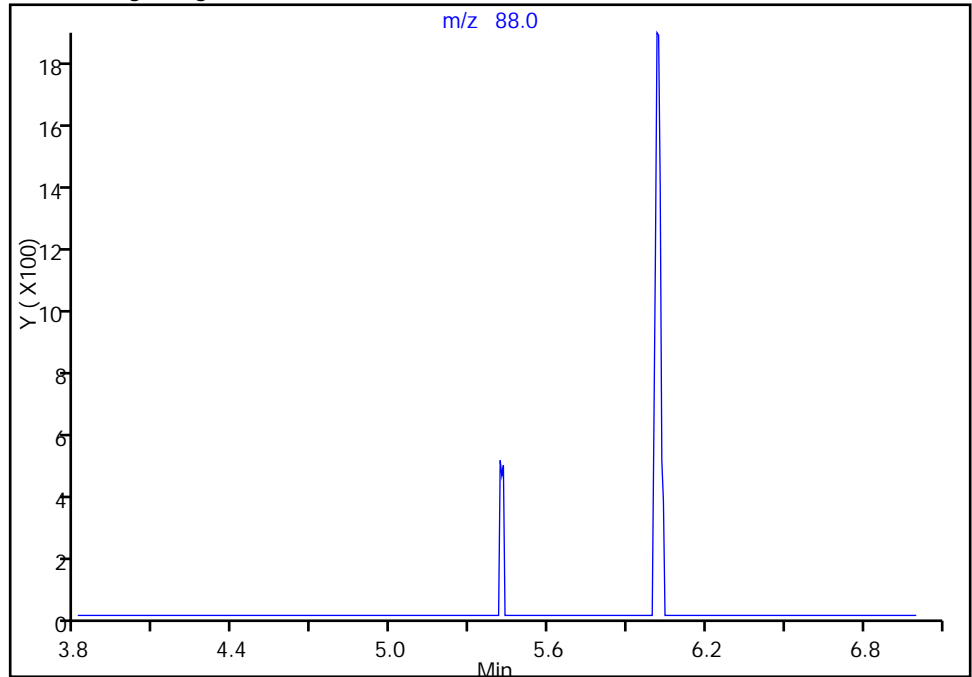
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1210.D
Injection Date: 22-Apr-2014 05:39:30 Instrument ID: HP5975D
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

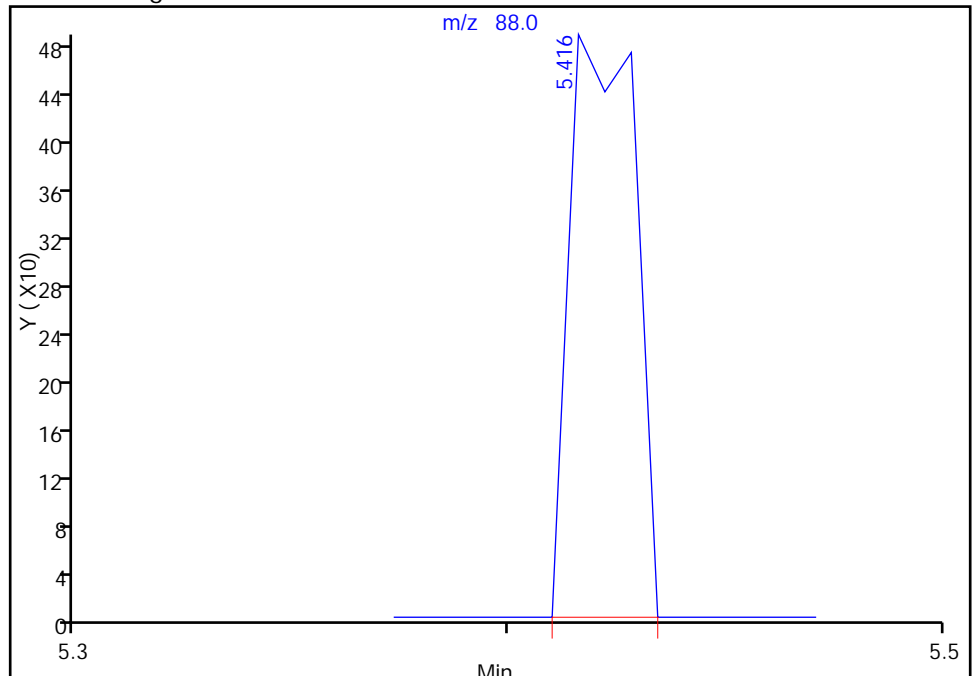
Not Detected
Expected RT: 5.40

Processing Integration Results



RT: 5.42
Response: 512
Amount: 17.405647

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 11:28:21
Audit Action: Manually Integrated
Audit Reason: Missed Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1211.D
 Lims ID: IC 2
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-Apr-2014 06:01:30 ALS Bottle#: 4 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 2
 Misc. Info.: 480-0031313-006
 Operator ID: CDC Instrument ID: HP5975D
 Sublist: chrom-D-8260*sub13
 Method: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1211.D-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Apr-2014 00:44:43 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK037

First Level Reviewer: cwiklinc

Date: 23-Apr-2014 00:44:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.825	0.000	98	147198	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.154	7.154	0.000	87	294076	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.056	9.056	0.000	95	258466	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.343	0.000	83	232502	25.0	26.5	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.593	0.000	0	150037	25.0	26.1	
\$ 5 Toluene-d8 (Surr)	98	6.020	6.014	0.006	93	833797	25.0	25.4	
\$ 6 4-Bromofluorobenzene (Surr	174	8.105	8.105	0.000	89	246845	25.0	25.3	
10 Dichlorodifluoromethane	85	1.332	1.325	0.007	73	46300	5.00	5.35	
12 Chloromethane	50	1.429	1.435	-0.006	89	70115	5.00	5.46	
13 Vinyl chloride	62	1.527	1.539	-0.012	79	61206	5.00	5.06	
144 Butadiene	54	1.545	1.551	-0.006	92	66859	5.00	5.54	
14 Bromomethane	94	1.801	1.801	0.000	79	32892	5.00	5.39	M
15 Chloroethane	64	1.892	1.899	-0.006	84	36873	5.00	5.55	
16 Dichlorofluoromethane	67	2.075	2.081	-0.006	81	81654	5.00	5.40	
17 Trichlorofluoromethane	101	2.106	2.112	-0.006	64	47409	5.00	4.96	
18 Ethyl ether	59	2.313	2.307	0.006	94	46574	5.00	5.20	
20 Acrolein	56	2.453	2.453	0.000	86	25319	25.0	23.5	
22 1,1-Dichloroethene	96	2.502	2.496	0.006	78	46458	5.00	5.24	
21 1,1,2-Trichloro-1,2,2-trif	101	2.545	2.545	0.000	79	50010	5.00	5.42	
23 Acetone	43	2.600	2.593	0.007	95	66887	25.0	25.7	
25 Iodomethane	142	2.636	2.630	0.006	97	80122	5.00	5.29	
26 Carbon disulfide	76	2.673	2.673	0.000	99	169102	5.00	5.41	
28 3-Chloro-1-propene	41	2.819	2.819	0.000	85	92519	5.00	5.30	
27 Methyl acetate	43	2.862	2.862	0.000	96	208043	25.0	25.4	
30 Methylene Chloride	84	2.947	2.941	0.006	90	51910	5.00	5.34	
31 2-Methyl-2-propanol	59	3.093	3.087	0.006	88	28610	50.0	56.0	M
32 Methyl tert-butyl ether	73	3.148	3.142	0.006	90	157704	5.00	5.25	
34 trans-1,2-Dichloroethene	96	3.148	3.148	0.000	66	50054	5.00	5.34	
33 Acrylonitrile	53	3.179	3.173	0.006	99	209514	50.0	49.9	
35 Hexane	57	3.337	3.331	0.006	93	89521	5.00	5.41	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.502	3.502	0.000	96	101743	5.00	5.35	
37 Vinyl acetate	43	3.545	3.545	0.000	96	230927	10.0	10.1	
44 2,2-Dichloropropane	77	3.941	3.941	0.000	87	52067	5.00	5.59	
45 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	74	54393	5.00	5.36	
43 2-Butanone (MEK)	43	3.996	3.990	0.006	99	133850	25.0	25.5	
48 Chlorobromomethane	128	4.154	4.154	0.000	90	26717	5.00	5.26	
49 Tetrahydrofuran	42	4.197	4.191	0.006	86	36520	10.0	10.5	
50 Chloroform	83	4.221	4.221	0.000	82	90450	5.00	5.34	
51 1,1,1-Trichloroethane	97	4.325	4.325	0.000	92	73487	5.00	5.38	
52 Cyclohexane	56	4.343	4.343	0.000	82	106346	5.00	5.40	
55 Carbon tetrachloride	117	4.441	4.441	0.000	77	67160	5.00	5.33	
54 1,1-Dichloropropene	75	4.447	4.447	0.000	90	67707	5.00	5.31	
53 Isobutyl alcohol	43	4.611	4.605	0.006	85	52380	125.0	123.7	
57 Benzene	78	4.611	4.611	0.000	94	196139	5.00	5.32	
58 1,2-Dichloroethane	62	4.654	4.654	0.000	85	72246	5.00	5.19	
59 n-Heptane	43	4.770	4.770	0.000	94	105856	5.00	5.56	
62 Trichloroethene	95	5.099	5.099	0.000	93	50178	5.00	5.27	
64 Methylcyclohexane	83	5.209	5.209	0.000	95	93295	5.00	5.36	
65 1,2-Dichloropropane	63	5.282	5.282	0.000	92	52779	5.00	5.17	
67 Dibromomethane	93	5.392	5.386	0.006	87	31701	5.00	5.23	
66 1,4-Dioxane	88	5.410	5.404	0.006	69	6674	100.0	100.6	M
68 Dichlorobromomethane	83	5.508	5.508	0.000	90	67325	5.00	5.15	
69 2-Chloroethyl vinyl ether	63	5.721	5.721	0.000	87	36105	5.00	5.05	
72 cis-1,3-Dichloropropene	75	5.831	5.831	0.000	83	79874	5.00	4.75	
73 4-Methyl-2-pentanone (MIBK)	43	5.940	5.940	0.000	97	321478	25.0	25.7	
74 Toluene	92	6.068	6.068	0.000	96	117239	5.00	5.13	
77 trans-1,3-Dichloropropene	75	6.270	6.264	0.006	90	70599	5.00	4.71	
75 Ethyl methacrylate	69	6.306	6.306	0.000	90	66444	5.00	4.99	
79 1,1,2-Trichloroethane	83	6.410	6.416	-0.006	87	36014	5.00	4.96	
81 Tetrachloroethene	166	6.489	6.489	0.000	89	51054	5.00	5.13	
82 1,3-Dichloropropane	76	6.538	6.538	0.000	93	75455	5.00	4.97	
80 2-Hexanone	43	6.587	6.587	0.000	97	214427	25.0	25.1	
83 Chlorodibromomethane	129	6.721	6.721	0.000	84	47902	4.90	4.80	
84 Ethylene Dibromide	107	6.806	6.812	-0.006	95	46118	5.00	5.02	
87 Chlorobenzene	112	7.178	7.178	0.000	92	130036	5.00	5.06	
88 Ethylbenzene	91	7.245	7.245	0.000	99	218952	5.00	5.06	
89 1,1,1,2-Tetrachloroethane	131	7.245	7.245	0.000	39	47002	5.00	5.12	
90 m-Xylene & p-Xylene	106	7.337	7.336	0.000	0	85529	5.00	5.10	
91 o-Xylene	106	7.660	7.660	0.000	97	84312	5.00	5.07	
92 Styrene	104	7.678	7.678	0.000	94	141835	5.00	5.02	
95 Bromoform	173	7.867	7.867	0.000	92	31307	5.00	4.75	
94 Isopropylbenzene	105	7.952	7.952	0.000	95	225174	5.00	5.00	
101 Bromobenzene	156	8.227	8.227	0.000	96	53085	5.00	4.97	
97 1,1,2,2-Tetrachloroethane	83	8.245	8.245	0.000	89	63921	5.00	4.96	
100 1,2,3-Trichloropropane	110	8.275	8.275	0.000	81	18154	5.00	4.77	
98 trans-1,4-Dichloro-2-buten	53	8.281	8.281	0.000	56	12534	5.00	4.09	
99 N-Propylbenzene	91	8.288	8.288	0.000	98	262938	5.00	5.01	
103 2-Chlorotoluene	126	8.373	8.373	0.000	95	51490	5.00	5.11	
102 1,3,5-Trimethylbenzene	105	8.428	8.428	0.000	75	186723	5.00	5.06	
105 4-Chlorotoluene	126	8.464	8.464	0.000	97	52546	5.00	5.04	
106 tert-Butylbenzene	134	8.696	8.696	0.000	92	37756	5.00	4.89	
107 1,2,4-Trimethylbenzene	105	8.739	8.745	-0.006	97	190998	5.00	5.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.879	8.879	0.000	93	238329	5.00	5.05	
110 4-Isopropyltoluene	119	8.995	8.995	0.000	96	202298	5.00	5.13	
111 1,3-Dichlorobenzene	146	9.001	9.001	0.000	95	101861	5.00	5.05	
113 1,4-Dichlorobenzene	146	9.074	9.074	0.000	92	101286	5.00	5.01	
115 n-Butylbenzene	91	9.342	9.336	0.006	97	189344	5.00	5.16	
116 1,2-Dichlorobenzene	146	9.391	9.391	0.000	95	98342	5.00	5.00	
117 1,2-Dibromo-3-Chloropropan	75	10.062	10.055	0.007	59	12881	5.00	4.88	
119 1,2,4-Trichlorobenzene	180	10.732	10.732	0.000	92	69811	5.00	4.98	
120 Hexachlorobutadiene	225	10.848	10.848	0.000	91	36594	5.00	5.25	
121 Naphthalene	128	10.939	10.939	0.000	97	183259	5.00	4.91	
122 1,2,3-Trichlorobenzene	180	11.135	11.141	-0.006	93	64866	5.00	5.03	
S 125 1,2-Dichloroethene, Total	1				0			10.7	
S 126 1,3-Dichloropropene, Total	1				0			9.46	
S 123 Total BTEX	1				0			25.7	
S 124 Xylenes, Total	1				0			10.2	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1211.D

Injection Date: 22-Apr-2014 06:01:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: IC 2

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

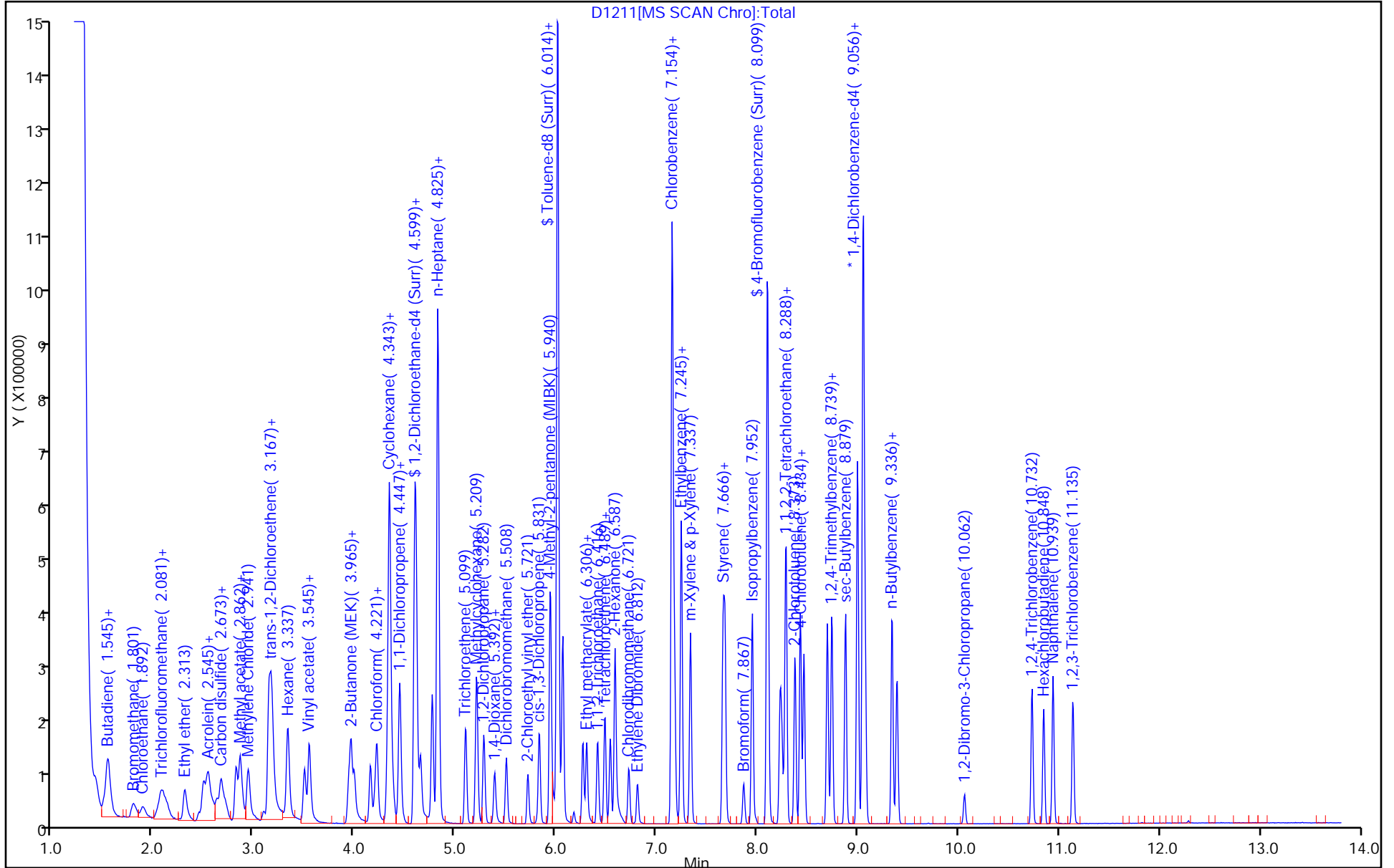
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



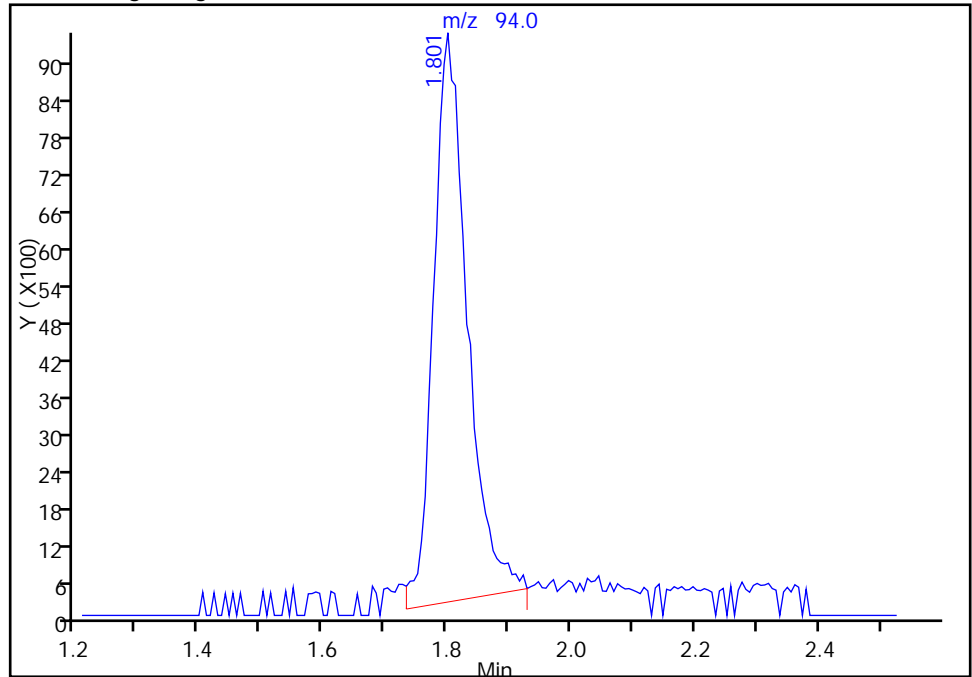
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1211.D
Injection Date: 22-Apr-2014 06:01:30 Instrument ID: HP5975D
Lims ID: IC 2
Client ID:
Operator ID: CDC ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

14 Bromomethane, CAS: 74-83-9

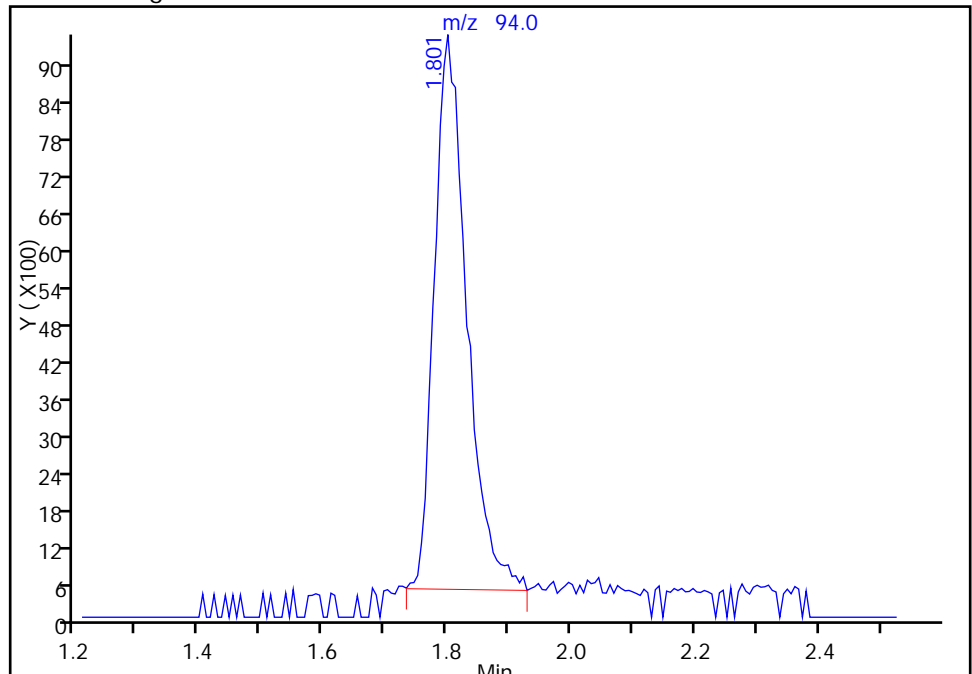
RT: 1.80
Response: 35071
Amount: 5.676531

Processing Integration Results



RT: 1.80
Response: 32892
Amount: 5.387175

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 12:43:45
Audit Action: Manually Integrated
Audit Reason: Baseline

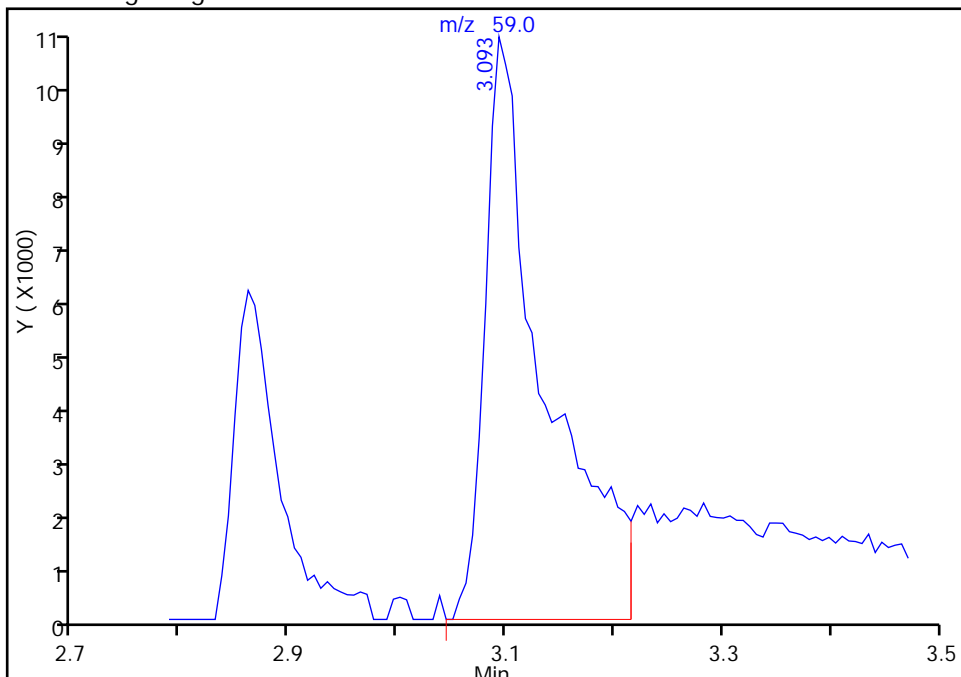
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1211.D
Injection Date: 22-Apr-2014 06:01:30 Instrument ID: HP5975D
Lims ID: IC 2
Client ID:
Operator ID: CDC ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

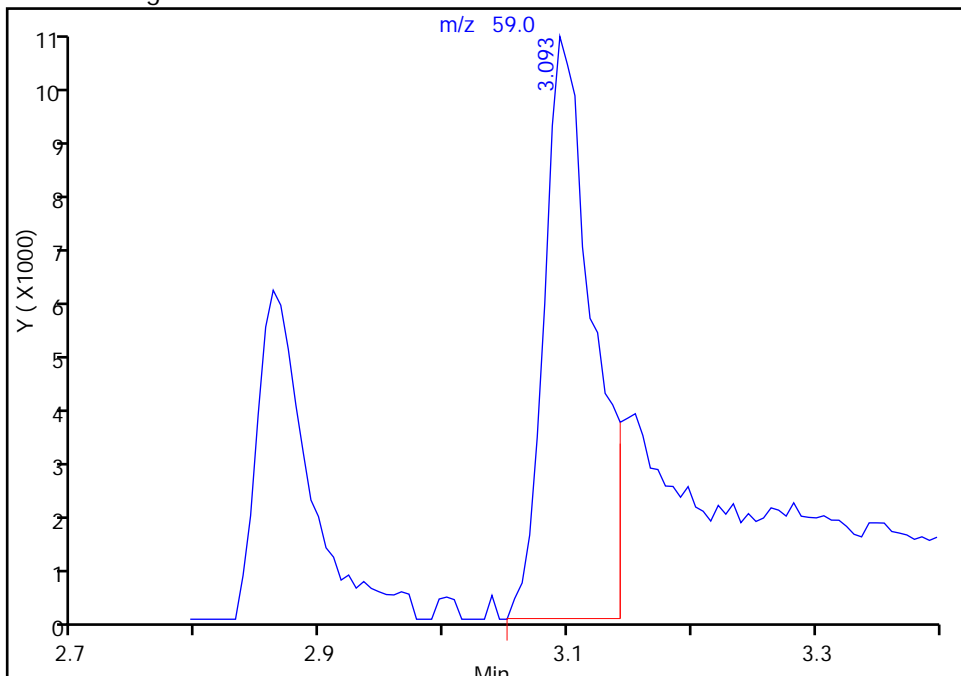
RT: 3.09
Response: 39980
Amount: 60.264683

Processing Integration Results



RT: 3.09
Response: 28610
Amount: 56.002019

Manual Integration Results



Reviewer: BrandtT, 22-Apr-2014 17:50:04
Audit Action: Manually Integrated
Audit Reason: Coelution

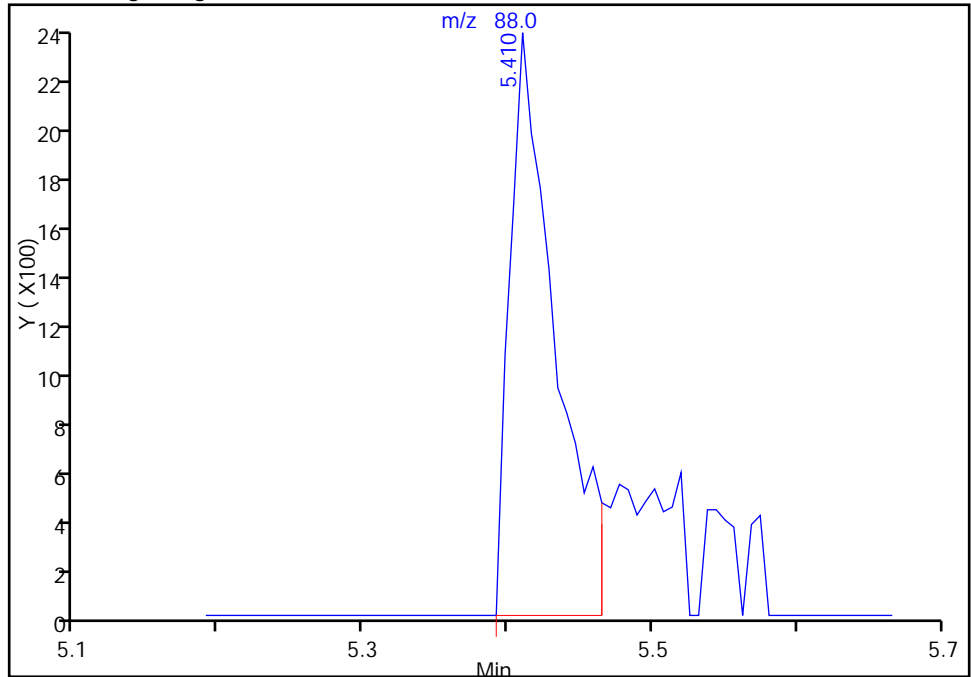
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1211.D
Injection Date: 22-Apr-2014 06:01:30 Instrument ID: HP5975D
Lims ID: IC 2
Client ID:
Operator ID: CDC ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

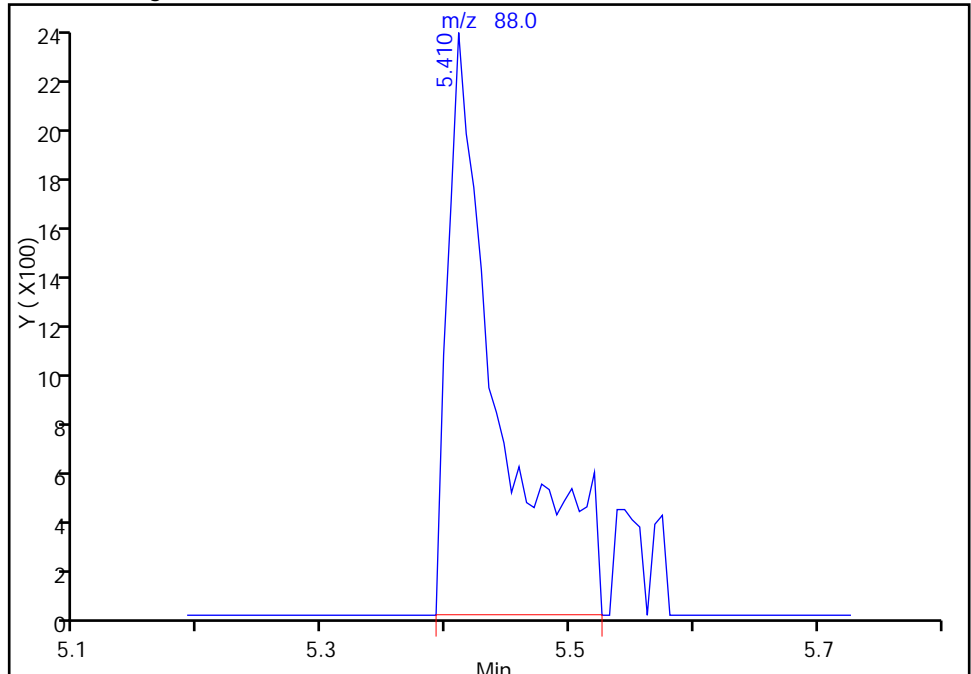
RT: 5.41
Response: 5134
Amount: 82.980934

Processing Integration Results



RT: 5.41
Response: 6674
Amount: 100.6039

Manual Integration Results



Reviewer: BrandtT, 22-Apr-2014 17:37:33
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1212.D
 Lims ID: IC 3
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-Apr-2014 06:22:30 ALS Bottle#: 5 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 3
 Misc. Info.: 480-0031313-007
 Operator ID: CDC Instrument ID: HP5975D
 Sublist: chrom-D-8260*sub13
 Method: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1212.D
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Apr-2014 00:44:48 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK037

First Level Reviewer: cwiklinc

Date: 23-Apr-2014 00:44:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.825	0.000	98	159332	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.154	7.154	0.000	87	311267	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.056	9.056	0.000	95	273920	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.343	0.000	82	236389	25.0	24.9	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.593	0.000	0	155938	25.0	25.0	
\$ 5 Toluene-d8 (Surr)	98	6.014	6.014	0.000	92	882694	25.0	25.4	
\$ 6 4-Bromofluorobenzene (Surr	174	8.105	8.105	0.000	89	264503	25.0	25.6	
10 Dichlorodifluoromethane	85	1.325	1.325	0.000	78	92410	10.0	9.86	
12 Chloromethane	50	1.429	1.429	0.000	88	135651	10.0	9.76	
13 Vinyl chloride	62	1.533	1.533	0.000	80	122006	10.0	9.32	
144 Butadiene	54	1.557	1.557	0.000	93	127858	10.0	9.79	
14 Bromomethane	94	1.813	1.813	0.000	87	62037	10.0	9.39	
15 Chloroethane	64	1.911	1.911	0.000	91	70961	10.0	9.86	
16 Dichlorofluoromethane	67	2.081	2.081	0.000	82	159156	10.0	9.72	
17 Trichlorofluoromethane	101	2.045	2.045	0.000	80	96629	10.0	9.33	
18 Ethyl ether	59	2.313	2.313	0.000	94	97068	10.0	10.0	
20 Acrolein	56	2.453	2.453	0.000	88	55393	50.0	47.6	
22 1,1-Dichloroethene	96	2.496	2.496	0.000	85	93526	10.0	9.74	
21 1,1,2-Trichloro-1,2,2-trif	101	2.551	2.551	0.000	84	99530	10.0	9.96	
23 Acetone	43	2.593	2.593	0.000	97	132249	50.0	46.9	
25 Iodomethane	142	2.630	2.630	0.000	98	160199	10.0	9.78	
26 Carbon disulfide	76	2.673	2.673	0.000	99	329484	10.0	9.74	
28 3-Chloro-1-propene	41	2.819	2.819	0.000	84	185581	10.0	9.82	
27 Methyl acetate	43	2.862	2.862	0.000	96	446164	50.0	50.3	
30 Methylene Chloride	84	2.941	2.941	0.000	91	104437	10.0	9.92	M
31 2-Methyl-2-propanol	59	3.093	3.093	0.000	97	58923	100.0	106.6	M
32 Methyl tert-butyl ether	73	3.148	3.148	0.000	90	326454	10.0	10.0	
34 trans-1,2-Dichloroethene	96	3.148	3.148	0.000	93	101557	10.0	10.0	
33 Acrylonitrile	53	3.179	3.179	0.000	97	427963	100.0	94.2	
35 Hexane	57	3.331	3.331	0.000	93	173126	10.0	9.66	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.502	3.502	0.000	85	203652	10.0	9.90	
37 Vinyl acetate	43	3.551	3.551	0.000	97	503581	20.0	20.4	
44 2,2-Dichloropropane	77	3.941	3.941	0.000	89	100553	10.0	9.98	
45 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	73	108696	10.0	9.89	
43 2-Butanone (MEK)	43	3.996	3.996	0.000	99	272631	50.0	47.9	
48 Chlorobromomethane	128	4.160	4.160	0.000	94	54683	10.0	9.95	
49 Tetrahydrofuran	42	4.197	4.197	0.000	89	75680	20.0	20.2	
50 Chloroform	83	4.221	4.221	0.000	82	181844	10.0	9.92	
51 1,1,1-Trichloroethane	97	4.325	4.325	0.000	92	147730	10.0	10.0	
52 Cyclohexane	56	4.343	4.343	0.000	94	211209	10.0	9.91	
55 Carbon tetrachloride	117	4.441	4.441	0.000	77	135529	10.0	9.94	
54 1,1-Dichloropropene	75	4.453	4.453	0.000	93	136694	10.0	9.90	
53 Isobutyl alcohol	43	4.611	4.611	0.000	93	108704	250.0	237.3	
57 Benzene	78	4.611	4.611	0.000	96	398373	10.0	9.97	
58 1,2-Dichloroethane	62	4.654	4.654	0.000	89	157860	10.0	10.5	
59 n-Heptane	43	4.770	4.770	0.000	94	209998	10.0	10.2	
62 Trichloroethene	95	5.099	5.099	0.000	92	103295	10.0	10.0	
64 Methylcyclohexane	83	5.209	5.209	0.000	94	184602	10.0	9.81	
65 1,2-Dichloropropane	63	5.282	5.282	0.000	93	111882	10.0	10.1	
67 Dibromomethane	93	5.392	5.392	0.000	91	67064	10.0	10.2	
66 1,4-Dioxane	88	5.416	5.416	0.000	86	15738	200.0	210.4	M
68 Dichlorobromomethane	83	5.508	5.508	0.000	92	141438	10.0	10.0	
69 2-Chloroethyl vinyl ether	63	5.721	5.721	0.000	91	80788	10.0	10.4	
72 cis-1,3-Dichloropropene	75	5.837	5.837	0.000	88	173543	10.0	9.53	
73 4-Methyl-2-pentanone (MIBK)	43	5.940	5.940	0.000	98	685812	50.0	51.9	
74 Toluene	92	6.068	6.068	0.000	96	242092	10.0	10.0	
77 trans-1,3-Dichloropropene	75	6.270	6.270	0.000	92	152671	10.0	9.62	
75 Ethyl methacrylate	69	6.306	6.306	0.000	91	145739	10.0	10.3	
79 1,1,2-Trichloroethane	83	6.416	6.416	0.000	88	78412	10.0	10.2	
81 Tetrachloroethene	166	6.489	6.489	0.000	91	105988	10.0	10.1	
82 1,3-Dichloropropane	76	6.538	6.538	0.000	93	164468	10.0	10.2	
80 2-Hexanone	43	6.587	6.587	0.000	97	468121	50.0	51.7	
83 Chlorodibromomethane	129	6.727	6.727	0.000	88	103513	9.80	9.79	
84 Ethylene Dibromide	107	6.812	6.812	0.000	98	99231	10.0	10.2	
87 Chlorobenzene	112	7.178	7.178	0.000	93	274374	10.0	10.1	
89 1,1,1,2-Tetrachloroethane	131	7.245	7.245	0.000	40	97528	10.0	10.0	
88 Ethylbenzene	91	7.245	7.245	0.000	99	464193	10.0	10.1	
90 m-Xylene & p-Xylene	106	7.336	7.336	0.000	0	179380	10.0	10.1	
91 o-Xylene	106	7.660	7.660	0.000	97	178863	10.0	10.2	
92 Styrene	104	7.678	7.678	0.000	94	303872	10.0	10.2	
95 Bromoform	173	7.867	7.867	0.000	96	69826	10.0	10.0	
94 Isopropylbenzene	105	7.952	7.952	0.000	96	475767	10.0	9.98	
101 Bromobenzene	156	8.226	8.226	0.000	96	112950	10.0	9.97	
97 1,1,2,2-Tetrachloroethane	83	8.245	8.245	0.000	88	136822	10.0	10.0	
100 1,2,3-Trichloropropane	110	8.275	8.275	0.000	82	40543	10.0	10.1	
98 trans-1,4-Dichloro-2-buten	53	8.281	8.281	0.000	68	32204	10.0	8.57	
99 N-Propylbenzene	91	8.287	8.287	0.000	98	558025	10.0	10.0	
103 2-Chlorotoluene	126	8.373	8.373	0.000	95	106794	10.0	10.0	
102 1,3,5-Trimethylbenzene	105	8.428	8.428	0.000	72	394823	10.0	10.1	
105 4-Chlorotoluene	126	8.464	8.464	0.000	97	110289	10.0	9.98	
106 tert-Butylbenzene	134	8.696	8.696	0.000	92	83556	10.0	10.2	
107 1,2,4-Trimethylbenzene	105	8.739	8.739	0.000	97	410607	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.879	8.879	0.000	94	506463	10.0	10.1	
110 4-Isopropyltoluene	119	8.995	8.995	0.000	96	426799	10.0	10.2	
111 1,3-Dichlorobenzene	146	9.001	9.001	0.000	96	216674	10.0	10.1	
113 1,4-Dichlorobenzene	146	9.074	9.074	0.000	92	216233	10.0	10.1	
115 n-Butylbenzene	91	9.342	9.342	0.000	97	396065	10.0	10.2	
116 1,2-Dichlorobenzene	146	9.391	9.391	0.000	95	209441	10.0	10.0	
117 1,2-Dibromo-3-Chloropropan	75	10.061	10.061	0.000	70	27990	10.0	10.0	
119 1,2,4-Trichlorobenzene	180	10.732	10.732	0.000	93	149253	10.0	10.1	
120 Hexachlorobutadiene	225	10.848	10.848	0.000	94	76287	10.0	10.6	
121 Naphthalene	128	10.939	10.939	0.000	97	394643	10.0	9.97	
122 1,2,3-Trichlorobenzene	180	11.141	11.141	0.000	94	136232	10.0	9.97	
S 123 Total BTEX	1				0			50.4	
S 124 Xylenes, Total	1				0			20.3	
S 125 1,2-Dichloroethene, Total	1				0			19.9	
S 126 1,3-Dichloropropene, Total	1				0			19.1	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1212.D

Injection Date: 22-Apr-2014 06:22:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: IC 3

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

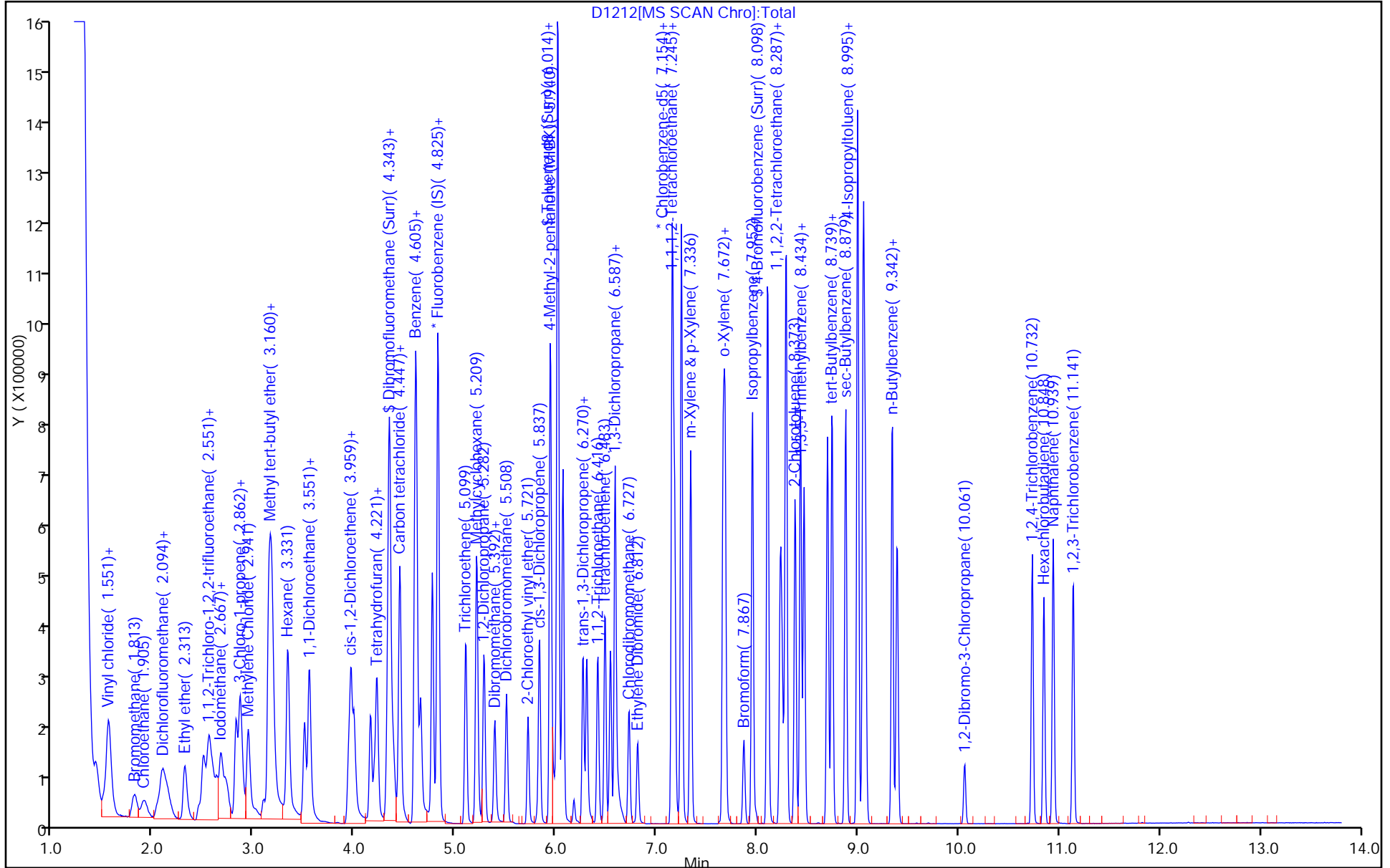
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



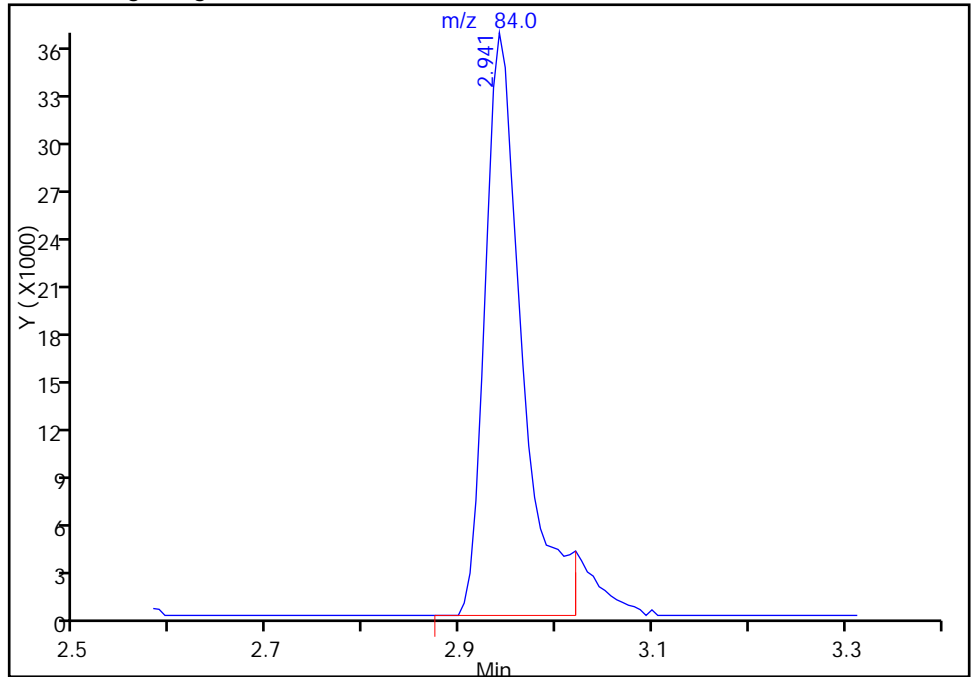
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1212.D
Injection Date: 22-Apr-2014 06:22:30 Instrument ID: HP5975D
Lims ID: IC 3
Client ID:
Operator ID: CDC ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

30 Methylene Chloride, CAS: 75-09-2

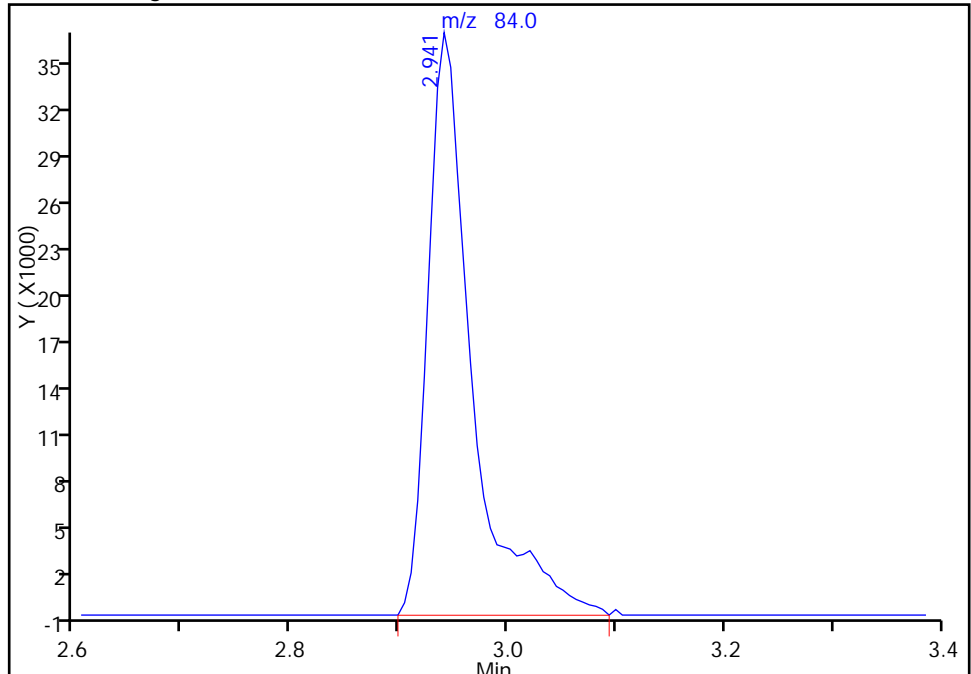
RT: 2.94
Response: 98217
Amount: 9.418372

Processing Integration Results



RT: 2.94
Response: 104437
Amount: 9.916252

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 12:44:53
Audit Action: Manually Integrated
Audit Reason: Peak Tail

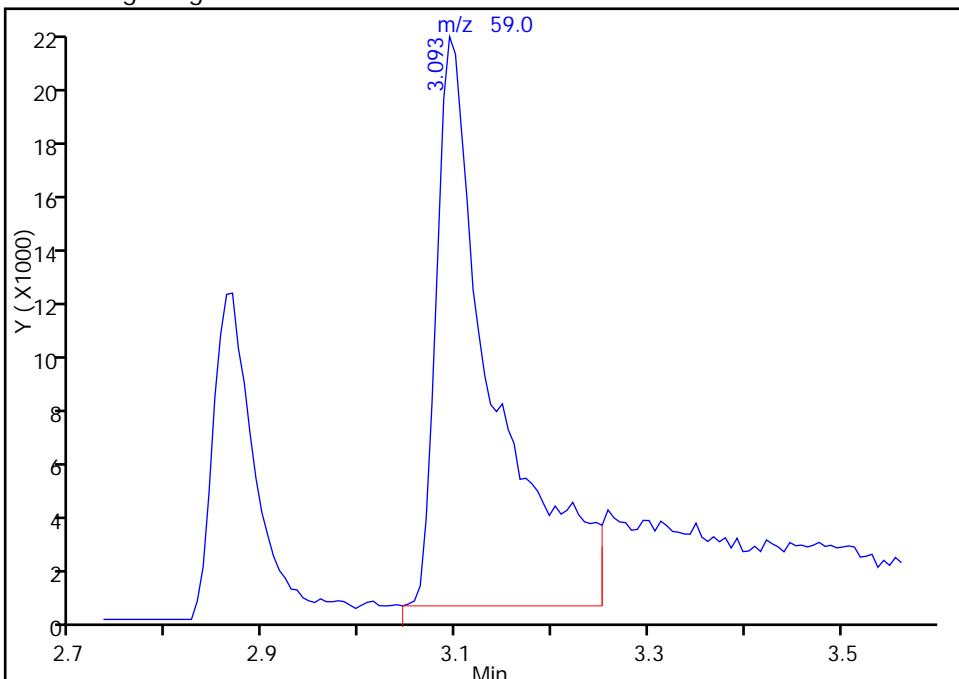
TestAmerica Buffalo

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Injection Date: 22-Apr-2014 06:22:30 Instrument ID: HP5975D
Lims ID: IC 3
Client ID:
Operator ID: CDC ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

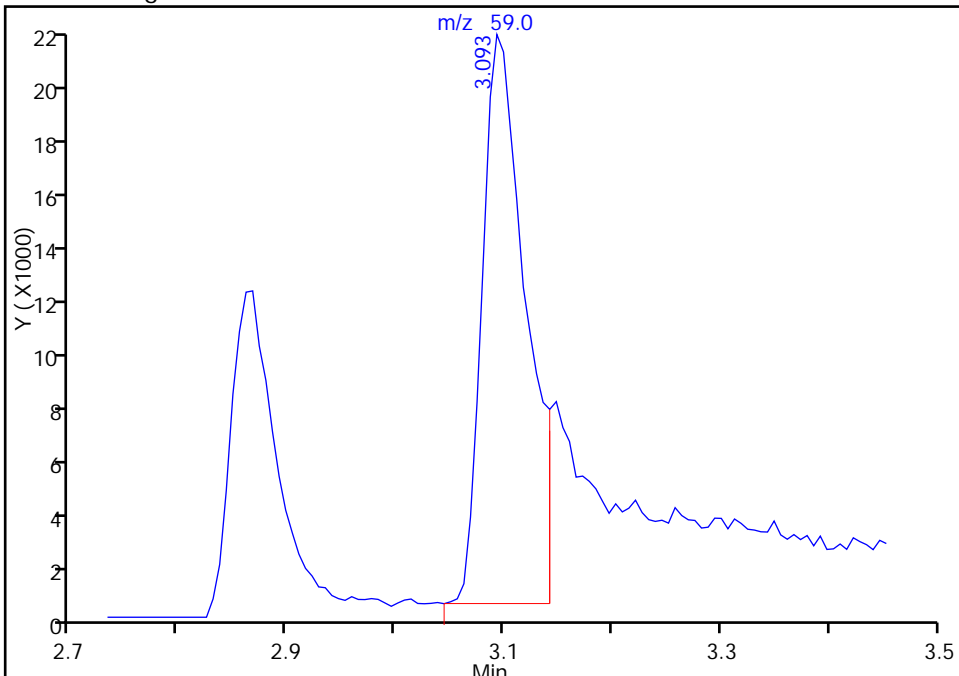
RT: 3.09
Response: 86299
Amount: 127.4596

Processing Integration Results



RT: 3.09
Response: 58923
Amount: 106.5540

Manual Integration Results



Reviewer: BrandtT, 22-Apr-2014 17:50:23
Audit Action: Manually Integrated
Audit Reason: Coelution

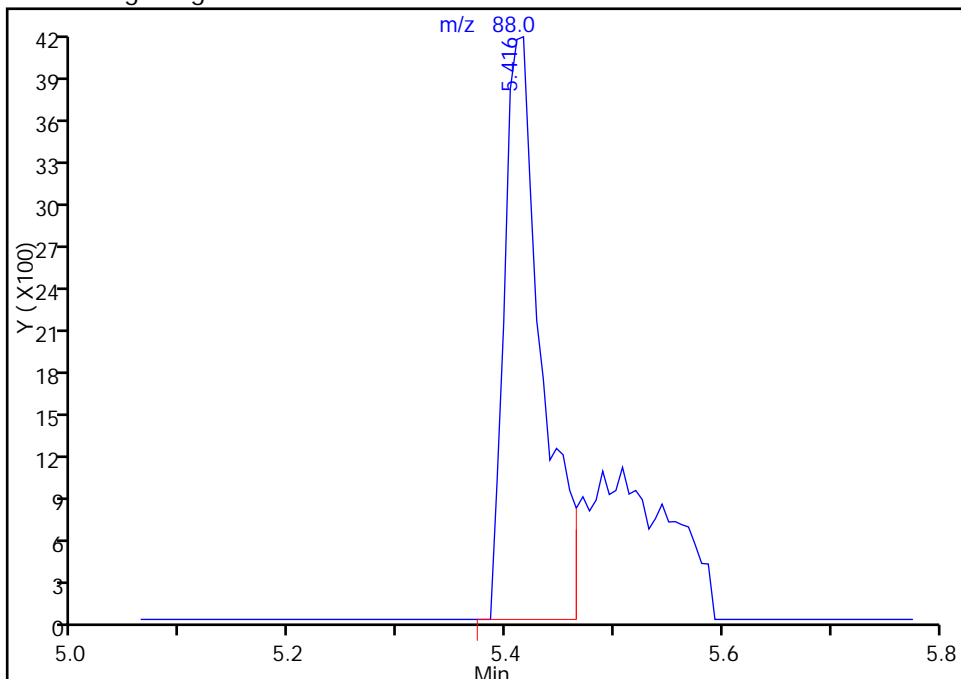
TestAmerica Buffalo

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Injection Date: 22-Apr-2014 06:22:30 Instrument ID: HP5975D
Lims ID: IC 3
Client ID:
Operator ID: CDC ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

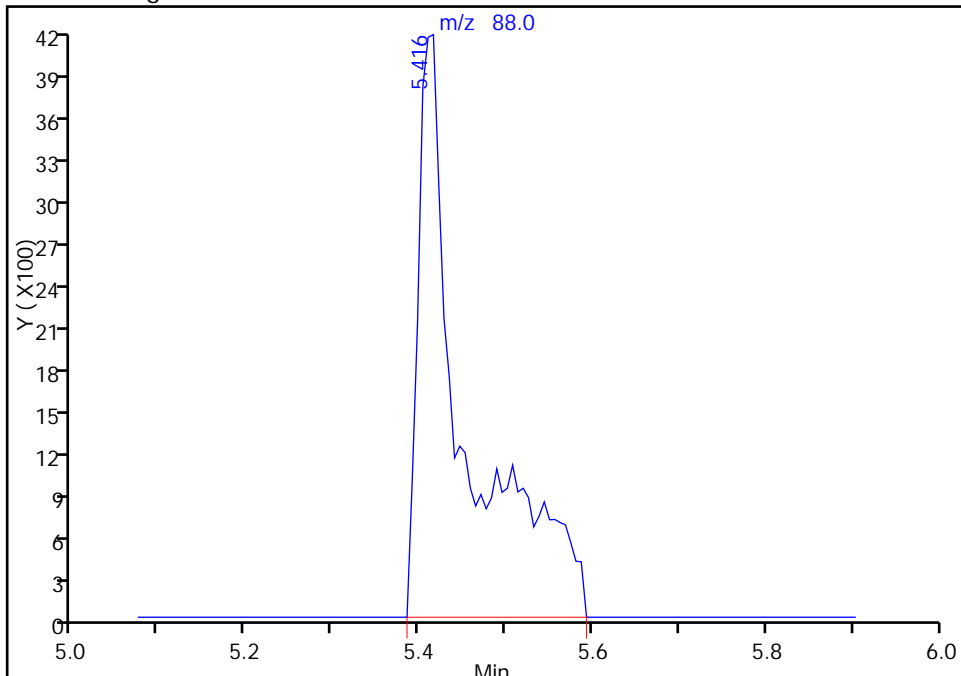
RT: 5.42
Response: 10080
Amount: 183.4048

Processing Integration Results



RT: 5.42
Response: 15738
Amount: 210.3887

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 11:31:05
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1213.D
 Lims ID: ICIS 4
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 22-Apr-2014 06:43:30 ALS Bottle#: 6 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS 4
 Misc. Info.: 480-0031313-008
 Operator ID: CDC Instrument ID: HP5975D
 Sublist: chrom-D-8260*sub13
 Method: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Apr-2014 00:44:53 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK037

First Level Reviewer: cwiklinc

Date: 23-Apr-2014 00:44:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.825	0.000	97	151606	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.154	7.154	0.000	86	293975	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.056	9.056	0.000	93	255178	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.343	0.000	71	230968	25.0	25.6	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.593	0.000	0	146396	25.0	24.7	
\$ 5 Toluene-d8 (Surr)	98	6.014	6.014	0.000	92	820354	25.0	25.0	
\$ 6 4-Bromofluorobenzene (Surr	174	8.105	8.105	0.000	89	242328	25.0	24.8	
10 Dichlorodifluoromethane	85	1.325	1.325	0.000	86	234194	25.0	26.3	
12 Chloromethane	50	1.435	1.435	0.000	89	329272	25.0	24.9	
13 Vinyl chloride	62	1.539	1.539	0.000	83	306848	25.0	24.6	
144 Butadiene	54	1.551	1.551	0.000	93	308740	25.0	24.8	
14 Bromomethane	94	1.801	1.801	0.000	90	165682	25.0	26.3	
15 Chloroethane	64	1.899	1.899	0.000	95	176552	25.0	25.8	
16 Dichlorofluoromethane	67	2.081	2.081	0.000	83	407312	25.0	26.2	
17 Trichlorofluoromethane	101	2.112	2.112	0.000	84	274403	25.0	27.9	
18 Ethyl ether	59	2.307	2.307	0.000	94	235384	25.0	25.5	
20 Acrolein	56	2.453	2.453	0.000	91	149245	125.0	134.7	
22 1,1-Dichloroethene	96	2.496	2.496	0.000	86	232392	25.0	25.4	
21 1,1,2-Trichloro-1,2,2-trif	101	2.545	2.545	0.000	87	246523	25.0	25.9	
23 Acetone	43	2.593	2.593	0.000	97	324637	125.0	121.0	
25 Iodomethane	142	2.630	2.630	0.000	99	403262	25.0	25.9	
26 Carbon disulfide	76	2.673	2.673	0.000	100	828882	25.0	25.8	
28 3-Chloro-1-propene	41	2.819	2.819	0.000	84	455604	25.0	25.3	
27 Methyl acetate	43	2.862	2.862	0.000	96	1045785	125.0	123.8	
30 Methylene Chloride	84	2.941	2.941	0.000	92	260208	25.0	26.0	
31 2-Methyl-2-propanol	59	3.087	3.087	0.000	99	134309	250.0	255.3	M
32 Methyl tert-butyl ether	73	3.142	3.142	0.000	90	798456	25.0	25.8	
34 trans-1,2-Dichloroethene	96	3.148	3.148	0.000	92	248657	25.0	25.8	
33 Acrylonitrile	53	3.173	3.173	0.000	98	982756	250.0	227.3	
35 Hexane	57	3.331	3.331	0.000	93	422548	25.0	24.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.502	3.502	0.000	85	498779	25.0	25.5	
37 Vinyl acetate	43	3.545	3.545	0.000	97	1143280	50.0	48.8	
44 2,2-Dichloropropane	77	3.941	3.941	0.000	90	250308	25.0	26.1	
45 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	71	272017	25.0	26.0	
43 2-Butanone (MEK)	43	3.990	3.990	0.000	94	656505	125.0	121.3	
48 Chlorobromomethane	128	4.154	4.154	0.000	93	133644	25.0	25.6	
49 Tetrahydrofuran	42	4.191	4.191	0.000	88	166174	50.0	46.5	
50 Chloroform	83	4.221	4.221	0.000	82	443121	25.0	25.4	
51 1,1,1-Trichloroethane	97	4.325	4.325	0.000	92	362792	25.0	25.8	
52 Cyclohexane	56	4.343	4.343	0.000	93	517647	25.0	25.5	
55 Carbon tetrachloride	117	4.441	4.441	0.000	81	329687	25.0	25.4	
54 1,1-Dichloropropene	75	4.447	4.447	0.000	94	329444	25.0	25.1	
53 Isobutyl alcohol	43	4.605	4.605	0.000	91	280549	625.0	643.5	
57 Benzene	78	4.611	4.611	0.000	98	944941	25.0	24.9	
58 1,2-Dichloroethane	62	4.654	4.654	0.000	89	352305	25.0	24.6	
59 n-Heptane	43	4.770	4.770	0.000	94	484203	25.0	24.7	
62 Trichloroethene	95	5.099	5.099	0.000	93	245299	25.0	25.0	
64 Methylcyclohexane	83	5.209	5.209	0.000	95	453993	25.0	25.3	
65 1,2-Dichloropropane	63	5.282	5.282	0.000	94	261475	25.0	24.9	
67 Dibromomethane	93	5.386	5.386	0.000	91	155040	25.0	24.8	
66 1,4-Dioxane	88	5.404	5.404	0.000	94	39487	500.0	540.4	M
68 Dichlorobromomethane	83	5.508	5.508	0.000	92	335572	25.0	24.9	
69 2-Chloroethyl vinyl ether	63	5.721	5.721	0.000	91	179530	25.0	24.4	
72 cis-1,3-Dichloropropene	75	5.831	5.831	0.000	89	401946	25.0	23.2	
73 4-Methyl-2-pentanone (MIBK)	43	5.940	5.940	0.000	97	1568610	125.0	125.6	
74 Toluene	92	6.068	6.068	0.000	97	563752	25.0	24.7	
77 trans-1,3-Dichloropropene	75	6.264	6.264	0.000	93	351420	25.0	23.5	
75 Ethyl methacrylate	69	6.306	6.306	0.000	91	329641	25.0	24.8	
79 1,1,2-Trichloroethane	83	6.416	6.416	0.000	88	178134	25.0	24.6	
81 Tetrachloroethene	166	6.489	6.489	0.000	92	246331	25.0	24.8	
82 1,3-Dichloropropane	76	6.538	6.538	0.000	93	373028	25.0	24.6	
80 2-Hexanone	43	6.587	6.587	0.000	97	1035406	125.0	121.1	
83 Chlorodibromomethane	129	6.721	6.721	0.000	88	246368	24.5	24.7	
84 Ethylene Dibromide	107	6.812	6.812	0.000	98	227957	25.0	24.8	
87 Chlorobenzene	112	7.178	7.178	0.000	94	636707	25.0	24.8	
88 Ethylbenzene	91	7.245	7.245	0.000	99	1074726	25.0	24.9	
89 1,1,1,2-Tetrachloroethane	131	7.245	7.245	0.000	40	232895	25.0	25.4	
90 m-Xylene & p-Xylene	106	7.336	7.336	0.000	0	420560	25.0	25.1	
91 o-Xylene	106	7.660	7.660	0.000	97	418865	25.0	25.2	
92 Styrene	104	7.678	7.678	0.000	95	705745	25.0	25.0	
95 Bromoform	173	7.867	7.867	0.000	96	167744	25.0	25.5	
94 Isopropylbenzene	105	7.952	7.952	0.000	96	1117068	25.0	25.1	
101 Bromobenzene	156	8.227	8.227	0.000	96	262636	25.0	24.9	
97 1,1,2,2-Tetrachloroethane	83	8.245	8.245	0.000	88	316361	25.0	24.9	
100 1,2,3-Trichloropropane	110	8.275	8.275	0.000	81	92625	25.0	24.7	
98 trans-1,4-Dichloro-2-buten	53	8.281	8.281	0.000	62	85137	25.0	22.6	
99 N-Propylbenzene	91	8.288	8.288	0.000	98	1288764	25.0	24.9	
103 2-Chlorotoluene	126	8.373	8.373	0.000	96	251781	25.0	25.3	
102 1,3,5-Trimethylbenzene	105	8.428	8.428	0.000	72	923803	25.0	25.3	
105 4-Chlorotoluene	126	8.464	8.464	0.000	97	250579	25.0	24.3	
106 tert-Butylbenzene	134	8.696	8.696	0.000	93	189523	25.0	24.9	
107 1,2,4-Trimethylbenzene	105	8.745	8.745	0.000	97	946399	25.0	25.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.879	8.879	0.000	95	1181127	25.0	25.4	
110 4-Isopropyltoluene	119	8.995	8.995	0.000	95	982005	25.0	25.2	
111 1,3-Dichlorobenzene	146	9.001	9.001	0.000	97	489358	25.0	24.6	
113 1,4-Dichlorobenzene	146	9.074	9.074	0.000	93	490053	25.0	24.5	
115 n-Butylbenzene	91	9.336	9.336	0.000	98	919298	25.0	25.4	
116 1,2-Dichlorobenzene	146	9.391	9.391	0.000	96	484021	25.0	24.9	
117 1,2-Dibromo-3-Chloropropan	75	10.055	10.055	0.000	77	65808	25.0	25.2	
119 1,2,4-Trichlorobenzene	180	10.732	10.732	0.000	90	354271	25.0	25.6	
120 Hexachlorobutadiene	225	10.848	10.848	0.000	95	179176	25.0	27.3	
121 Naphthalene	128	10.939	10.939	0.000	97	950593	25.0	25.8	
122 1,2,3-Trichlorobenzene	180	11.141	11.141	0.000	93	325788	25.0	25.6	
S 125 1,2-Dichloroethene, Total	1				0			51.8	
S 126 1,3-Dichloropropene, Total	1				0			46.6	
S 123 Total BTEX	1				0			124.6	
S 124 Xylenes, Total	1				0			50.3	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1213.D

Injection Date: 22-Apr-2014 06:43:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: ICIS 4

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

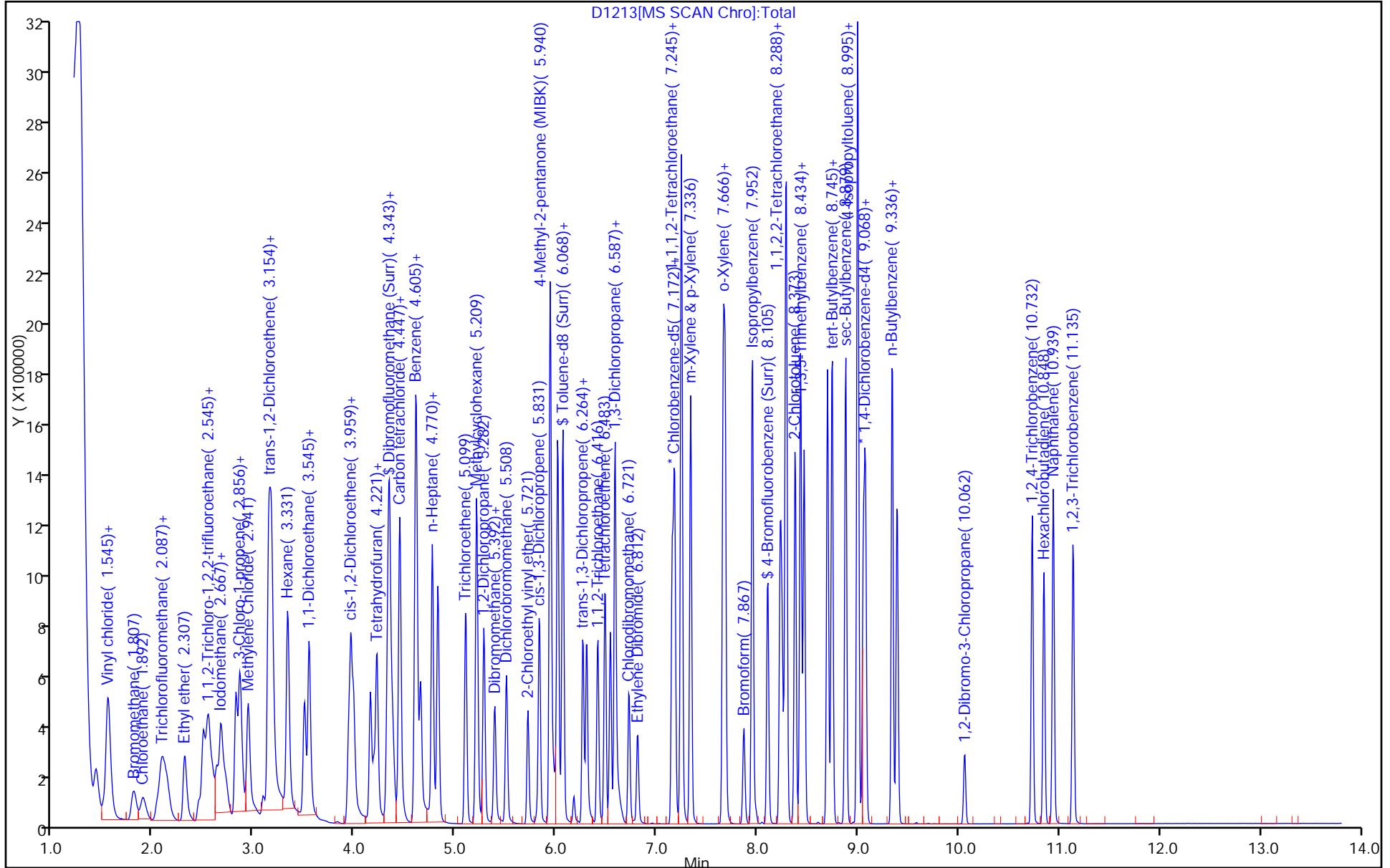
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



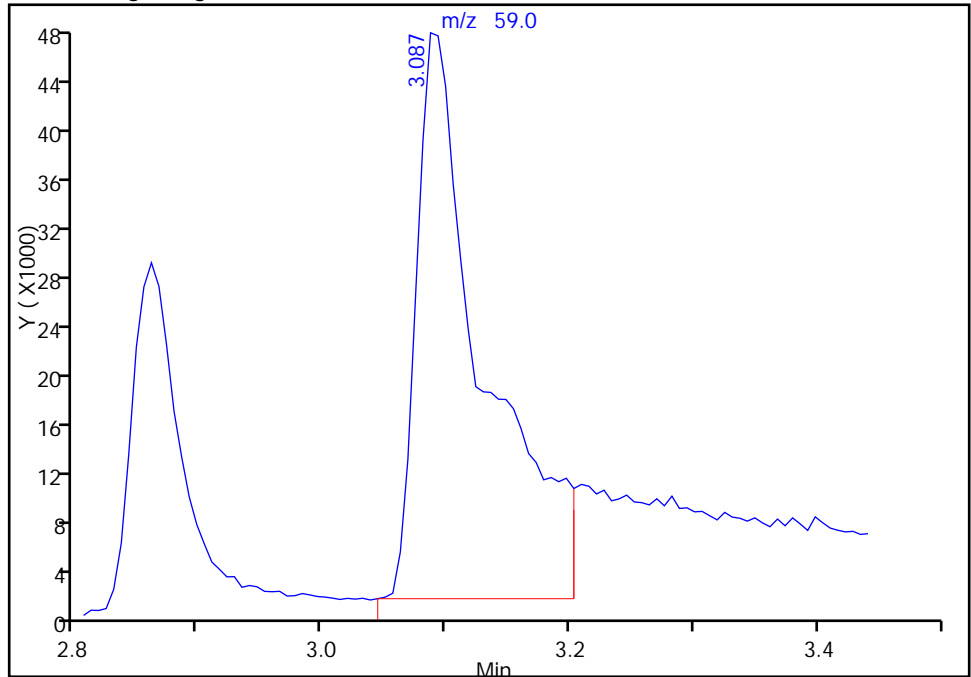
TestAmerica Buffalo

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Injection Date: 22-Apr-2014 06:43:30 Instrument ID: HP5975D
Lims ID: ICIS 4
Client ID:
Operator ID: CDC ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

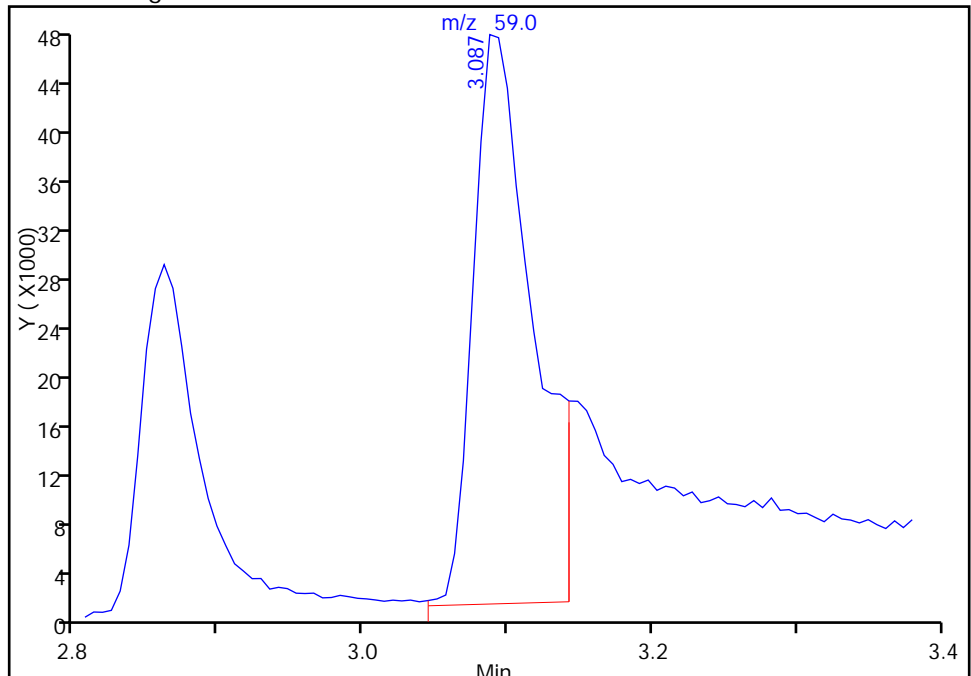
RT: 3.09
Response: 175299
Amount: 291.7643

Processing Integration Results



RT: 3.09
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Amount: 255.2563

Manual Integration Results



Reviewer: BrandtT, 22-Apr-2014 17:50:44
Audit Action: Manually Integrated
Audit Reason: Coelution

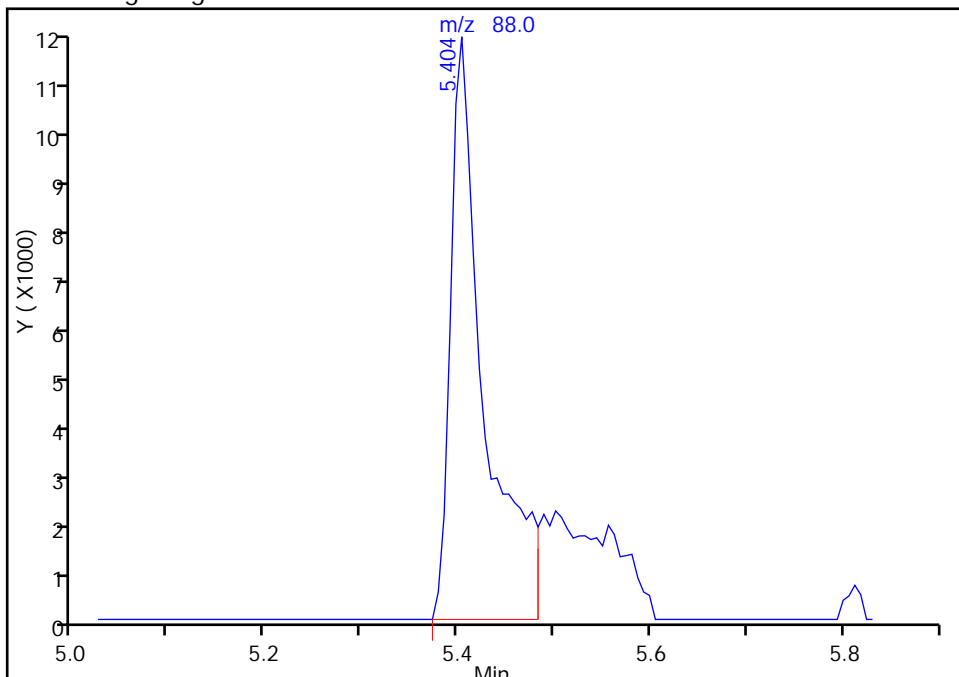
TestAmerica Buffalo

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Injection Date: 22-Apr-2014 06:43:30 Instrument ID: HP5975D
Lims ID: ICIS 4
Client ID:
Operator ID: CDC ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

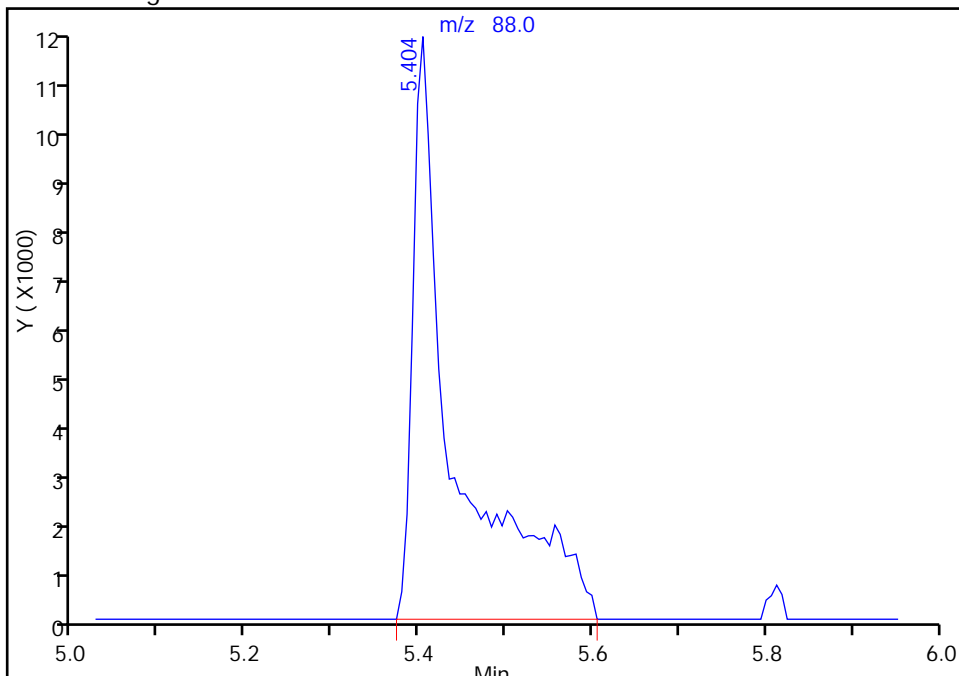
RT: 5.40
Response: 28721
Amount: 517.2219

Processing Integration Results



RT: 5.40
Response: 39487
Amount: 540.3776

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 11:32:12
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1214.D
 Lims ID: IC 5
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-Apr-2014 07:04:30 ALS Bottle#: 7 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 5
 Misc. Info.: 480-0031313-009
 Operator ID: CDC Instrument ID: HP5975D
 Sublist: chrom-D-8260*sub13
 Method: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Apr-2014 00:44:58 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK037

First Level Reviewer: cwiklinc

Date: 23-Apr-2014 00:44:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.825	0.000	97	155923	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.154	7.154	0.000	87	300019	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.056	9.056	0.000	68	254695	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.343	0.000	58	231497	25.0	24.9	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.593	4.593	0.000	0	148858	25.0	24.4	
\$ 5 Toluene-d8 (Surr)	98	6.020	6.014	0.006	91	830424	25.0	24.8	
\$ 6 4-Bromofluorobenzene (Surr	174	8.105	8.105	0.000	89	248686	25.0	24.9	
10 Dichlorodifluoromethane	85	1.332	1.325	0.007	87	458380	50.0	50.0	
12 Chloromethane	50	1.441	1.435	0.006	88	640091	50.0	47.1	
13 Vinyl chloride	62	1.551	1.539	0.012	83	597066	50.0	46.6	
144 Butadiene	54	1.557	1.551	0.006	93	596433	50.0	46.7	
14 Bromomethane	94	1.807	1.801	0.006	91	314124	50.0	48.6	
15 Chloroethane	64	1.899	1.899	0.001	95	344695	50.0	48.9	
17 Trichlorofluoromethane	101	2.124	2.112	0.012	83	568439	50.0	56.1	
16 Dichlorofluoromethane	67	2.088	2.081	0.007	83	793861	50.0	49.6	
18 Ethyl ether	59	2.313	2.307	0.006	94	476321	50.0	50.2	
20 Acrolein	56	2.453	2.453	0.000	91	308680	250.0	271.0	
22 1,1-Dichloroethene	96	2.502	2.496	0.006	86	468095	50.0	49.8	
21 1,1,2-Trichloro-1,2,2-trif	101	2.551	2.545	0.006	88	488252	50.0	50.0	
23 Acetone	43	2.594	2.593	0.001	96	547613	250.0	198.5	
25 Iodomethane	142	2.636	2.630	0.006	99	799364	50.0	49.8	
26 Carbon disulfide	76	2.673	2.673	0.000	100	1646136	50.0	49.7	
28 3-Chloro-1-propene	41	2.825	2.819	0.006	84	915210	50.0	49.5	
27 Methyl acetate	43	2.862	2.862	0.000	96	2039523	250.0	234.7	
30 Methylene Chloride	84	2.941	2.941	0.000	94	494547	50.0	48.0	
31 2-Methyl-2-propanol	59	3.087	3.087	0.000	99	218032	500.0	402.9	
34 trans-1,2-Dichloroethene	96	3.148	3.148	0.000	92	495926	50.0	50.0	
32 Methyl tert-butyl ether	73	3.142	3.142	0.000	90	1618277	50.0	50.9	
33 Acrylonitrile	53	3.179	3.173	0.006	98	1937802	500.0	435.9	
35 Hexane	57	3.337	3.331	0.006	93	858037	50.0	48.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.502	3.502	0.000	85	993941	50.0	49.4	
37 Vinyl acetate	43	3.545	3.545	0.000	97	2341434	100.0	97.1	
44 2,2-Dichloropropane	77	3.941	3.941	0.000	90	478032	50.0	48.5	
45 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	73	533524	50.0	49.6	
43 2-Butanone (MEK)	43	3.990	3.990	0.000	94	1328924	250.0	238.7	
48 Chlorobromomethane	128	4.160	4.154	0.006	94	267629	50.0	49.8	
49 Tetrahydrofuran	42	4.191	4.191	0.000	90	333001	100.0	90.7	
50 Chloroform	83	4.221	4.221	0.000	82	887590	50.0	49.5	
51 1,1,1-Trichloroethane	97	4.325	4.325	0.000	92	725160	50.0	50.2	
52 Cyclohexane	56	4.343	4.343	0.000	94	1024130	50.0	49.1	
55 Carbon tetrachloride	117	4.441	4.441	0.000	75	665455	50.0	49.9	
54 1,1-Dichloropropene	75	4.447	4.447	0.000	93	662875	50.0	49.0	
57 Benzene	78	4.611	4.611	0.000	98	1916774	50.0	49.0	
53 Isobutyl alcohol	43	4.605	4.605	0.000	92	546929	1250.0	1219.8	
58 1,2-Dichloroethane	62	4.654	4.654	0.000	89	700584	50.0	47.6	
59 n-Heptane	43	4.770	4.770	0.000	94	989842	50.0	49.1	
62 Trichloroethene	95	5.099	5.099	0.000	93	491395	50.0	48.7	
64 Methylcyclohexane	83	5.209	5.209	0.000	95	916377	50.0	49.7	
65 1,2-Dichloropropane	63	5.282	5.282	0.000	95	533403	50.0	49.3	
67 Dibromomethane	93	5.392	5.386	0.006	92	316540	50.0	49.3	
66 1,4-Dioxane	88	5.404	5.404	0.000	95	77641	1000.0	1030.7	M
68 Dichlorobromomethane	83	5.508	5.508	0.000	93	682850	50.0	49.3	
69 2-Chloroethyl vinyl ether	63	5.721	5.721	0.000	91	368909	50.0	48.8	
72 cis-1,3-Dichloropropene	75	5.837	5.831	0.006	90	820283	50.0	46.0	
73 4-Methyl-2-pentanone (MIBK)	43	5.940	5.940	0.000	98	3142650	250.0	246.6	
74 Toluene	92	6.068	6.068	0.000	97	1142285	50.0	48.9	
77 trans-1,3-Dichloropropene	75	6.264	6.264	0.000	93	718792	50.0	47.0	
75 Ethyl methacrylate	69	6.306	6.306	0.000	89	678964	50.0	50.0	
79 1,1,2-Trichloroethane	83	6.416	6.416	0.000	88	363206	50.0	49.1	
81 Tetrachloroethene	166	6.489	6.489	0.000	91	498722	50.0	49.1	
82 1,3-Dichloropropane	76	6.538	6.538	0.000	93	756764	50.0	48.8	
80 2-Hexanone	43	6.587	6.587	0.000	97	2080827	250.0	238.5	
83 Chlorodibromomethane	129	6.727	6.721	0.006	89	508847	49.0	50.0	
84 Ethylene Dibromide	107	6.812	6.812	0.000	98	464761	50.0	49.6	
87 Chlorobenzene	112	7.178	7.178	0.000	93	1295709	50.0	49.4	
89 1,1,1,2-Tetrachloroethane	131	7.245	7.245	0.000	40	475428	50.0	50.8	
88 Ethylbenzene	91	7.245	7.245	0.000	99	2184549	50.0	49.5	
90 m-Xylene & p-Xylene	106	7.337	7.336	0.001	0	854697	50.0	50.0	
91 o-Xylene	106	7.660	7.660	0.000	98	849618	50.0	50.0	
92 Styrene	104	7.678	7.678	0.000	94	1445235	50.0	50.1	
95 Bromoform	173	7.867	7.867	0.000	96	350309	50.0	52.1	
94 Isopropylbenzene	105	7.952	7.952	0.000	96	2251373	50.0	50.8	
101 Bromobenzene	156	8.227	8.227	0.000	96	535837	50.0	50.9	
97 1,1,2,2-Tetrachloroethane	83	8.245	8.245	0.000	88	640375	50.0	50.4	
100 1,2,3-Trichloropropane	110	8.275	8.275	0.000	81	186945	50.0	49.9	
98 trans-1,4-Dichloro-2-buten	53	8.281	8.281	0.000	65	187908	50.0	48.8	
99 N-Propylbenzene	91	8.288	8.288	0.000	98	2600245	50.0	50.3	
103 2-Chlorotoluene	126	8.379	8.373	0.006	96	502319	50.0	50.6	
102 1,3,5-Trimethylbenzene	105	8.428	8.428	0.000	72	1848759	50.0	50.8	
105 4-Chlorotoluene	126	8.464	8.464	0.000	98	511750	50.0	49.8	
106 tert-Butylbenzene	134	8.696	8.696	0.000	93	387252	50.0	50.9	
107 1,2,4-Trimethylbenzene	105	8.745	8.745	0.000	97	1886589	50.0	50.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.879	8.879	0.000	95	2362030	50.0	50.8	
110 4-Isopropyltoluene	119	8.995	8.995	0.000	94	1970573	50.0	50.7	
111 1,3-Dichlorobenzene	146	9.001	9.001	0.000	71	980271	50.0	49.3	
113 1,4-Dichlorobenzene	146	9.074	9.074	0.000	93	990691	50.0	49.7	
115 n-Butylbenzene	91	9.342	9.336	0.006	98	1848468	50.0	51.1	
116 1,2-Dichlorobenzene	146	9.391	9.391	0.000	95	970401	50.0	50.1	
117 1,2-Dibromo-3-Chloropropan	75	10.062	10.055	0.007	83	134559	50.0	51.7	
119 1,2,4-Trichlorobenzene	180	10.732	10.732	0.000	90	717822	50.0	52.0	
120 Hexachlorobutadiene	225	10.848	10.848	0.000	95	365870	50.0	56.1	
121 Naphthalene	128	10.939	10.939	0.000	98	1920172	50.0	52.2	
122 1,2,3-Trichlorobenzene	180	11.141	11.141	0.000	94	655517	50.0	51.6	
S 123 Total BTEX	1				0			247.5	
S 124 Xylenes, Total	1				0			100.0	
S 125 1,2-Dichloroethene, Total	1				0			99.6	
S 126 1,3-Dichloropropene, Total	1				0			93.0	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1214.D

Injection Date: 22-Apr-2014 07:04:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: IC 5

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

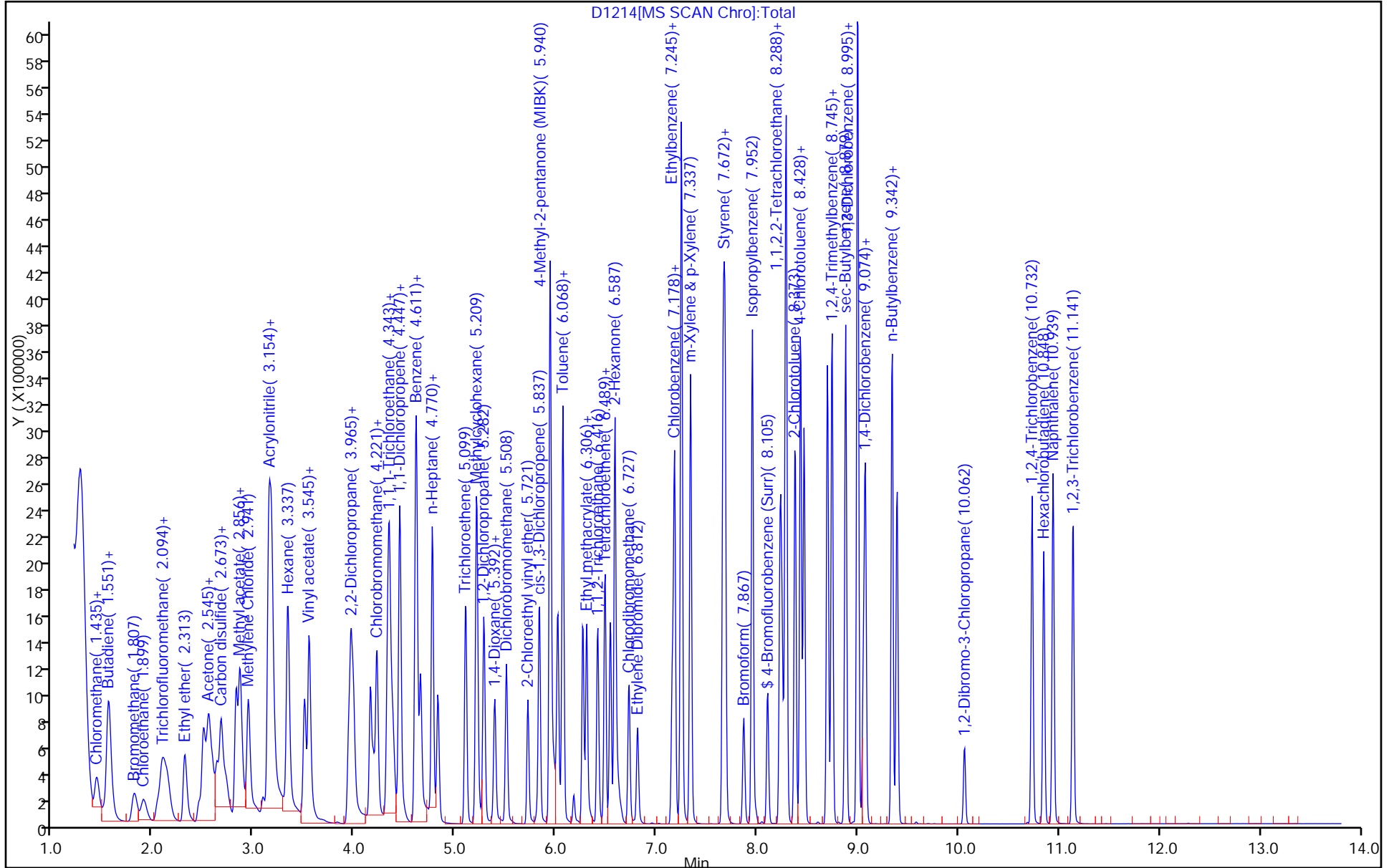
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



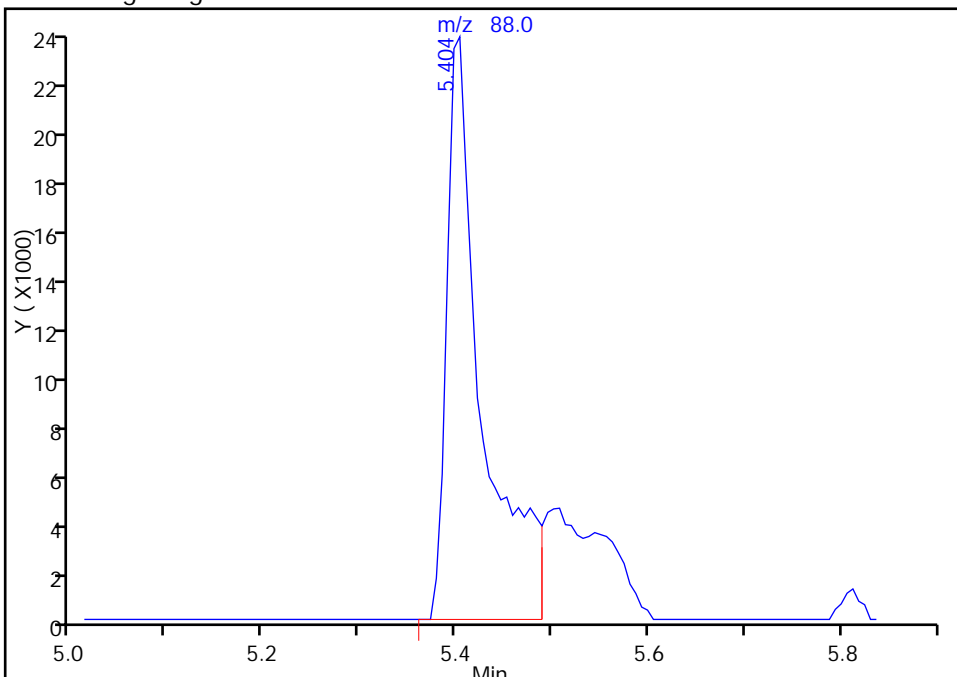
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1214.D
Injection Date: 22-Apr-2014 07:04:30 Instrument ID: HP5975D
Lims ID: IC 5
Client ID:
Operator ID: CDC ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

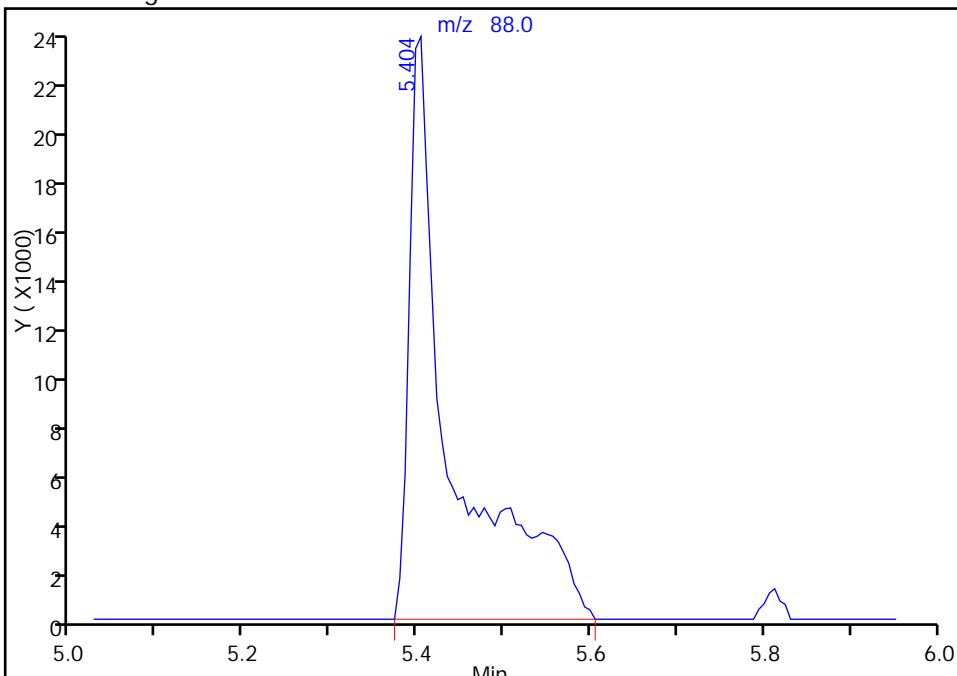
RT: 5.40
Response: 58708
Amount: 916.8326

Processing Integration Results



RT: 5.40
Response: 77641
Amount: 1030.7365

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 11:33:44
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1215.D
 Lims ID: IC 6
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-Apr-2014 07:25:30 ALS Bottle#: 8 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 6
 Misc. Info.: 480-0031313-010
 Operator ID: CDC Instrument ID: HP5975D
 Sublist: chrom-D-8260*sub13
 Method: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Apr-2014 00:45:02 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK037

First Level Reviewer: cwiklinc

Date: 23-Apr-2014 00:45:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.825	4.825	0.000	92	168945	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.154	7.154	0.000	87	319632	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.056	9.056	0.000	95	265897	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.343	4.343	0.000	71	232610	25.0	23.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.599	4.593	0.006	0	156999	25.0	23.8	
\$ 5 Toluene-d8 (Surr)	98	6.020	6.014	0.006	91	888917	25.0	24.9	
\$ 6 4-Bromofluorobenzene (Surr	174	8.105	8.105	0.000	88	268753	25.0	25.3	
10 Dichlorodifluoromethane	85	1.332	1.325	0.007	87	907834	100.0	91.4	
12 Chloromethane	50	1.441	1.435	0.006	89	1229847	100.0	83.5	
13 Vinyl chloride	62	1.551	1.539	0.012	80	1169031	100.0	84.2	
144 Butadiene	54	1.557	1.551	0.006	92	1165407	100.0	84.1	
14 Bromomethane	94	1.813	1.801	0.012	91	619547	100.0	88.4	
15 Chloroethane	64	1.911	1.899	0.013	95	682720	100.0	89.5	
16 Dichlorofluoromethane	67	2.088	2.081	0.007	83	1508593	100.0	86.9	
17 Trichlorofluoromethane	101	2.130	2.112	0.018	86	1158080	100.0	105.5	
18 Ethyl ether	59	2.307	2.307	0.000	95	945583	100.0	91.9	
20 Acrolein	56	2.453	2.453	0.000	94	652389	500.0	528.5	
22 1,1-Dichloroethene	96	2.496	2.496	0.000	86	908533	100.0	89.2	
21 1,1,2-Trichloro-1,2,2-trif	101	2.551	2.545	0.006	87	981002	100.0	92.6	
23 Acetone	43	2.594	2.593	0.001	99	1325887	500.0	443.5	
25 Iodomethane	142	2.630	2.630	0.000	99	1530338	100.0	88.1	
26 Carbon disulfide	76	2.673	2.673	0.000	100	3138933	100.0	87.5	
28 3-Chloro-1-propene	41	2.819	2.819	0.000	84	1791502	100.0	89.4	
27 Methyl acetate	43	2.856	2.862	-0.006	96	4913667	500.0	521.9	
30 Methylene Chloride	84	2.941	2.941	0.000	94	1003559	100.0	89.9	
31 2-Methyl-2-propanol	59	3.087	3.087	0.000	99	521052	1000.0	888.6	M
32 Methyl tert-butyl ether	73	3.142	3.142	0.000	90	3107060	100.0	90.1	
34 trans-1,2-Dichloroethene	96	3.148	3.148	0.000	93	957897	100.0	89.1	
33 Acrylonitrile	53	3.179	3.173	0.006	99	4181132	1000.0	868.0	
35 Hexane	57	3.331	3.331	0.000	93	1701900	100.0	89.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.502	3.502	0.000	85	1925309	100.0	88.3	
37 Vinyl acetate	43	3.545	3.545	0.000	97	5015523	200.0	192.0	
44 2,2-Dichloropropane	77	3.941	3.941	0.000	89	855391	100.0	80.1	
45 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	72	1047331	100.0	89.9	
43 2-Butanone (MEK)	43	3.990	3.990	0.000	98	2904903	500.0	481.5	
48 Chlorobromomethane	128	4.154	4.154	0.000	93	534258	100.0	91.7	
49 Tetrahydrofuran	42	4.185	4.191	-0.006	90	733659	200.0	184.3	
50 Chloroform	83	4.221	4.221	0.000	82	1727462	100.0	88.9	
51 1,1,1-Trichloroethane	97	4.325	4.325	0.000	94	1389106	100.0	88.7	
52 Cyclohexane	56	4.343	4.343	0.000	94	2001980	100.0	88.6	
55 Carbon tetrachloride	117	4.441	4.441	0.000	80	1314262	100.0	90.9	
54 1,1-Dichloropropene	75	4.447	4.447	0.000	94	1313931	100.0	89.7	
53 Isobutyl alcohol	43	4.605	4.605	0.000	94	1208353	2500.0	2487.3	
57 Benzene	78	4.611	4.611	0.000	98	3839816	100.0	90.7	
58 1,2-Dichloroethane	62	4.654	4.654	0.000	89	1462512	100.0	91.6	
59 n-Heptane	43	4.770	4.770	0.000	94	2047890	100.0	93.7	
62 Trichloroethene	95	5.099	5.099	0.000	93	1000093	100.0	91.5	
64 Methylcyclohexane	83	5.215	5.209	0.006	95	1814791	100.0	90.9	
65 1,2-Dichloropropane	63	5.282	5.282	0.000	94	1110031	100.0	94.7	
67 Dibromomethane	93	5.392	5.386	0.006	93	650613	100.0	93.5	
66 1,4-Dioxane	88	5.398	5.404	-0.006	95	154903	2000.0	1920.5	M
68 Dichlorobromomethane	83	5.508	5.508	0.000	93	1413737	100.0	94.2	
69 2-Chloroethyl vinyl ether	63	5.721	5.721	0.000	90	832430	100.0	101.5	
72 cis-1,3-Dichloropropene	75	5.837	5.831	0.006	90	1744911	100.0	90.3	
73 4-Methyl-2-pentanone (MIBK)	43	5.940	5.940	0.000	97	6658761	500.0	490.4	
74 Toluene	92	6.068	6.068	0.000	97	2374063	100.0	95.5	
77 trans-1,3-Dichloropropene	75	6.270	6.264	0.006	91	1551135	100.0	95.2	
75 Ethyl methacrylate	69	6.306	6.306	0.000	88	1488862	100.0	102.8	
79 1,1,2-Trichloroethane	83	6.416	6.416	0.000	88	773547	100.0	98.1	
81 Tetrachloroethene	166	6.489	6.489	0.000	92	1024788	100.0	94.7	
82 1,3-Dichloropropane	76	6.544	6.538	0.006	93	1628339	100.0	98.6	
80 2-Hexanone	43	6.587	6.587	0.000	97	4615423	500.0	496.5	
83 Chlorodibromomethane	129	6.727	6.721	0.006	89	1079568	98.0	99.5	
84 Ethylene Dibromide	107	6.812	6.812	0.000	99	989173	100.0	99.1	
87 Chlorobenzene	112	7.178	7.178	0.000	93	2678680	100.0	95.9	
88 Ethylbenzene	91	7.245	7.245	0.000	99	4489153	100.0	95.5	
89 1,1,1,2-Tetrachloroethane	131	7.245	7.245	0.000	40	953672	100.0	95.6	
90 m-Xylene & p-Xylene	106	7.337	7.336	0.001	0	1751372	100.0	96.1	
91 o-Xylene	106	7.666	7.660	0.006	95	1703457	100.0	94.2	
92 Styrene	104	7.684	7.678	0.006	96	2989169	100.0	97.3	
95 Bromoform	173	7.867	7.867	0.000	96	753327	100.0	105.2	
94 Isopropylbenzene	105	7.952	7.952	0.000	96	4476317	100.0	96.7	
101 Bromobenzene	156	8.227	8.227	0.000	97	1101326	100.0	100.1	
97 1,1,2,2-Tetrachloroethane	83	8.245	8.245	0.000	88	1325230	100.0	100.0	
100 1,2,3-Trichloropropane	110	8.281	8.275	0.006	80	387611	100.0	99.0	
98 trans-1,4-Dichloro-2-buten	53	8.281	8.281	0.000	67	429004	100.0	105.6	
99 N-Propylbenzene	91	8.288	8.288	0.000	98	5155710	100.0	95.5	
103 2-Chlorotoluene	126	8.379	8.373	0.006	96	995563	100.0	96.1	
102 1,3,5-Trimethylbenzene	105	8.434	8.428	0.006	67	3568145	100.0	93.9	
105 4-Chlorotoluene	126	8.470	8.464	0.006	97	1038402	100.0	96.8	
106 tert-Butylbenzene	134	8.702	8.696	0.006	93	761043	100.0	95.8	
107 1,2,4-Trimethylbenzene	105	8.745	8.745	0.000	97	3681390	100.0	94.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.879	8.879	0.000	95	4476378	100.0	92.3	
110 4-Isopropyltoluene	119	9.001	8.995	0.006	94	3661930	100.0	90.3	
111 1,3-Dichlorobenzene	146	9.001	9.001	0.000	72	1987372	100.0	95.8	
113 1,4-Dichlorobenzene	146	9.074	9.074	0.000	93	2019278	100.0	97.0	
115 n-Butylbenzene	91	9.342	9.336	0.006	98	3368934	100.0	89.2	
116 1,2-Dichlorobenzene	146	9.391	9.391	0.000	96	1927221	100.0	95.2	
117 1,2-Dibromo-3-Chloropropan	75	10.062	10.055	0.007	83	279774	100.0	103.0	
119 1,2,4-Trichlorobenzene	180	10.732	10.732	0.000	93	1366703	100.0	94.8	
120 Hexachlorobutadiene	225	10.848	10.848	0.000	96	617140	100.0	90.9	
121 Naphthalene	128	10.939	10.939	0.000	97	3877235	100.0	100.9	
122 1,2,3-Trichlorobenzene	180	11.141	11.141	0.000	93	1292237	100.0	97.4	
S 125 1,2-Dichloroethene, Total	1				0			179.0	
S 126 1,3-Dichloropropene, Total	1				0			185.5	
S 123 Total BTEX	1				0			471.9	
S 124 Xylenes, Total	1				0			190.3	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1215.D

Injection Date: 22-Apr-2014 07:25:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: IC 6

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

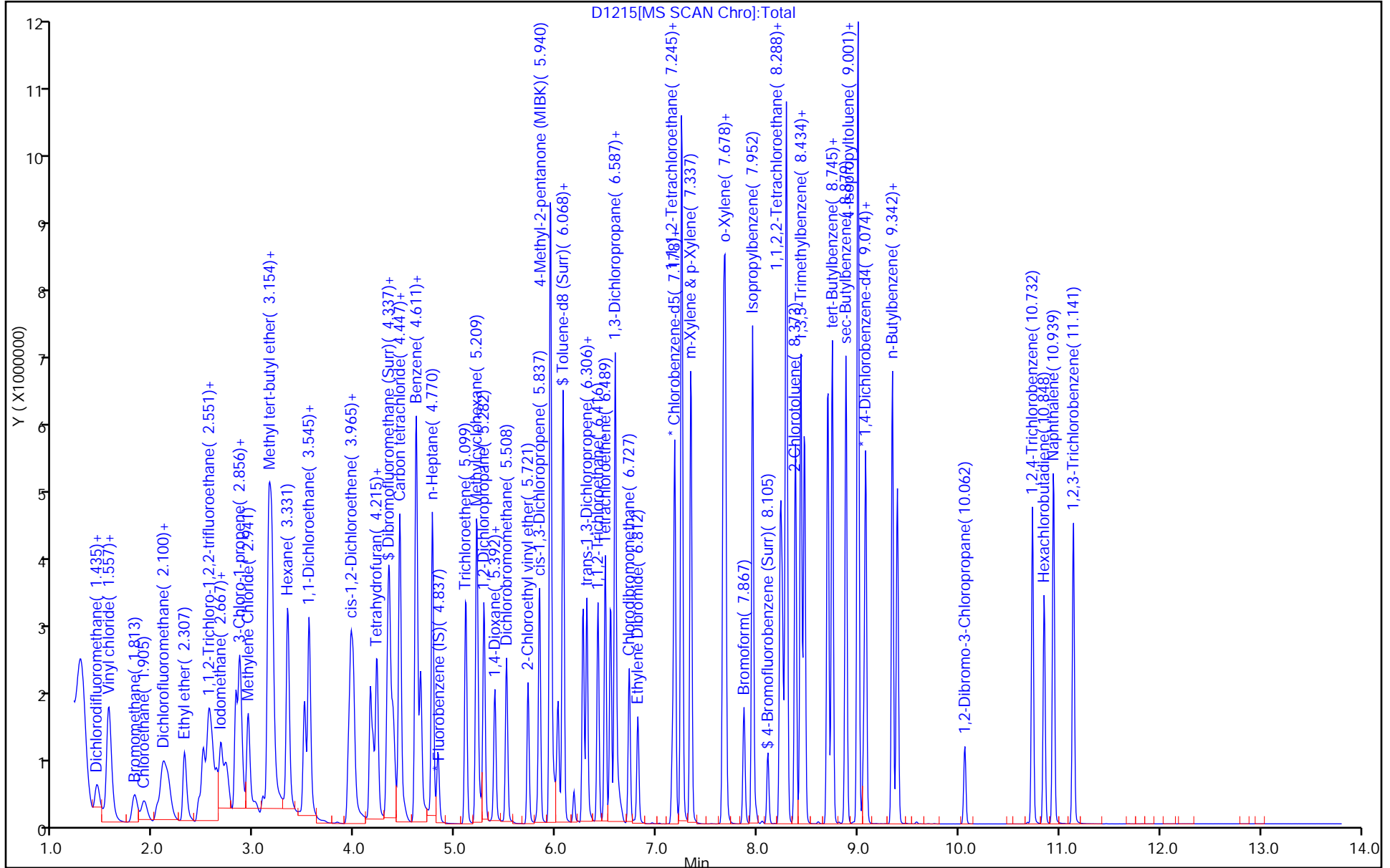
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



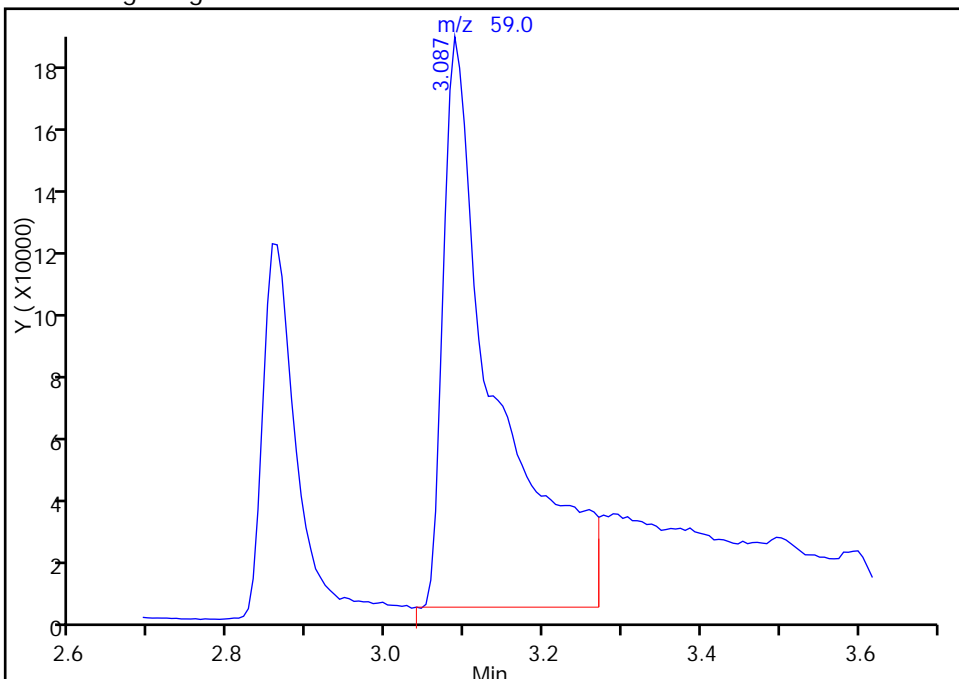
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1215.D
Injection Date: 22-Apr-2014 07:25:30 Instrument ID: HP5975D
Lims ID: IC 6
Client ID:
Operator ID: CDC ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

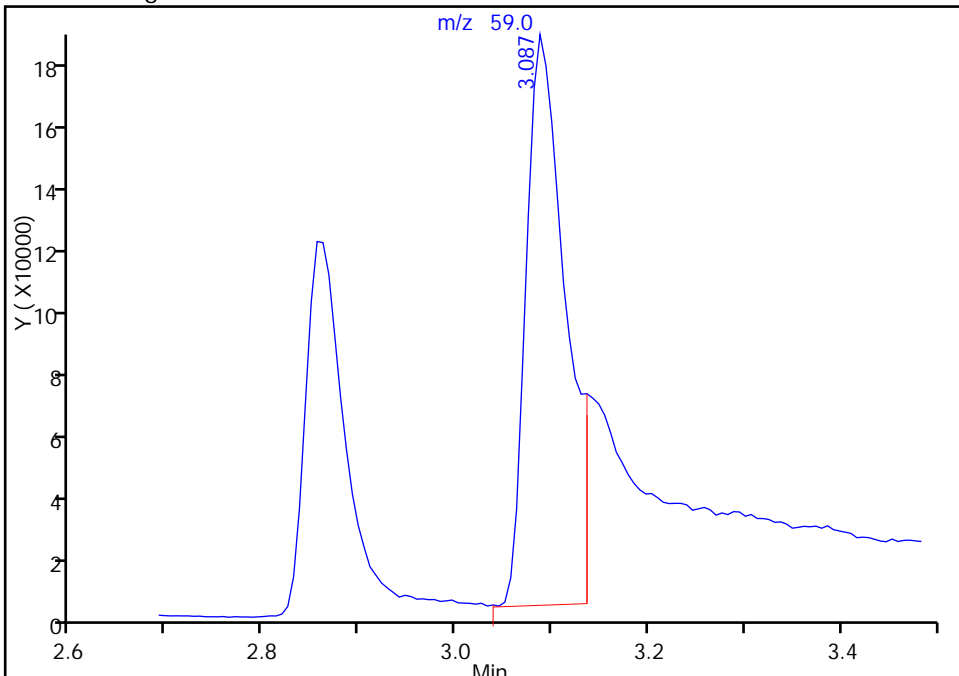
RT: 3.09
Response: 837472
Amount: 1003.9922

Processing Integration Results



RT: 3.09
Response: 521052
Amount: 888.6351

Manual Integration Results



Reviewer: BrandtT, 22-Apr-2014 17:51:06
Audit Action: Manually Integrated
Audit Reason: Coelution

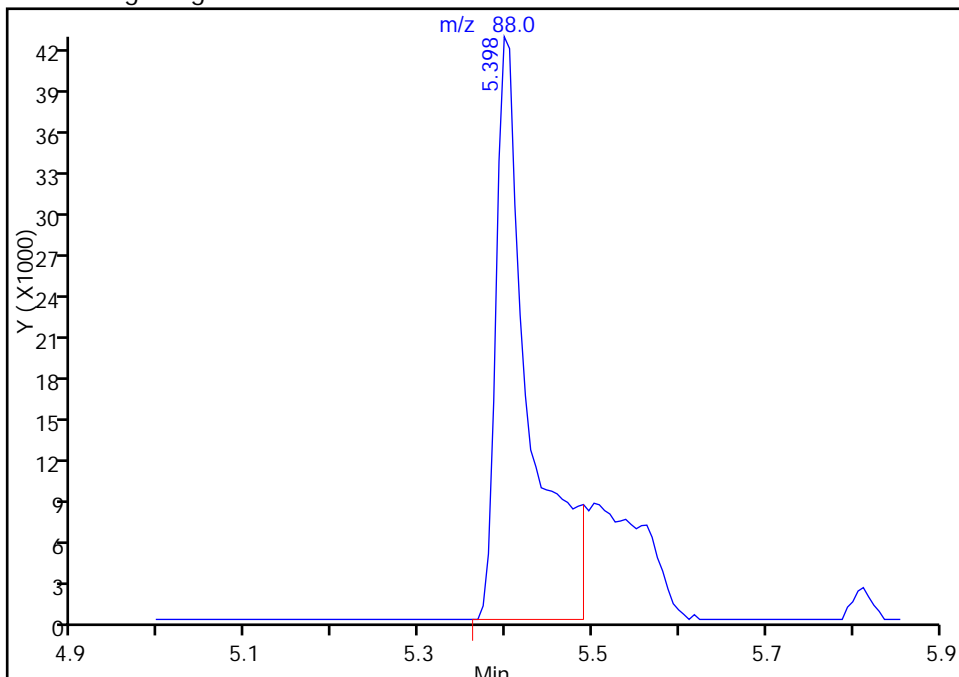
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1215.D
Injection Date: 22-Apr-2014 07:25:30 Instrument ID: HP5975D
Lims ID: IC 6
Client ID:
Operator ID: CDC ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

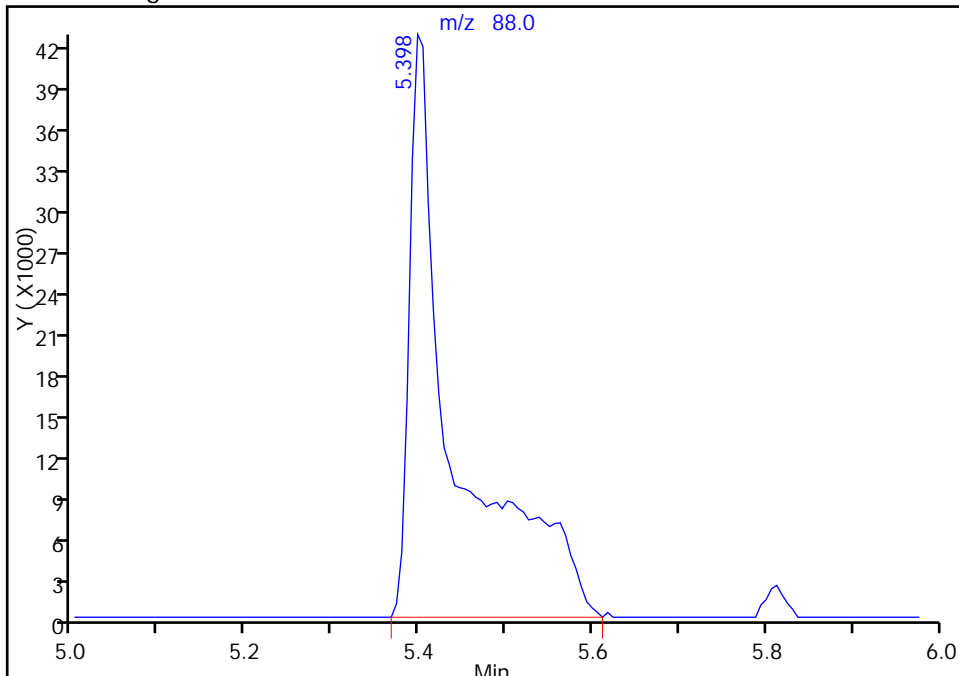
RT: 5.40
Response: 115053
Amount: 1967.6870

Processing Integration Results



RT: 5.40
Response: 154903
Amount: 1920.4877

Manual Integration Results



Reviewer: quirkp, 22-Apr-2014 12:47:33
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-179534/2 Calibration Date: 05/01/2014 20:06
 Instrument ID: HP5975D Calib Start Date: 04/22/2014 05:18
 GC Column: RTX-CLPII ID: 0.53 (mm) Calib End Date: 04/22/2014 07:25
 Lab File ID: D1598.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.470	1.739	0.1000	29.6	25.0	18.3	20.0
Chloromethane	Ave	2.180	2.179	0.1000	25.0	25.0	-0.0	20.0
Vinyl chloride	Ave	2.055	1.989	0.1000	24.2	25.0	-3.2	20.0
Butadiene	Ave	2.050	2.331		28.4	25.0	13.7	20.0
Bromomethane	Ave	1.037	1.021	0.1000	24.6	25.0	-1.5	20.0
Chloroethane	Ave	1.129	1.113	0.1000	24.7	25.0	-1.4	20.0
Dichlorofluoromethane	Ave	2.568	2.337		22.7	25.0	-9.0	20.0
Trichlorofluoromethane	Ave	1.625	1.495	0.1000	23.0	25.0	-8.0	20.0
Ethyl ether	Ave	1.522	1.481		24.3	25.0	-2.7	20.0
Acrolein	Ave	0.1827	0.1968		135	125	7.7	20.0
1,1-Dichloroethene	Ave	1.507	1.418	0.1000	23.5	25.0	-5.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.567	1.499	0.1000	23.9	25.0	-4.3	20.0
Acetone	Ave	0.4424	0.5796	0.1000	164	125	31.0*	20.0
Iodomethane	Ave	2.571	2.431		23.6	25.0	-5.4	20.0
Carbon disulfide	Ave	5.307	4.724	0.1000	22.3	25.0	-11.0	20.0
Allyl chloride	Ave	2.966	2.636		22.2	25.0	-11.1	20.0
Methyl acetate	Ave	1.393	1.605	0.1000	144	125	15.2	20.0
Methylene Chloride	Ave	1.653	1.588	0.1000	24.0	25.0	-3.9	20.0
2-Methyl-2-propanol	Ave	0.0868	0.1742		502	250	100.7*	20.0
Methyl tert-butyl ether	Ave	5.102	4.952	0.1000	24.3	25.0	-2.9	20.0
trans-1,2-Dichloroethene	Ave	1.591	1.529	0.1000	24.0	25.0	-3.9	20.0
Acrylonitrile	Ave	0.7128	0.7228		253	250	1.4	20.0
Hexane	Ave	2.811	2.664		23.7	25.0	-5.2	20.0
1,1-Dichloroethane	Ave	3.227	3.039	0.2000	23.5	25.0	-5.8	20.0
Vinyl acetate	Ave	3.866	3.183		41.2	50.0	-17.7	20.0
2,2-Dichloropropane	Ave	1.581	1.434		22.7	25.0	-9.3	20.0
cis-1,2-Dichloroethene	Ave	1.725	1.681	0.1000	24.4	25.0	-2.5	20.0
2-Butanone (MEK)	Ave	0.8928	0.995	0.1000	139	125	11.5	20.0
Chlorobromomethane	Ave	0.8622	0.8493		24.6	25.0	-1.5	20.0
Tetrahydrofuran	Ave	0.5890	0.6288		53.4	50.0	6.8	20.0
Chloroform	Ave	2.875	2.781	0.2000	24.2	25.0	-3.3	20.0
1,1,1-Trichloroethane	Ave	2.318	2.234	0.1000	24.1	25.0	-3.6	20.0
Cyclohexane	Ave	3.345	3.109	0.1000	23.2	25.0	-7.0	20.0
Carbon tetrachloride	Ave	2.140	2.012	0.1000	23.5	25.0	-6.0	20.0
1,1-Dichloropropene	Ave	2.167	2.100		24.2	25.0	-3.1	20.0
Isobutyl alcohol	Ave	0.0719	0.0944		821	625	31.3*	20.0
Benzene	Ave	6.267	6.141	0.5000	24.5	25.0	-2.0	20.0
1,2-Dichloroethane	Ave	2.362	2.405	0.1000	25.5	25.0	1.8	20.0
n-Heptane	Ave	3.233	3.156		24.4	25.0	-2.4	20.0
Trichloroethene	Ave	1.617	1.604	0.2000	24.8	25.0	-0.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-179534/2 Calibration Date: 05/01/2014 20:06
 Instrument ID: HP5975D Calib Start Date: 04/22/2014 05:18
 GC Column: RTX-CLPII ID: 0.53 (mm) Calib End Date: 04/22/2014 07:25
 Lab File ID: D1598.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.954	2.819	0.1000	23.9	25.0	-4.6	20.0
1,2-Dichloropropane	Ave	1.734	1.723	0.1000	24.8	25.0	-0.6	20.0
Dibromomethane	Ave	1.030	1.021	0.1000	24.8	25.0	-0.9	20.0
1,4-Dioxane	Lin1		0.0076		612	500	22.4*	20.0
Bromodichloromethane	Ave	2.220	2.220	0.2000	25.0	25.0	0.0	20.0
2-Chloroethyl vinyl ether	Ave	1.213	1.216		25.1	25.0	0.2	20.0
cis-1,3-Dichloropropene	Ave	2.858	2.573	0.2000	22.5	25.0	-10.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.062	1.043	0.1000	123	125	-1.8	20.0
Toluene	Ave	1.945	1.871	0.4000	24.0	25.0	-3.8	20.0
trans-1,3-Dichloropropene	Ave	1.274	1.094	0.1000	21.5	25.0	-14.1	20.0
Ethyl methacrylate	Ave	1.132	1.166		25.7	25.0	3.0	20.0
1,1,2-Trichloroethane	Ave	0.6170	0.6070	0.1000	24.6	25.0	-1.6	20.0
Tetrachloroethene	Ave	0.8461	0.8211	0.2000	24.3	25.0	-3.0	20.0
1,3-Dichloropropane	Ave	1.291	1.262		24.4	25.0	-2.3	20.0
2-Hexanone	Ave	0.7270	0.7598	0.1000	131	125	4.5	20.0
Dibromochloromethane	Ave	0.8488	0.8228	0.1000	23.7	24.5	-3.1	20.0
1,2-Dibromoethane	Ave	0.7806	0.7734		24.8	25.0	-0.9	20.0
Chlorobenzene	Ave	2.185	2.128	0.5000	24.3	25.0	-2.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7802	0.7582		24.3	25.0	-2.8	20.0
Ethylbenzene	Ave	3.677	3.614	0.1000	24.6	25.0	-1.7	20.0
m,p-Xylene	Ave	1.425	1.394	0.1000	24.5	25.0	-2.2	20.0
o-Xylene	Ave	1.415	1.375	0.3000	24.3	25.0	-2.8	20.0
Styrene	Ave	2.404	2.406		25.0	25.0	0.1	20.0
Bromoform	Ave	0.5601	0.5252	0.1000	23.4	25.0	-6.2	20.0
Isopropylbenzene	Ave	4.353	4.131	0.1000	23.7	25.0	-5.1	20.0
Bromobenzene	Ave	1.034	0.9925		24.0	25.0	-4.0	20.0
1,1,2,2-Tetrachloroethane	Ave	1.247	1.173	0.3000	23.5	25.0	-5.9	20.0
1,2,3-Trichloropropane	Ave	0.3681	0.3487		23.7	25.0	-5.3	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.1282		9.26	25.0	-63.0*	20.0
N-Propylbenzene	Ave	5.073	4.833		23.8	25.0	-4.7	20.0
2-Chlorotoluene	Ave	0.9743	0.9366		24.0	25.0	-3.9	20.0
1,3,5-Trimethylbenzene	Ave	3.573	3.472		24.3	25.0	-2.8	20.0
4-Chlorotoluene	Ave	1.009	0.9699		24.0	25.0	-3.9	20.0
tert-Butylbenzene	Ave	0.7470	0.7415		24.8	25.0	-0.7	20.0
1,2,4-Trimethylbenzene	Ave	3.675	3.559		24.2	25.0	-3.2	20.0
sec-Butylbenzene	Ave	4.560	4.503		24.7	25.0	-1.3	20.0
4-Isopropyltoluene	Ave	3.813	3.797		24.9	25.0	-0.4	20.0
1,3-Dichlorobenzene	Ave	1.950	1.896	0.6000	24.3	25.0	-2.8	20.0
1,4-Dichlorobenzene	Ave	1.957	1.907	0.5000	24.4	25.0	-2.6	20.0
n-Butylbenzene	Ave	3.550	3.574		25.2	25.0	0.7	20.0
1,2-Dichlorobenzene	Ave	1.903	1.855	0.4000	24.4	25.0	-2.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-179534/2 Calibration Date: 05/01/2014 20:06
 Instrument ID: HP5975D Calib Start Date: 04/22/2014 05:18
 GC Column: RTX-CLPII ID: 0.53 (mm) Calib End Date: 04/22/2014 07:25
 Lab File ID: D1598.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2554	0.2353	0.0500	23.0	25.0	-7.9	20.0
1,2,4-Trichlorobenzene	Ave	1.355	1.353	0.2000	25.0	25.0	-0.1	20.0
Hexachlorobutadiene	Lin1		0.7148		27.8	25.0	11.1	20.0
Naphthalene	Ave	3.614	3.463		24.0	25.0	-4.2	20.0
1,2,3-Trichlorobenzene	Ave	1.247	1.228		24.6	25.0	-1.5	20.0
Dibromofluoromethane (Surr)	Ave	1.490	1.328		22.3	25.0	-10.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.9768	0.8338		21.3	25.0	-14.6	20.0
Toluene-d8 (Surr)	Ave	2.790	2.585		23.2	25.0	-7.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8309	0.9284		27.9	25.0	11.7	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\1598.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 01-May-2014 20:06:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 480-0031670-002
 Operator ID: CDC Instrument ID: HP5975D
 Sublist: chrom-D-8260*sub13
 Method: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 02-May-2014 02:17:07 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: cwiklinc

Date: 01-May-2014 20:25:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.819	4.819	0.000	97	171609	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.147	7.147	0.000	87	351145	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.049	9.049	0.000	81	313760	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.337	4.337	0.000	83	227929	25.0	22.3	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.587	4.587	0.000	0	143082	25.0	21.3	
\$ 5 Toluene-d8 (Surr)	98	6.007	6.007	0.000	92	907879	25.0	23.2	
\$ 6 4-Bromofluorobenzene (Surr	174	8.098	8.098	0.000	90	325998	25.0	27.9	
10 Dichlorodifluoromethane	85	1.325	1.325	0.000	87	298399	25.0	29.6	
12 Chloromethane	50	1.435	1.435	0.000	88	373886	25.0	25.0	
13 Vinyl chloride	62	1.539	1.539	0.000	83	341392	25.0	24.2	
144 Butadiene	54	1.551	1.551	0.000	91	400000	25.0	28.4	
14 Bromomethane	94	1.801	1.801	0.000	90	175282	25.0	24.6	
15 Chloroethane	64	1.898	1.898	0.000	94	191060	25.0	24.7	
16 Dichlorofluoromethane	67	2.081	2.081	0.000	83	400997	25.0	22.7	
17 Trichlorofluoromethane	101	2.118	2.118	0.000	82	256581	25.0	23.0	
18 Ethyl ether	59	2.301	2.301	0.000	94	254208	25.0	24.3	
20 Acrolein	56	2.447	2.447	0.000	91	168824	125.0	134.7	
22 1,1-Dichloroethene	96	2.490	2.490	0.000	85	243374	25.0	23.5	
21 1,1,2-Trichloro-1,2,2-trif	101	2.545	2.545	0.000	86	257318	25.0	23.9	
23 Acetone	43	2.587	2.587	0.000	97	497305	125.0	163.8	
25 Iodomethane	142	2.624	2.624	0.000	98	417223	25.0	23.6	
26 Carbon disulfide	76	2.667	2.667	0.000	99	810682	25.0	22.3	
28 3-Chloro-1-propene	41	2.813	2.813	0.000	84	452368	25.0	22.2	
27 Methyl acetate	43	2.856	2.856	0.000	96	1377568	125.0	144.1	
30 Methylene Chloride	84	2.935	2.935	0.000	91	272556	25.0	24.0	
31 2-Methyl-2-propanol	59	3.087	3.087	0.000	100	298853	250.0	501.8	
32 Methyl tert-butyl ether	73	3.136	3.136	0.000	90	849768	25.0	24.3	
34 trans-1,2-Dichloroethene	96	3.142	3.142	0.000	92	262330	25.0	24.0	
33 Acrylonitrile	53	3.166	3.166	0.000	99	1240367	250.0	253.5	
35 Hexane	57	3.325	3.325	0.000	93	457106	25.0	23.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.490	3.490	0.000	85	521510	25.0	23.5	
37 Vinyl acetate	43	3.538	3.538	0.000	97	1092574	50.0	41.2	
44 2,2-Dichloropropane	77	3.935	3.935	0.000	87	246053	25.0	22.7	
45 cis-1,2-Dichloroethene	96	3.959	3.959	0.000	71	288549	25.0	24.4	
43 2-Butanone (MEK)	43	3.983	3.983	0.000	100	853755	125.0	139.3	
48 Chlorobromomethane	128	4.148	4.148	0.000	94	145740	25.0	24.6	
49 Tetrahydrofuran	42	4.178	4.178	0.000	88	215812	50.0	53.4	
50 Chloroform	83	4.209	4.209	0.000	81	477210	25.0	24.2	
51 1,1,1-Trichloroethane	97	4.319	4.319	0.000	93	383416	25.0	24.1	
52 Cyclohexane	56	4.337	4.337	0.000	93	533581	25.0	23.2	
55 Carbon tetrachloride	117	4.435	4.435	0.000	79	345261	25.0	23.5	
54 1,1-Dichloropropene	75	4.441	4.441	0.000	94	360439	25.0	24.2	
53 Isobutyl alcohol	43	4.599	4.599	0.000	93	405097	625.0	820.9	
57 Benzene	78	4.605	4.605	0.000	98	1053789	25.0	24.5	
58 1,2-Dichloroethane	62	4.648	4.648	0.000	89	412708	25.0	25.5	
59 n-Heptane	43	4.764	4.764	0.000	94	541548	25.0	24.4	
62 Trichloroethene	95	5.093	5.093	0.000	94	275309	25.0	24.8	
64 Methylcyclohexane	83	5.203	5.203	0.000	94	483731	25.0	23.9	
65 1,2-Dichloropropane	63	5.276	5.276	0.000	94	295716	25.0	24.8	
67 Dibromomethane	93	5.379	5.379	0.000	92	175220	25.0	24.8	
66 1,4-Dioxane	88	5.398	5.398	0.000	94	53564	500.0	612.2	M
68 Dichlorobromomethane	83	5.501	5.501	0.000	93	381024	25.0	25.0	
69 2-Chloroethyl vinyl ether	63	5.715	5.715	0.000	90	208642	25.0	25.1	
72 cis-1,3-Dichloropropene	75	5.825	5.825	0.000	89	441547	25.0	22.5	
73 4-Methyl-2-pentanone (MIBK)	43	5.934	5.934	0.000	97	1831594	125.0	122.8	
74 Toluene	92	6.062	6.062	0.000	98	656895	25.0	24.0	
77 trans-1,3-Dichloropropene	75	6.257	6.257	0.000	96	384199	25.0	21.5	
75 Ethyl methacrylate	69	6.300	6.300	0.000	91	409398	25.0	25.7	
79 1,1,2-Trichloroethane	83	6.410	6.410	0.000	87	213135	25.0	24.6	
81 Tetrachloroethene	166	6.483	6.483	0.000	92	288331	25.0	24.3	
82 1,3-Dichloropropane	76	6.532	6.532	0.000	92	443098	25.0	24.4	
80 2-Hexanone	43	6.580	6.580	0.000	97	1334064	125.0	130.6	
83 Chlorodibromomethane	129	6.721	6.721	0.000	89	283158	24.5	23.7	
84 Ethylene Dibromide	107	6.806	6.806	0.000	97	271583	25.0	24.8	
87 Chlorobenzene	112	7.172	7.172	0.000	94	747240	25.0	24.3	
89 1,1,1,2-Tetrachloroethane	131	7.239	7.239	0.000	40	266238	25.0	24.3	
88 Ethylbenzene	91	7.239	7.239	0.000	99	1268920	25.0	24.6	
90 m-Xylene & p-Xylene	106	7.330	7.330	0.000	0	489629	25.0	24.5	
91 o-Xylene	106	7.653	7.653	0.000	98	482801	25.0	24.3	
92 Styrene	104	7.672	7.672	0.000	95	845022	25.0	25.0	
95 Bromoform	173	7.861	7.861	0.000	96	184425	25.0	23.4	
94 Isopropylbenzene	105	7.946	7.946	0.000	96	1296125	25.0	23.7	
101 Bromobenzene	156	8.220	8.220	0.000	96	311409	25.0	24.0	
97 1,1,2,2-Tetrachloroethane	83	8.239	8.239	0.000	88	368148	25.0	23.5	
100 1,2,3-Trichloropropane	110	8.269	8.269	0.000	82	109407	25.0	23.7	
98 trans-1,4-Dichloro-2-buten	53	8.275	8.275	0.000	54	40230	25.0	9.26	
99 N-Propylbenzene	91	8.281	8.281	0.000	98	1516464	25.0	23.8	
103 2-Chlorotoluene	126	8.373	8.373	0.000	96	293864	25.0	24.0	
102 1,3,5-Trimethylbenzene	105	8.422	8.422	0.000	71	1089278	25.0	24.3	
105 4-Chlorotoluene	126	8.458	8.458	0.000	97	304317	25.0	24.0	
106 tert-Butylbenzene	134	8.690	8.690	0.000	89	232656	25.0	24.8	
107 1,2,4-Trimethylbenzene	105	8.739	8.739	0.000	97	1116728	25.0	24.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.873	8.873	0.000	94	1412944	25.0	24.7	
110 4-Isopropyltoluene	119	8.989	8.989	0.000	95	1191407	25.0	24.9	
111 1,3-Dichlorobenzene	146	8.995	8.995	0.000	71	594754	25.0	24.3	
113 1,4-Dichlorobenzene	146	9.068	9.068	0.000	93	598251	25.0	24.4	
115 n-Butylbenzene	91	9.336	9.336	0.000	98	1121422	25.0	25.2	
116 1,2-Dichlorobenzene	146	9.385	9.385	0.000	96	581925	25.0	24.4	
117 1,2-Dibromo-3-Chloropropan	75	10.055	10.055	0.000	79	73820	25.0	23.0	
119 1,2,4-Trichlorobenzene	180	10.726	10.726	0.000	90	424544	25.0	25.0	
120 Hexachlorobutadiene	225	10.842	10.842	0.000	95	224276	25.0	27.8	
121 Naphthalene	128	10.933	10.933	0.000	97	1086440	25.0	24.0	
122 1,2,3-Trichlorobenzene	180	11.134	11.134	0.000	92	385288	25.0	24.6	
S 123 Total BTEX	1				0			121.9	
S 124 Xylenes, Total	1				0			48.8	
S 125 1,2-Dichloroethene, Total	1				0			48.4	
S 126 1,3-Dichloropropene, Total	1				0			44.0	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1598.D

Injection Date: 01-May-2014 20:06:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

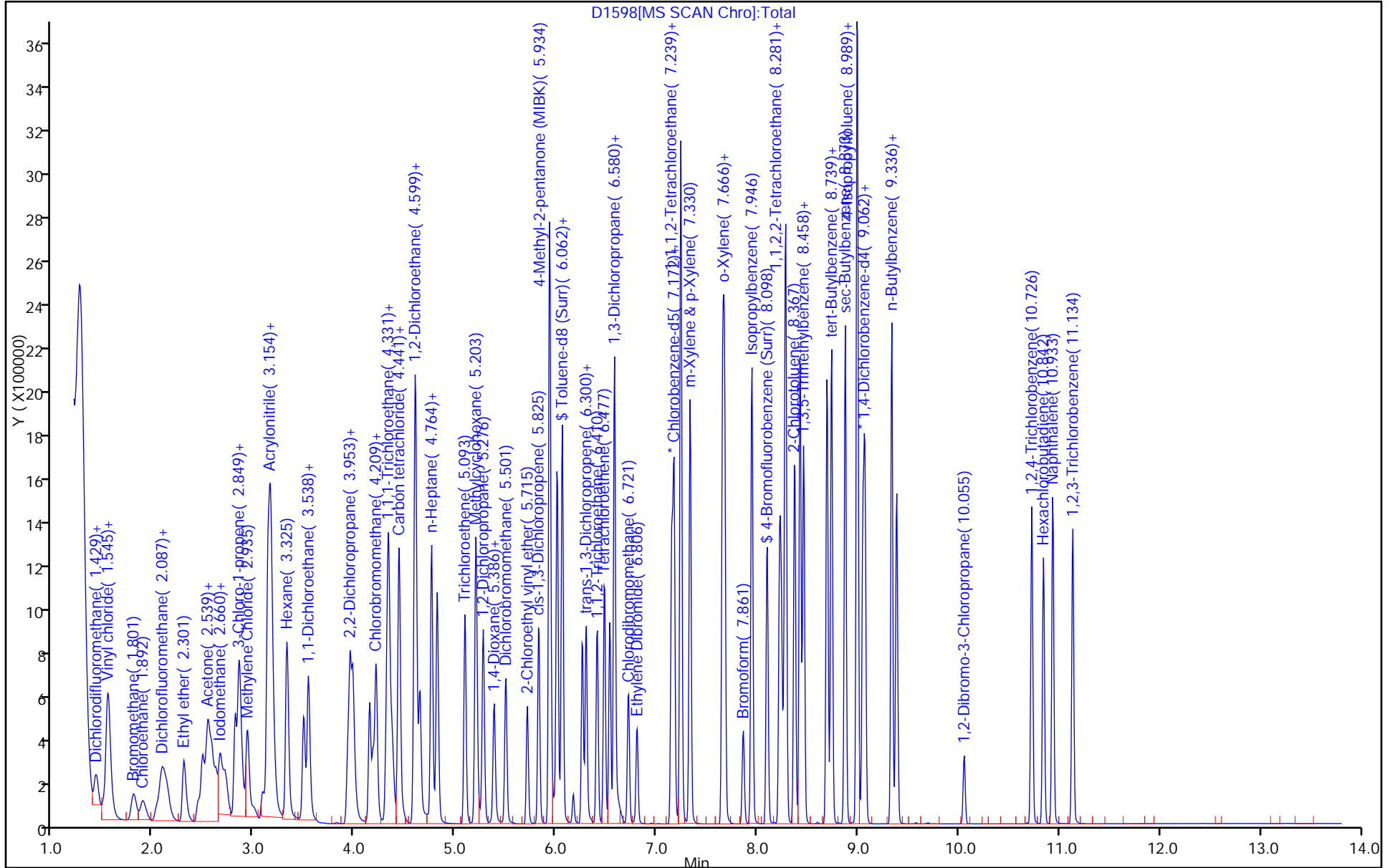
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



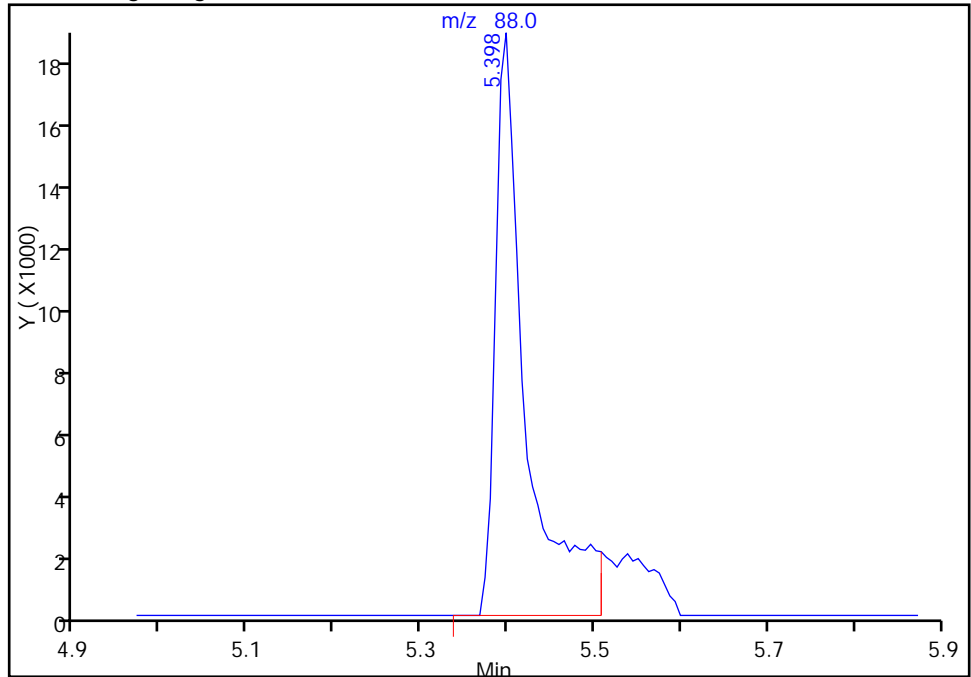
TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\1598.D
Injection Date: 01-May-2014 20:06:30 Instrument ID: HP5975D
Lims ID: CCVIS
Client ID:
Operator ID: CDC ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: D-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

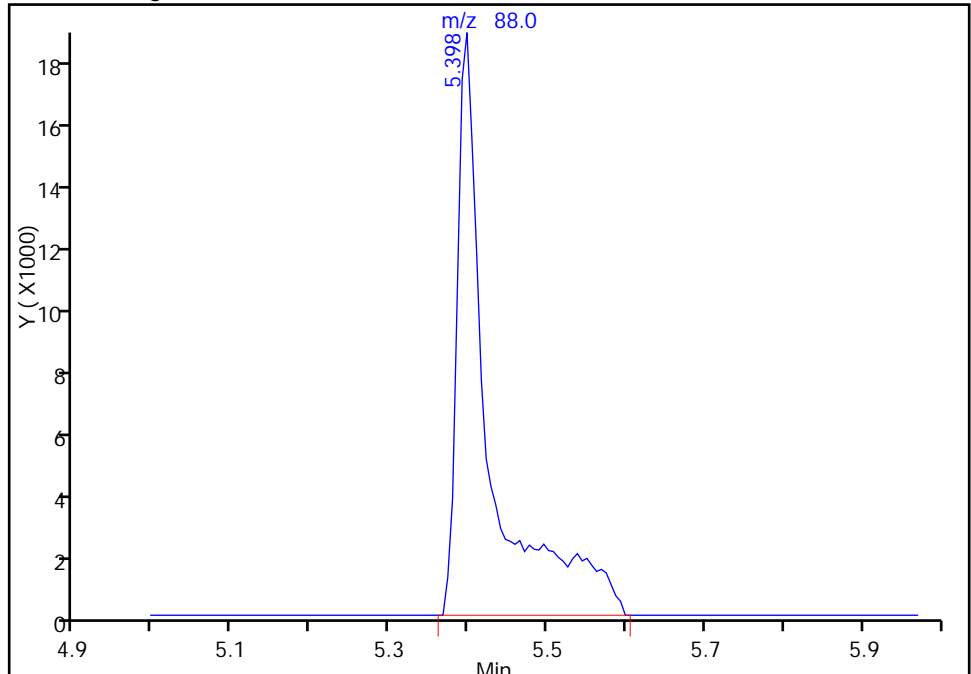
RT: 5.40
Response: 46087
Amount: 528.2702

Processing Integration Results



RT: 5.40
Response: 53564
Amount: 612.1590

Manual Integration Results



Reviewer: cwiklinc, 02-May-2014 02:17:07
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1207.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 22-Apr-2014 04:32:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 480-0031313-002
 Operator ID: CDC Instrument ID: HP5975D
 Method: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 22-Apr-2014 04:41:54 Calib Date: 21-Apr-2014 19:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140421-31299.b\D1194.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK034

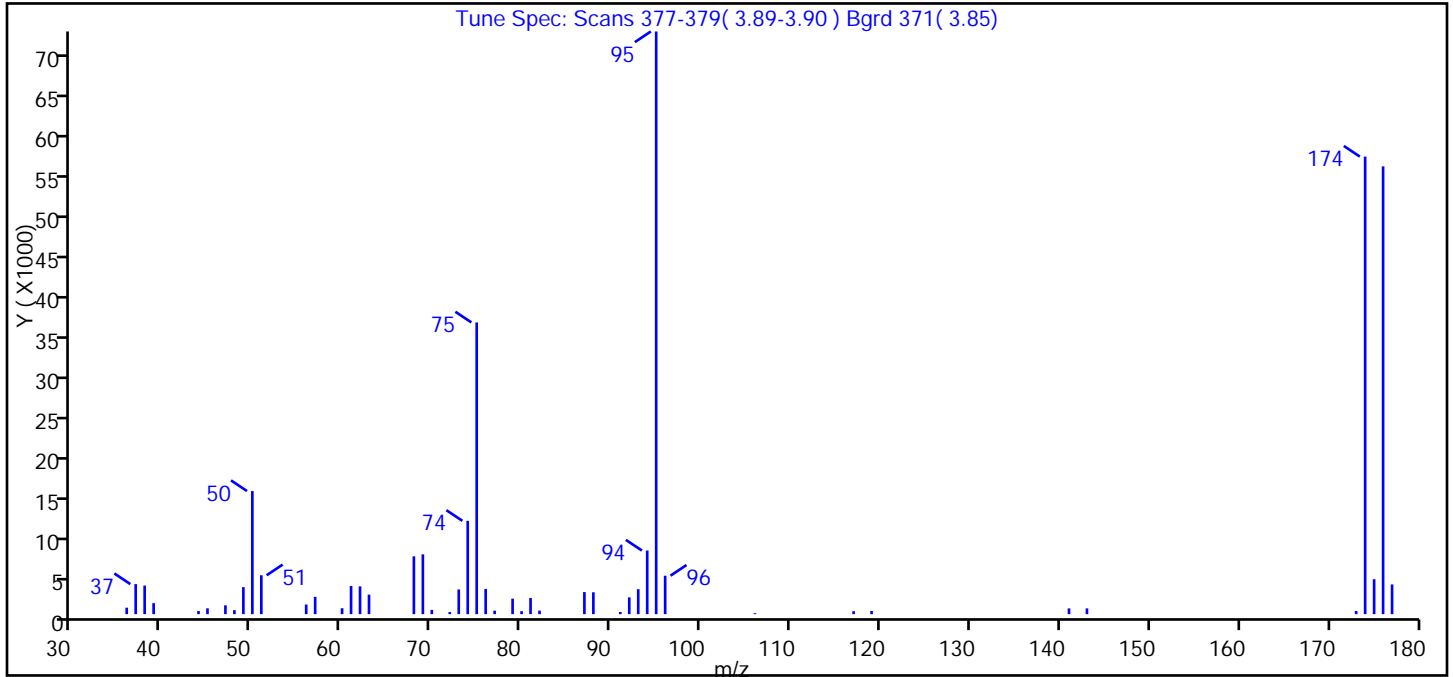
First Level Reviewer: cwiklinc Date: 22-Apr-2014 04:41:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 61 BFB	95	3.891	3.891	0.000	0	137061	NR	NR	

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\1207.D
 Injection Date: 22-Apr-2014 04:32:30 Instrument ID: HP5975D
 Lims ID: BFB
 Client ID:
 Operator ID: CDC ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: D-8260 Limit Group: MV - 8260C ICAL
 Tune Method: BFB Method 8260

\$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.10
75	30.00 - 60.00% of mass 95	50.10
96	5.00 - 9.00% of mass 95	6.60
173	Less than 2.00% of mass 174	0.50 (0.70)
174	50.00 - 120.00% of mass 95	78.50
175	5.00 - 9.00% of mass 174	6.00 (7.60)
176	95.00 - 101.00% of mass 174	76.80 (97.90)
177	5.00 - 9.00% of mass 176	5.10 (6.60)

Data File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1207.D\D-8260.rsl\spectra.d

Injection Date: 22-Apr-2014 04:32:30

Spectrum: Tune Spec: Scans 377-379(3.89-3.90) Bgrd 371(3.85)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 48

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	798	57.00	2137	76.00	3112	95.00	72016
37.00	3712	60.00	732	77.00	429	96.00	4751
38.00	3534	61.00	3486	79.00	1916	106.00	118
39.00	1364	62.00	3432	80.00	364	117.00	362
44.00	384	63.00	2413	81.00	1998	119.00	389
45.00	719	68.00	7146	82.00	436	141.00	709
47.00	1087	69.00	7394	87.00	2729	143.00	712
48.00	490	70.00	528	88.00	2701	173.00	385
49.00	3337	72.00	258	91.00	264	174.00	56552
50.00	15213	73.00	3048	92.00	2070	175.00	4316
51.00	4806	74.00	11531	93.00	3083	176.00	55344
56.00	1186	75.00	36056	94.00	7862	177.00	3672

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1597.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 01-May-2014 19:44:30 ALS Bottle#: 1 Worklist Smp#: 1
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 480-0031670-001
 Operator ID: CDC Instrument ID: HP5975D
 Method: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 01-May-2014 19:52:27 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: cwiklinc Date: 01-May-2014 19:52:27

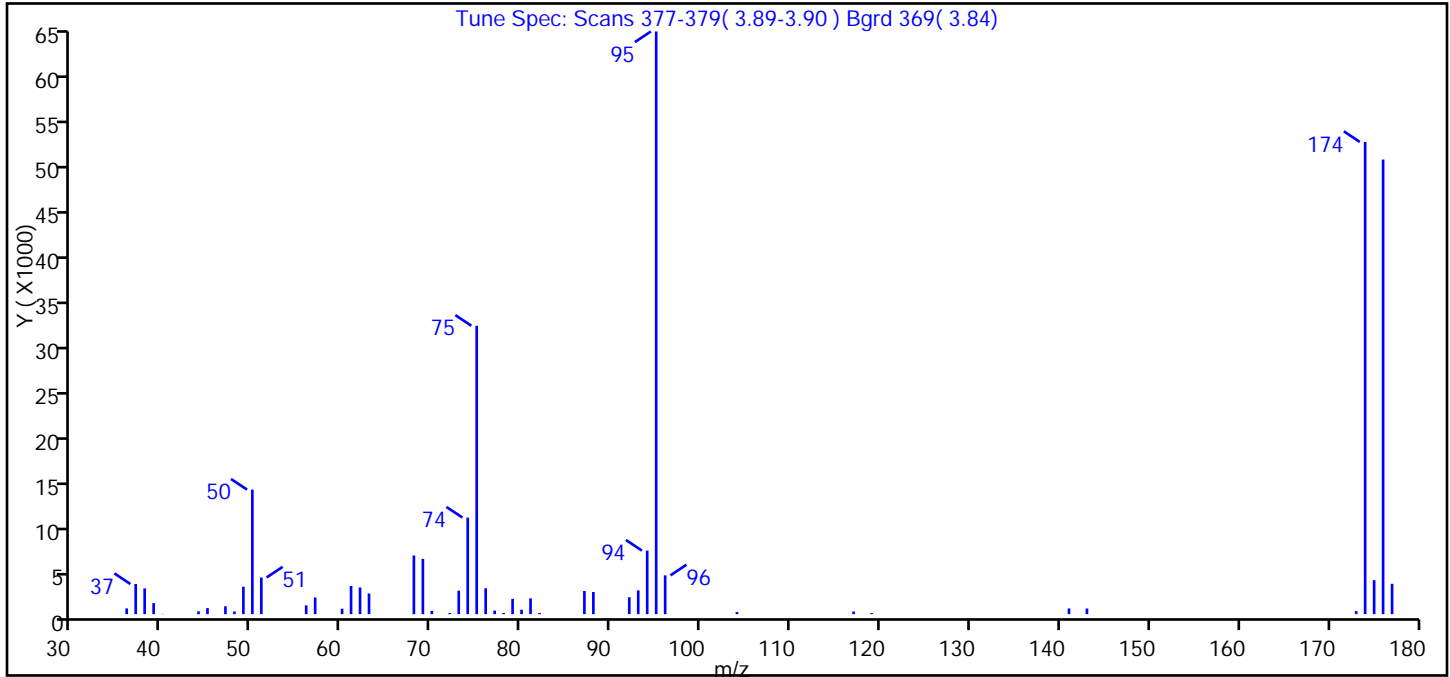
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
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\$ 61 BFB	95	3.891	3.891	0.000	0	124535	NR	NR	
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TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\1597.D
 Injection Date: 01-May-2014 19:44:30 Instrument ID: HP5975D
 Lims ID: BFB
 Client ID:
 Operator ID: CDC ALS Bottle#: 1 Worklist Smp#: 1
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: D-8260 Limit Group: MV - 8260C ICAL
 Tune Method: BFB Method 8260

\$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.40
75	30.00 - 60.00% of mass 95	49.50
96	5.00 - 9.00% of mass 95	6.70
173	Less than 2.00% of mass 174	0.50 (0.60)
174	50.00 - 120.00% of mass 95	81.00
175	5.00 - 9.00% of mass 174	5.80 (7.20)
176	95.00 - 101.00% of mass 174	78.00 (96.30)
177	5.00 - 9.00% of mass 176	5.20 (6.70)

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1597.D\D-8260.rslt\spectra.d

Injection Date: 01-May-2014 19:44:30

Spectrum: Tune Spec: Scans 377-379(3.89-3.90) Bgrd 369(3.84)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 49

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	639	57.00	1851	77.00	393	104.00	241
37.00	3347	60.00	604	78.00	132	117.00	293
38.00	2863	61.00	3134	79.00	1698	119.00	123
39.00	1223	62.00	2962	80.00	493	141.00	631
40.00	25	63.00	2294	81.00	1756	143.00	624
44.00	312	68.00	6517	82.00	130	173.00	337
45.00	671	69.00	6141	87.00	2573	174.00	52456
47.00	877	70.00	365	88.00	2463	175.00	3774
48.00	298	72.00	127	92.00	1877	176.00	50504
49.00	3047	73.00	2605	93.00	2640	177.00	3367
50.00	13831	74.00	10729	94.00	7061		
51.00	4073	75.00	32032	95.00	64728		
56.00	971	76.00	2875	96.00	4308		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-179534/5
 Matrix: Water Lab File ID: D1601.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/01/2014 21:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.23
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.41
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.73
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.79
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.72
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.77
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.78
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.84
78-93-3	2-Butanone (MEK)	10	U	10	1.3
591-78-6	2-Hexanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1
67-64-1	Acetone	10	U	10	3.0
71-43-2	Benzene	1.0	U	1.0	0.41
75-27-4	Bromodichloromethane	1.0	U	1.0	0.39
75-25-2	Bromoform	1.0	U	1.0	0.26
74-83-9	Bromomethane	1.0	U	1.0	0.69
75-15-0	Carbon disulfide	1.0	U	1.0	0.19
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.27
108-90-7	Chlorobenzene	1.0	U	1.0	0.75
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.34
74-87-3	Chloromethane	1.0	U	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.36
110-82-7	Cyclohexane	1.0	U	1.0	0.18
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-179534/5
 Matrix: Water Lab File ID: D1601.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/01/2014 21:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	1.0	U	1.0	0.74
98-82-8	Isopropylbenzene	1.0	U	1.0	0.79
79-20-9	Methyl acetate	2.5	U	2.5	0.50
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.16
108-87-2	Methylcyclohexane	1.0	U	1.0	0.16
75-09-2	Methylene Chloride	1.0	U	1.0	0.44
100-42-5	Styrene	1.0	U	1.0	0.73
127-18-4	Tetrachloroethene	1.0	U	1.0	0.36
108-88-3	Toluene	1.0	U	1.0	0.51
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.37
79-01-6	Trichloroethene	1.0	U	1.0	0.46
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.88
75-01-4	Vinyl chloride	1.0	U	1.0	0.90
1330-20-7	Xylenes, Total	2.0	U	2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		66-137
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
2037-26-5	Toluene-d8 (Surr)	92		71-126
1868-53-7	Dibromofluoromethane (Surr)	95		60-140

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1601.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 01-May-2014 21:21:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 480-0031670-005
 Operator ID: CDC Instrument ID: HP5975D
 Method: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 01-May-2014 21:39:15 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: cwiklinc

Date: 01-May-2014 21:37:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.819	4.819	0.000	98	154152	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.147	7.147	0.000	88	306125	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.049	9.049	0.000	95	268218	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.337	4.337	0.000	58	217758	25.0	23.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.587	4.587	0.000	0	129354	25.0	21.5	
\$ 5 Toluene-d8 (Surr)	98	6.007	6.007	0.000	93	785730	25.0	23.0	
\$ 6 4-Bromofluorobenzene (Surr	174	8.098	8.098	0.000	88	270188	25.0	26.6	
10 Dichlorodifluoromethane	85		1.325						
11 Chlorodifluoromethane	51		1.356						
12 Chloromethane	50		1.435						
13 Vinyl chloride	62		1.539						
144 Butadiene	54		1.551						
14 Bromomethane	94		1.801						
15 Chloroethane	64		1.898						
16 Dichlorofluoromethane	67		2.081						
17 Trichlorofluoromethane	101		2.118						
141 Ethanol	45		2.301						
18 Ethyl ether	59		2.301						
19 Propene oxide	58		2.374						
20 Acrolein	56		2.447						
22 1,1-Dichloroethene	96		2.490						
21 1,1,2-Trichloro-1,2,2-trif	101		2.545						
23 Acetone	43		2.587						
25 Iodomethane	142		2.624						
26 Carbon disulfide	76		2.667						
24 Isopropyl alcohol	45		2.752						
28 3-Chloro-1-propene	41		2.813						
29 Acetonitrile	40		2.849						
27 Methyl acetate	43		2.856						
30 Methylene Chloride	84		2.935						
31 2-Methyl-2-propanol	59		3.087						

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		3.136						
34 trans-1,2-Dichloroethene	96		3.142						
33 Acrylonitrile	53		3.166						
35 Hexane	57		3.325						
39 1,1-Dichloroethane	63		3.490						
36 Isopropyl ether	45		3.520						
132 Halothane	117		3.526						
37 Vinyl acetate	43		3.538						
40 2-Chloro-1,3-butadiene	53		3.550						
38 1,1-Dimethoxyethane	75		3.581						
41 Tert-butyl ethyl ether	59		3.807						
44 2,2-Dichloropropane	77		3.935						
45 cis-1,2-Dichloroethene	96		3.959						
43 2-Butanone (MEK)	43		3.983						
42 Ethyl acetate	43		4.014						
46 Propionitrile	54		4.056						
47 Methacrylonitrile	41		4.148						
48 Chlorobromomethane	128		4.148						
49 Tetrahydrofuran	42		4.178						
50 Chloroform	83		4.209						
51 1,1,1-Trichloroethane	97		4.319						
52 Cyclohexane	56		4.337						
55 Carbon tetrachloride	117		4.435						
54 1,1-Dichloropropene	75		4.441						
53 Isobutyl alcohol	43		4.599						
57 Benzene	78		4.605						
146 Isooctane	57		4.617						
140 t-Amyl alcohol	59		4.648						
58 1,2-Dichloroethane	62		4.648						
56 Tert-amyl methyl ether	73		4.672						
59 n-Heptane	43		4.764						
1 1,4-Difluorobenzene	114		4.904						
154 2,4,4-Trimethyl-1-pentene	55		5.014						
60 n-Butanol	56		5.093						
62 Trichloroethene	95		5.093						
145 Ethyl acrylate	55		5.178						
64 Methylcyclohexane	83		5.203						
153 2,4,4-Trimethyl-2-pentene	97		5.203						
65 1,2-Dichloropropane	63		5.276						
63 Methyl methacrylate	41		5.349						
67 Dibromomethane	93		5.379						
66 1,4-Dioxane	88		5.398						
68 Dichlorobromomethane	83		5.501						
70 2-Nitropropane	43		5.684						
69 2-Chloroethyl vinyl ether	63		5.715						
71 Epichlorohydrin	57		5.782						
72 cis-1,3-Dichloropropene	75		5.825						
73 4-Methyl-2-pentanone (MIBK)	43		5.934						
74 Toluene	92		6.062						
76 2-Methylthiophene	97		6.166						
77 trans-1,3-Dichloropropene	75		6.257						
78 3-Methylthiophene	97		6.294						

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
75 Ethyl methacrylate	69		6.300						
79 1,1,2-Trichloroethane	83		6.410						
81 Tetrachloroethene	166		6.483						
82 1,3-Dichloropropane	76		6.532						
80 2-Hexanone	43		6.580						
155 n-Butyl acetate	43		6.666						
83 Chlorodibromomethane	129		6.721						
84 Ethylene Dibromide	107		6.806						
139 1-Chlorohexane	55		7.123						
85 3-Chlorobenzotrifluoride	180		7.135						
87 Chlorobenzene	112		7.172						
86 4-Chlorobenzotrifluoride	180		7.184						
89 1,1,1,2-Tetrachloroethane	131		7.239						
88 Ethylbenzene	91		7.239						
90 m-Xylene & p-Xylene	106		7.330						
91 o-Xylene	106		7.653						
92 Styrene	104		7.672						
95 Bromoform	173		7.861						
93 2-Chlorobenzotrifluoride	180		7.879						
94 Isopropylbenzene	105		7.946						
96 Cyclohexanone	55		8.074						
101 Bromobenzene	156		8.220						
97 1,1,2,2-Tetrachloroethane	83		8.239						
100 1,2,3-Trichloropropane	110		8.269						
98 trans-1,4-Dichloro-2-buten	53		8.275						
99 N-Propylbenzene	91		8.281						
103 2-Chlorotoluene	126		8.373						
104 3-Chlorotoluene	126		8.421						
102 1,3,5-Trimethylbenzene	105		8.422						
105 4-Chlorotoluene	126		8.458						
106 tert-Butylbenzene	134		8.690						
108 Pentachloroethane	167		8.739						
107 1,2,4-Trimethylbenzene	105		8.739						
109 sec-Butylbenzene	105		8.873						
110 4-Isopropyltoluene	119		8.989						
111 1,3-Dichlorobenzene	146		8.995						
114 Dicyclopentadiene	66		9.062						
113 1,4-Dichlorobenzene	146		9.068						
112 1,2,3-Trimethylbenzene	105		9.092						
143 Benzyl chloride	91		9.190						
115 n-Butylbenzene	91		9.336						
116 1,2-Dichlorobenzene	146		9.385						
117 1,2-Dibromo-3-Chloropropan	75		10.055						
118 1,3,5-Trichlorobenzene	180		10.196						
119 1,2,4-Trichlorobenzene	180		10.726						
120 Hexachlorobutadiene	225		10.842						
121 Naphthalene	128		10.933						
122 1,2,3-Trichlorobenzene	180		11.134						
142 2-Methylnaphthalene	142		11.817						
152 cis-1,4-Dichloro-2-butene	88		0.000						
149 Hexachloroethane	117		0.000						
151 Methyl acrylate	1		0.000						

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
150 Nitrobenzene	77		0.000						
S 123 Total BTEX	1		30.000						
S 124 Xylenes, Total	1		30.000						
S 125 1,2-Dichloroethene, Total	1		30.000						
S 126 1,3-Dichloropropene, Total	1		30.000						
T 7 Ethylene oxide	44		2.000						
T 135 1-Bromopropane	43		4.154						
T 136 Propene oxide TIC	1		0.000						
T 138 Ethylene oxide TIC	1		0.000						
T 137 1-Bromopropane TIC	1		0.000						
T 130 Bromoethane TIC	1		0.000						
T 129 Aziridine TIC	1		0.000						
T 133 bis(chloromethyl)ether TIC	1		0.000						
T 134 Pentachloroethane TIC	1		0.000						
T 131 tert-amyl alcohol TIC	1		0.000						
T 9 bis(2-chloromethyl)ether T	1		0.000						
T 128 Hexachloroethane TIC	1		0.000						
T 127 Ethanol TIC	45		0.000						

TestAmerica Buffalo

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1601.D

Injection Date: 01-May-2014 21:21:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: MB

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

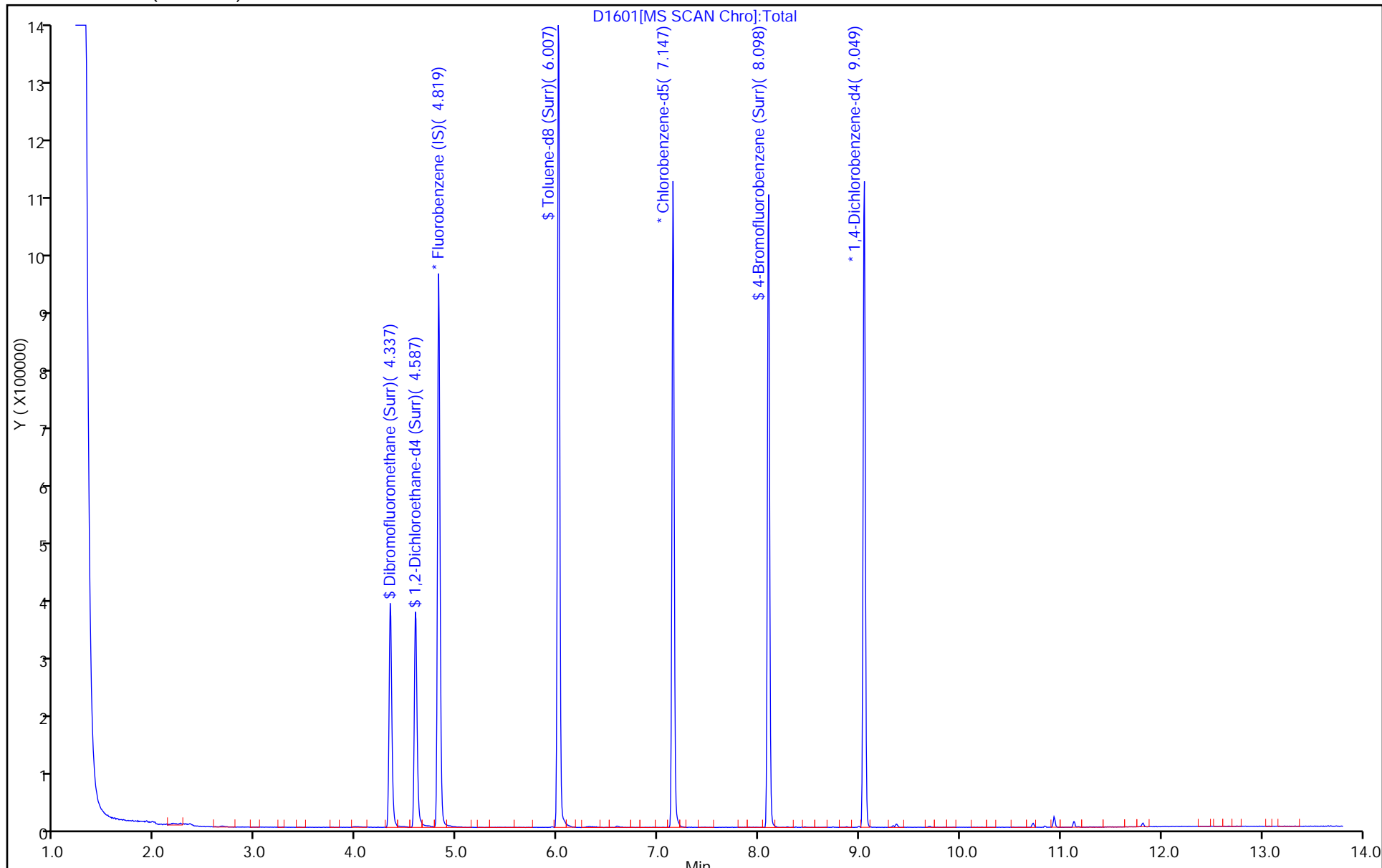
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 480-179534/4
 Matrix: Water Lab File ID: D1600.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/01/2014 21:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	27.0		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.1		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.1		1.0	0.31
79-00-5	1,1,2-Trichloroethane	24.4		1.0	0.23
75-34-3	1,1-Dichloroethane	26.0		1.0	0.38
75-35-4	1,1-Dichloroethene	25.4		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	25.6		1.0	0.41
95-63-6	1,2,4-Trimethylbenzene	25.6		1.0	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	22.7		1.0	0.39
106-93-4	1,2-Dibromoethane	24.5		1.0	0.73
95-50-1	1,2-Dichlorobenzene	25.2		1.0	0.79
107-06-2	1,2-Dichloroethane	26.0		1.0	0.21
78-87-5	1,2-Dichloropropane	26.2		1.0	0.72
108-67-8	1,3,5-Trimethylbenzene	25.7		1.0	0.77
541-73-1	1,3-Dichlorobenzene	25.0		1.0	0.78
106-46-7	1,4-Dichlorobenzene	24.9		1.0	0.84
78-93-3	2-Butanone (MEK)	125		10	1.3
591-78-6	2-Hexanone	115		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	117		5.0	2.1
67-64-1	Acetone	118		10	3.0
71-43-2	Benzene	26.0		1.0	0.41
75-27-4	Bromodichloromethane	26.0		1.0	0.39
75-25-2	Bromoform	22.5		1.0	0.26
74-83-9	Bromomethane	27.8		1.0	0.69
75-15-0	Carbon disulfide	25.3		1.0	0.19
56-23-5	Carbon tetrachloride	26.1		1.0	0.27
108-90-7	Chlorobenzene	24.9		1.0	0.75
75-00-3	Chloroethane	26.9		1.0	0.32
67-66-3	Chloroform	26.2		1.0	0.34
74-87-3	Chloromethane	27.3		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	26.4		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	23.1		1.0	0.36
110-82-7	Cyclohexane	25.5		1.0	0.18
124-48-1	Dibromochloromethane	23.6		1.0	0.32
75-71-8	Dichlorodifluoromethane	32.3		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 480-179534/4
 Matrix: Water Lab File ID: D1600.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/01/2014 21:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	25.1		1.0	0.74
98-82-8	Isopropylbenzene	25.2		1.0	0.79
79-20-9	Methyl acetate	126		2.5	0.50
1634-04-4	Methyl tert-butyl ether	25.8		1.0	0.16
108-87-2	Methylcyclohexane	26.2		1.0	0.16
75-09-2	Methylene Chloride	25.8		1.0	0.44
100-42-5	Styrene	25.0		1.0	0.73
127-18-4	Tetrachloroethene	25.3		1.0	0.36
108-88-3	Toluene	24.9		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	26.4		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	21.4		1.0	0.37
79-01-6	Trichloroethene	26.4		1.0	0.46
75-69-4	Trichlorofluoromethane	29.0		1.0	0.88
75-01-4	Vinyl chloride	26.6		1.0	0.90
1330-20-7	Xylenes, Total	50.6		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		66-137
460-00-4	4-Bromofluorobenzene (Surr)	112		73-120
2037-26-5	Toluene-d8 (Surr)	94		71-126
1868-53-7	Dibromofluoromethane (Surr)	94		60-140

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1600.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 01-May-2014 21:00:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 480-0031670-004
 Operator ID: CDC Instrument ID: HP5975D
 Method: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 02-May-2014 02:17:51 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: cwiklinc

Date: 01-May-2014 21:36:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.818	4.819	-0.001	97	158333	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.147	7.147	0.000	86	328372	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.049	9.049	0.000	85	285095	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.337	4.337	0.000	65	221568	25.0	23.5	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.587	4.587	0.000	0	134221	25.0	21.7	
\$ 5 Toluene-d8 (Surr)	98	6.013	6.007	0.006	92	856498	25.0	23.4	
\$ 6 4-Bromofluorobenzene (Surr	174	8.098	8.098	0.000	89	305444	25.0	28.0	
10 Dichlorodifluoromethane	85	1.331	1.325	0.006	87	300372	25.0	32.3	
12 Chloromethane	50	1.435	1.435	0.000	89	376580	25.0	27.3	
13 Vinyl chloride	62	1.545	1.539	0.006	79	345592	25.0	26.6	
144 Butadiene	54	1.545	1.551	-0.006	92	412992	25.0	31.8	
14 Bromomethane	94	1.801	1.801	0.000	91	182646	25.0	27.8	
15 Chloroethane	64	1.886	1.898	-0.012	94	192430	25.0	26.9	
16 Dichlorofluoromethane	67	2.081	2.081	0.000	83	426423	25.0	26.2	
17 Trichlorofluoromethane	101	2.118	2.118	0.000	84	298919	25.0	29.0	
18 Ethyl ether	59	2.307	2.301	0.006	94	247108	25.0	25.6	
20 Acrolein	56	2.447	2.447	0.000	91	117033	125.0	101.2	
22 1,1-Dichloroethene	96	2.490	2.490	0.000	86	242836	25.0	25.4	
21 1,1,2-Trichloro-1,2,2-trif	101	2.538	2.545	-0.007	88	258936	25.0	26.1	
23 Acetone	43	2.587	2.587	0.000	97	331354	125.0	118.3	
25 Iodomethane	142	2.630	2.624	0.006	98	430155	25.0	26.4	
26 Carbon disulfide	76	2.666	2.667	-0.001	99	851086	25.0	25.3	
28 3-Chloro-1-propene	41	2.813	2.813	0.000	85	437385	25.0	23.3	
27 Methyl acetate	43	2.855	2.856	-0.001	96	1109137	125.0	125.7	
30 Methylene Chloride	84	2.935	2.935	0.000	91	270442	25.0	25.8	
31 2-Methyl-2-propanol	59	3.087	3.087	0.000	97	124983	250.0	227.4	
32 Methyl tert-butyl ether	73	3.136	3.136	0.000	90	834460	25.0	25.8	
34 trans-1,2-Dichloroethene	96	3.142	3.142	0.000	93	266230	25.0	26.4	
33 Acrylonitrile	53	3.166	3.166	0.000	98	1006761	250.0	223.0	
35 Hexane	57	3.325	3.325	0.000	93	435508	25.0	24.5	
39 1,1-Dichloroethane	63	3.496	3.490	0.006	85	531945	25.0	26.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.538	3.538	0.000	97	982401	50.0	40.1	
44 2,2-Dichloropropane	77	3.935	3.935	0.000	90	285810	25.0	28.5	
45 cis-1,2-Dichloroethene	96	3.959	3.959	0.000	71	287796	25.0	26.4	
43 2-Butanone (MEK)	43	3.983	3.983	0.000	94	704075	125.0	124.5	
48 Chlorobromomethane	128	4.148	4.148	0.000	93	143491	25.0	26.3	
49 Tetrahydrofuran	42	4.184	4.178	0.006	89	166828	50.0	44.7	
50 Chloroform	83	4.215	4.209	0.006	81	477136	25.0	26.2	
51 1,1,1-Trichloroethane	97	4.319	4.319	0.000	93	396374	25.0	27.0	
52 Cyclohexane	56	4.337	4.337	0.000	93	540455	25.0	25.5	
55 Carbon tetrachloride	117	4.434	4.435	-0.001	77	354115	25.0	26.1	
54 1,1-Dichloropropene	75	4.441	4.441	0.000	95	356697	25.0	26.0	
53 Isobutyl alcohol	43	4.599	4.599	0.000	91	299941	625.0	658.8	
57 Benzene	78	4.605	4.605	0.000	98	1033445	25.0	26.0	
58 1,2-Dichloroethane	62	4.648	4.648	0.000	89	389472	25.0	26.0	
59 n-Heptane	43	4.764	4.764	0.000	94	533501	25.0	26.1	
62 Trichloroethene	95	5.093	5.093	0.000	93	269825	25.0	26.4	
64 Methylcyclohexane	83	5.203	5.203	0.000	94	489941	25.0	26.2	
65 1,2-Dichloropropane	63	5.276	5.276	0.000	94	288281	25.0	26.2	
67 Dibromomethane	93	5.379	5.379	0.000	91	169934	25.0	26.1	
66 1,4-Dioxane	88	5.398	5.398	0.000	94	38827	500.0	477.0	M
68 Dichlorobromomethane	83	5.501	5.501	0.000	93	365509	25.0	26.0	
69 2-Chloroethyl vinyl ether	63	5.715	5.715	0.000	90	197461	25.0	25.7	
72 cis-1,3-Dichloropropene	75	5.830	5.825	0.006	87	418222	25.0	23.1	
73 4-Methyl-2-pentanone (MIBK)	43	5.934	5.934	0.000	97	1626584	125.0	116.6	
74 Toluene	92	6.062	6.062	0.000	97	636923	25.0	24.9	
77 trans-1,3-Dichloropropene	75	6.257	6.257	0.000	92	357703	25.0	21.4	
75 Ethyl methacrylate	69	6.300	6.300	0.000	91	360400	25.0	24.2	
79 1,1,2-Trichloroethane	83	6.410	6.410	0.000	88	197670	25.0	24.4	
81 Tetrachloroethene	166	6.483	6.483	0.000	92	281168	25.0	25.3	
82 1,3-Dichloropropane	76	6.532	6.532	0.000	93	410612	25.0	24.2	
80 2-Hexanone	43	6.580	6.580	0.000	97	1096277	125.0	114.8	
83 Chlorodibromomethane	129	6.721	6.721	0.000	89	263354	24.5	23.6	
84 Ethylene Dibromide	107	6.806	6.806	0.000	98	251179	25.0	24.5	
87 Chlorobenzene	112	7.172	7.172	0.000	93	713446	25.0	24.9	
88 Ethylbenzene	91	7.239	7.239	0.000	99	1211590	25.0	25.1	
89 1,1,1,2-Tetrachloroethane	131	7.239	7.239	0.000	40	258172	25.0	25.2	
90 m-Xylene & p-Xylene	106	7.330	7.330	0.000	0	475552	25.0	25.4	
91 o-Xylene	106	7.653	7.653	0.000	97	468706	25.0	25.2	
92 Styrene	104	7.672	7.672	0.000	95	789550	25.0	25.0	
95 Bromoform	173	7.861	7.861	0.000	96	165332	25.0	22.5	
94 Isopropylbenzene	105	7.946	7.946	0.000	96	1252808	25.0	25.2	
101 Bromobenzene	156	8.220	8.220	0.000	96	295208	25.0	25.0	
97 1,1,2,2-Tetrachloroethane	83	8.239	8.239	0.000	86	341937	25.0	24.1	
100 1,2,3-Trichloropropane	110	8.269	8.269	0.000	83	100122	25.0	23.9	
98 trans-1,4-Dichloro-2-buten	53	8.281	8.275	0.006	51	20616	25.0	5.63	
99 N-Propylbenzene	91	8.281	8.281	0.000	99	1442550	25.0	24.9	
103 2-Chlorotoluene	126	8.373	8.373	0.000	96	282421	25.0	25.4	
102 1,3,5-Trimethylbenzene	105	8.421	8.422	-0.001	71	1046857	25.0	25.7	
105 4-Chlorotoluene	126	8.458	8.458	0.000	96	283810	25.0	24.7	
106 tert-Butylbenzene	134	8.690	8.690	0.000	93	221441	25.0	26.0	
107 1,2,4-Trimethylbenzene	105	8.738	8.739	-0.001	97	1072969	25.0	25.6	
109 sec-Butylbenzene	105	8.873	8.873	0.000	94	1358864	25.0	26.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
110 4-Isopropyltoluene	119	8.988	8.989	-0.001	94	1135264	25.0	26.1	
111 1,3-Dichlorobenzene	146	8.995	8.995	-0.001	72	554817	25.0	25.0	
113 1,4-Dichlorobenzene	146	9.068	9.068	0.000	93	554927	25.0	24.9	
115 n-Butylbenzene	91	9.336	9.336	0.000	98	1048756	25.0	25.9	
116 1,2-Dichlorobenzene	146	9.385	9.385	0.000	96	546646	25.0	25.2	
117 1,2-Dibromo-3-Chloropropan	75	10.055	10.055	0.000	81	66188	25.0	22.7	
119 1,2,4-Trichlorobenzene	180	10.726	10.726	0.000	93	395353	25.0	25.6	
120 Hexachlorobutadiene	225	10.842	10.842	0.000	95	208632	25.0	28.4	
121 Naphthalene	128	10.933	10.933	0.000	97	1005788	25.0	24.4	
122 1,2,3-Trichlorobenzene	180	11.134	11.134	0.000	94	365608	25.0	25.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1600.D

Injection Date: 01-May-2014 21:00:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

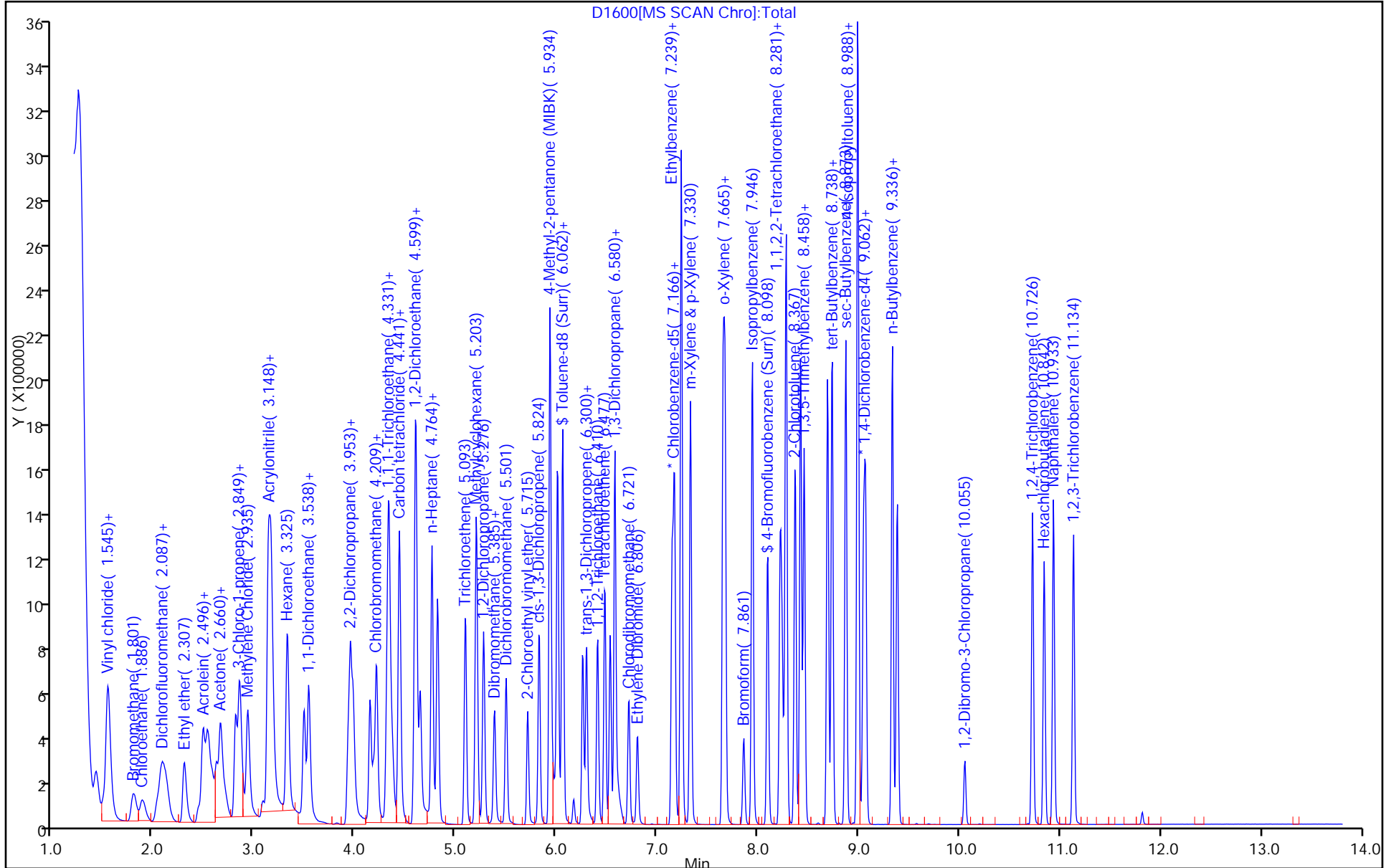
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 480-179534/25
 Matrix: Water Lab File ID: D1602.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/01/2014 21:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	26.2		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.7		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.0		1.0	0.31
79-00-5	1,1,2-Trichloroethane	24.9		1.0	0.23
75-34-3	1,1-Dichloroethane	25.7		1.0	0.38
75-35-4	1,1-Dichloroethene	25.4		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	25.6		1.0	0.41
95-63-6	1,2,4-Trimethylbenzene	25.6		1.0	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	23.7		1.0	0.39
106-93-4	1,2-Dibromoethane	25.3		1.0	0.73
95-50-1	1,2-Dichlorobenzene	25.3		1.0	0.79
107-06-2	1,2-Dichloroethane	25.1		1.0	0.21
78-87-5	1,2-Dichloropropane	25.9		1.0	0.72
108-67-8	1,3,5-Trimethylbenzene	25.7		1.0	0.77
541-73-1	1,3-Dichlorobenzene	25.3		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.2		1.0	0.84
78-93-3	2-Butanone (MEK)	123		10	1.3
591-78-6	2-Hexanone	121		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	121		5.0	2.1
67-64-1	Acetone	107		10	3.0
71-43-2	Benzene	25.9		1.0	0.41
75-27-4	Bromodichloromethane	26.0		1.0	0.39
75-25-2	Bromoform	24.1		1.0	0.26
74-83-9	Bromomethane	27.9		1.0	0.69
75-15-0	Carbon disulfide	25.0		1.0	0.19
56-23-5	Carbon tetrachloride	25.8		1.0	0.27
108-90-7	Chlorobenzene	25.3		1.0	0.75
75-00-3	Chloroethane	26.7		1.0	0.32
67-66-3	Chloroform	26.0		1.0	0.34
74-87-3	Chloromethane	27.5		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	25.9		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	23.4		1.0	0.36
110-82-7	Cyclohexane	25.2		1.0	0.18
124-48-1	Dibromochloromethane	24.6		1.0	0.32
75-71-8	Dichlorodifluoromethane	31.9		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 480-179534/25
 Matrix: Water Lab File ID: D1602.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/01/2014 21:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-CLPII ID: 0.53(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 179534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	25.6		1.0	0.74
98-82-8	Isopropylbenzene	25.5		1.0	0.79
79-20-9	Methyl acetate	120		2.5	0.50
1634-04-4	Methyl tert-butyl ether	24.8		1.0	0.16
108-87-2	Methylcyclohexane	25.7		1.0	0.16
75-09-2	Methylene Chloride	25.3		1.0	0.44
100-42-5	Styrene	25.6		1.0	0.73
127-18-4	Tetrachloroethene	25.5		1.0	0.36
108-88-3	Toluene	25.2		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	26.1		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	22.3		1.0	0.37
79-01-6	Trichloroethene	26.3		1.0	0.46
75-69-4	Trichlorofluoromethane	29.0		1.0	0.88
75-01-4	Vinyl chloride	26.6		1.0	0.90
1330-20-7	Xylenes, Total	51.3		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		66-137
460-00-4	4-Bromofluorobenzene (Surr)	115		73-120
2037-26-5	Toluene-d8 (Surr)	95		71-126
1868-53-7	Dibromofluoromethane (Surr)	92		60-140

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1602.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 01-May-2014 21:56:30 ALS Bottle#: 1 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Misc. Info.: 480-0031670-025
 Operator ID: CDC Instrument ID: HP5975D
 Method: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 02-May-2014 02:17:51 Calib Date: 22-Apr-2014 10:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\Bufchrom\ChromData\HP5975D\20140422-31313.b\D1223.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: XAWRK051

First Level Reviewer: cwiklinc

Date: 01-May-2014 22:27:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	4.819	4.819	-0.001	97	158435	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.147	7.147	0.000	86	318078	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	9.049	9.049	0.000	84	278417	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	4.337	4.337	0.000	68	218240	25.0	23.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	4.587	4.587	0.000	0	131613	25.0	21.3	
\$ 5 Toluene-d8 (Surr)	98	6.007	6.007	0.000	92	844673	25.0	23.8	
\$ 6 4-Bromofluorobenzene (Surr	174	8.098	8.098	0.000	89	303837	25.0	28.7	
10 Dichlorodifluoromethane	85	1.331	1.325	0.006	87	297305	25.0	31.9	
12 Chloromethane	50	1.429	1.435	-0.006	88	379267	25.0	27.5	
13 Vinyl chloride	62	1.539	1.539	0.000	80	346931	25.0	26.6	
144 Butadiene	54	1.551	1.551	0.000	92	403205	25.0	31.0	
14 Bromomethane	94	1.801	1.801	0.000	91	183614	25.0	27.9	
15 Chloroethane	64	1.892	1.898	-0.006	94	191205	25.0	26.7	
16 Dichlorofluoromethane	67	2.075	2.081	-0.006	83	424082	25.0	26.1	
17 Trichlorofluoromethane	101	2.112	2.118	-0.006	85	299033	25.0	29.0	
18 Ethyl ether	59	2.307	2.301	0.006	95	243273	25.0	25.2	
20 Acrolein	56	2.447	2.447	0.000	91	129699	125.0	112.0	
22 1,1-Dichloroethene	96	2.496	2.490	0.006	87	243037	25.0	25.4	
21 1,1,2-Trichloro-1,2,2-trif	101	2.538	2.545	-0.007	88	258017	25.0	26.0	
23 Acetone	43	2.587	2.587	0.000	97	301200	125.0	107.4	
25 Iodomethane	142	2.630	2.624	0.006	99	427842	25.0	26.3	
26 Carbon disulfide	76	2.666	2.667	-0.001	99	839521	25.0	25.0	
28 3-Chloro-1-propene	41	2.813	2.813	0.000	85	445710	25.0	23.7	
27 Methyl acetate	43	2.855	2.856	-0.001	96	1056824	125.0	119.7	
30 Methylene Chloride	84	2.935	2.935	0.000	90	264490	25.0	25.3	
31 2-Methyl-2-propanol	59	3.081	3.087	-0.006	99	156171	250.0	284.0	
32 Methyl tert-butyl ether	73	3.136	3.136	0.000	90	801853	25.0	24.8	
34 trans-1,2-Dichloroethene	96	3.142	3.142	0.000	92	263366	25.0	26.1	
33 Acrylonitrile	53	3.172	3.166	0.006	99	958574	250.0	212.2	
35 Hexane	57	3.325	3.325	0.000	93	435376	25.0	24.4	
39 1,1-Dichloroethane	63	3.496	3.490	0.006	85	525099	25.0	25.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.538	3.538	0.000	97	966082	50.0	39.4	
44 2,2-Dichloropropane	77	3.935	3.935	0.000	89	266682	25.0	26.6	
45 cis-1,2-Dichloroethene	96	3.959	3.959	0.000	71	283138	25.0	25.9	
43 2-Butanone (MEK)	43	3.983	3.983	0.000	94	696174	125.0	123.0	
48 Chlorobromomethane	128	4.148	4.148	0.000	94	141187	25.0	25.8	
49 Tetrahydrofuran	42	4.184	4.178	0.006	90	165378	50.0	44.3	
50 Chloroform	83	4.209	4.209	0.000	82	473609	25.0	26.0	
51 1,1,1-Trichloroethane	97	4.319	4.319	0.000	93	385466	25.0	26.2	
52 Cyclohexane	56	4.337	4.337	0.000	94	534153	25.0	25.2	
55 Carbon tetrachloride	117	4.434	4.435	-0.001	77	350226	25.0	25.8	
54 1,1-Dichloropropene	75	4.441	4.441	0.000	94	355311	25.0	25.9	
53 Isobutyl alcohol	43	4.599	4.599	0.000	91	294254	625.0	645.9	
57 Benzene	78	4.605	4.605	0.000	98	1030570	25.0	25.9	
58 1,2-Dichloroethane	62	4.648	4.648	0.000	89	375945	25.0	25.1	
59 n-Heptane	43	4.764	4.764	0.000	94	530927	25.0	25.9	
62 Trichloroethene	95	5.093	5.093	0.000	94	269059	25.0	26.3	
64 Methylcyclohexane	83	5.203	5.203	0.000	94	481283	25.0	25.7	
65 1,2-Dichloropropane	63	5.276	5.276	0.000	95	284125	25.0	25.9	
67 Dibromomethane	93	5.379	5.379	0.000	90	168077	25.0	25.8	
66 1,4-Dioxane	88	5.398	5.398	0.000	95	39758	500.0	503.6	
68 Dichlorobromomethane	83	5.501	5.501	0.000	93	366144	25.0	26.0	
69 2-Chloroethyl vinyl ether	63	5.715	5.715	0.000	92	194625	25.0	25.3	
72 cis-1,3-Dichloropropene	75	5.824	5.825	0.000	88	423534	25.0	23.4	
73 4-Methyl-2-pentanone (MIBK)	43	5.934	5.934	0.000	97	1633304	125.0	120.9	
74 Toluene	92	6.062	6.062	0.000	97	624587	25.0	25.2	
77 trans-1,3-Dichloropropene	75	6.257	6.257	0.000	92	362018	25.0	22.3	
75 Ethyl methacrylate	69	6.300	6.300	0.000	91	360688	25.0	25.0	
79 1,1,2-Trichloroethane	83	6.410	6.410	0.000	88	195347	25.0	24.9	
81 Tetrachloroethene	166	6.483	6.483	0.000	92	274655	25.0	25.5	
82 1,3-Dichloropropane	76	6.532	6.532	0.000	93	408296	25.0	24.9	
80 2-Hexanone	43	6.580	6.580	0.000	97	1122641	125.0	121.4	
83 Chlorodibromomethane	129	6.714	6.721	-0.007	90	265535	24.5	24.6	
84 Ethylene Dibromide	107	6.806	6.806	0.000	98	251202	25.0	25.3	
87 Chlorobenzene	112	7.172	7.172	0.000	93	702219	25.0	25.3	
88 Ethylbenzene	91	7.239	7.239	0.000	99	1198576	25.0	25.6	
89 1,1,1,2-Tetrachloroethane	131	7.239	7.239	0.000	40	252312	25.0	25.4	
90 m-Xylene & p-Xylene	106	7.330	7.330	0.000	0	466732	25.0	25.7	
91 o-Xylene	106	7.653	7.653	0.000	98	460673	25.0	25.6	
92 Styrene	104	7.672	7.672	0.000	95	782969	25.0	25.6	
95 Bromoform	173	7.861	7.861	0.000	96	171687	25.0	24.1	
94 Isopropylbenzene	105	7.946	7.946	0.000	96	1236830	25.0	25.5	
101 Bromobenzene	156	8.220	8.220	0.000	96	289589	25.0	25.1	
97 1,1,2,2-Tetrachloroethane	83	8.239	8.239	0.000	88	343033	25.0	24.7	
100 1,2,3-Trichloropropane	110	8.269	8.269	0.000	82	100210	25.0	24.4	
98 trans-1,4-Dichloro-2-buten	53	8.275	8.275	0.000	54	37215	25.0	9.61	
99 N-Propylbenzene	91	8.281	8.281	0.000	98	1424834	25.0	25.2	
103 2-Chlorotoluene	126	8.373	8.373	0.000	96	278196	25.0	25.6	
102 1,3,5-Trimethylbenzene	105	8.421	8.422	-0.001	67	1024433	25.0	25.7	
105 4-Chlorotoluene	126	8.458	8.458	0.000	97	282059	25.0	25.1	
106 tert-Butylbenzene	134	8.690	8.690	0.000	89	216224	25.0	26.0	
107 1,2,4-Trimethylbenzene	105	8.738	8.739	-0.001	97	1049094	25.0	25.6	
109 sec-Butylbenzene	105	8.873	8.873	0.000	94	1318073	25.0	26.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
110 4-Isopropyltoluene	119	8.988	8.989	-0.001	95	1103892	25.0	26.0	
111 1,3-Dichlorobenzene	146	8.995	8.995	0.000	72	549540	25.0	25.3	
113 1,4-Dichlorobenzene	146	9.068	9.068	0.000	94	549007	25.0	25.2	
115 n-Butylbenzene	91	9.336	9.336	0.000	97	1028871	25.0	26.0	
116 1,2-Dichlorobenzene	146	9.385	9.385	0.000	96	536510	25.0	25.3	
117 1,2-Dibromo-3-Chloropropan	75	10.055	10.055	0.000	82	67434	25.0	23.7	
119 1,2,4-Trichlorobenzene	180	10.726	10.726	0.000	93	386284	25.0	25.6	
120 Hexachlorobutadiene	225	10.842	10.842	0.000	95	201743	25.0	28.2	
121 Naphthalene	128	10.933	10.933	0.000	97	995273	25.0	24.7	
122 1,2,3-Trichlorobenzene	180	11.134	11.134	0.000	94	349488	25.0	25.2	

Data File: \\Bufchrom\ChromData\HP5975D\20140501-31670.b\D1602.D

Injection Date: 01-May-2014 21:56:30

Instrument ID: HP5975D

Operator ID: CDC

Lims ID: LCSD

Worklist Smp#: 25

Client ID:

Purge Vol: 5.000 mL

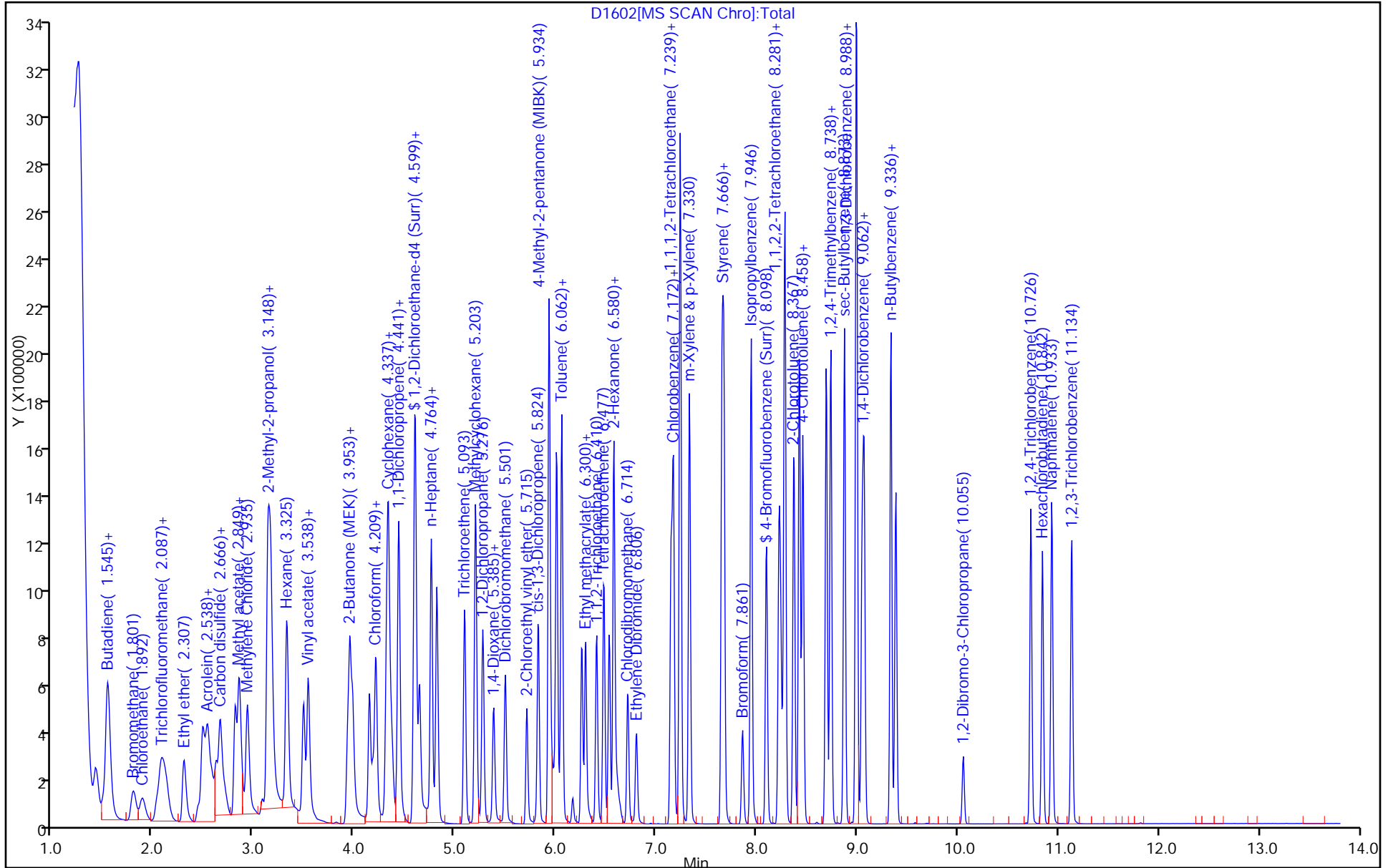
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: D-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1

SDG No.: _____

Instrument ID: HP5975D Start Date: 04/22/2014 04:32Analysis Batch Number: 177332 End Date: 04/22/2014 11:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-177332/2		04/22/2014 04:32	1	D1207.D	RTX-CLPII 0.53 (mm)
IC 480-177332/4		04/22/2014 05:18	1	D1209.D	RTX-CLPII 0.53 (mm)
IC 480-177332/5		04/22/2014 05:39	1	D1210.D	RTX-CLPII 0.53 (mm)
IC 480-177332/6		04/22/2014 06:01	1	D1211.D	RTX-CLPII 0.53 (mm)
IC 480-177332/7		04/22/2014 06:22	1	D1212.D	RTX-CLPII 0.53 (mm)
ICIS 480-177332/8		04/22/2014 06:43	1	D1213.D	RTX-CLPII 0.53 (mm)
IC 480-177332/9		04/22/2014 07:04	1	D1214.D	RTX-CLPII 0.53 (mm)
IC 480-177332/10		04/22/2014 07:25	1	D1215.D	RTX-CLPII 0.53 (mm)
IC 480-177332/12		04/22/2014 08:07	1		RTX-CLPII 0.53 (mm)
IC 480-177332/13		04/22/2014 08:28	1		RTX-CLPII 0.53 (mm)
IC 480-177332/14		04/22/2014 08:48	1		RTX-CLPII 0.53 (mm)
IC 480-177332/15		04/22/2014 09:09	1		RTX-CLPII 0.53 (mm)
IC 480-177332/16		04/22/2014 09:30	1		RTX-CLPII 0.53 (mm)
IC 480-177332/17		04/22/2014 09:50	1		RTX-CLPII 0.53 (mm)
IC 480-177332/18		04/22/2014 10:11	1		RTX-CLPII 0.53 (mm)
MDLV 480-177332/20		04/22/2014 10:52	1		RTX-CLPII 0.53 (mm)
MDLV 480-177332/21		04/22/2014 11:13	1		RTX-CLPII 0.53 (mm)
ICV 480-177332/22		04/22/2014 11:33	1		RTX-CLPII 0.53 (mm)
ICV 480-177332/23		04/22/2014 11:54	1		RTX-CLPII 0.53 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-59007-1

SDG No.: _____

Instrument ID: HP5975D Start Date: 05/01/2014 19:44

Analysis Batch Number: 179534 End Date: 05/02/2014 04:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-179534/1		05/01/2014 19:44	1	D1597.D	RTX-CLPII 0.53 (mm)
CCVIS 480-179534/2		05/01/2014 20:06	1	D1598.D	RTX-CLPII 0.53 (mm)
CCV 480-179534/3		05/01/2014 20:40	1		RTX-CLPII 0.53 (mm)
LCS 480-179534/4		05/01/2014 21:00	1	D1600.D	RTX-CLPII 0.53 (mm)
MB 480-179534/5		05/01/2014 21:21	1	D1601.D	RTX-CLPII 0.53 (mm)
LCSD 480-179534/25		05/01/2014 21:56	1	D1602.D	RTX-CLPII 0.53 (mm)
ZZZZZ		05/01/2014 22:17	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/01/2014 22:38	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/01/2014 22:58	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/01/2014 23:19	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/01/2014 23:40	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 00:01	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 00:22	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 00:43	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 01:05	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 01:25	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 01:46	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 02:07	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 02:28	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 02:50	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 03:11	1		RTX-CLPII 0.53 (mm)
ZZZZZ		05/02/2014 03:31	1		RTX-CLPII 0.53 (mm)
480-59007-1	1-2	05/02/2014 03:53	1	D1619.D	RTX-CLPII 0.53 (mm)
480-59007-2	1-3	05/02/2014 04:14	1	D1620.D	RTX-CLPII 0.53 (mm)
480-59007-3	TRIP BLANK	05/02/2014 04:35	1	D1621.D	RTX-CLPII 0.53 (mm)

GC/MS VOA Worksheet

Batch Number: 480-179534

Date Open: May 01 2014 7:44PM

Method: 8260C

Batch End:

Analyst: Quirk, Patrick J

Lab ID	Client ID	Method Chain	Basis	Initial pH	Initial weight/volume of sample	Final weight/volume of sample	Instrument	2MTP_WRK_00031	3MTP_WRK_00034
BFB~480-179534/1		8260C			1 uL	1 uL	HP5975D		
CCVIS~480-179534/2		8260C			5 mL	5 mL	HP5975D		
CCV~480-179534/3		8260C			5 mL	5 mL	HP5975D	12.5 uL	12.5 uL
LCS~480-179534/4		8260C			5 mL	5 mL	HP5975D		
MB~480-179534/5		8260C			5 mL	5 mL	HP5975D		
480-58638-A-1	TB	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-2	DUP1	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-3	GWB-2	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-4	GWB-3	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-5	GWC-10	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-6	GWC-13	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-7	GWC-1AR	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-8	GWC-3A	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-9	GWC-3RA	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-10	GWC-6A	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-11	GWC-7AR	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-13	GWC-8A	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-14	GWC-8R	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58638-F-15	GWC-9A	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58892-B-7	BIW-2	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-58892-B-13	BMW-13S	8260C	T	7 SU	5 mL	5 mL	HP5975D		
480-59007-A-1	1-2	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-59007-A-2	1-3	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
480-59007-A-3	TRIP BLANK	8260C	T	<2 SU	5 mL	5 mL	HP5975D		
LCSD~480-179534/25		8260C			5 mL	5 mL	HP5975D		

GC/MS VOA Worksheet

Batch Number: 480-179534

Date Open: May 01 2014 7:44PM

Method: 8260C

Batch End:

Analyst: Quirk, Patrick J

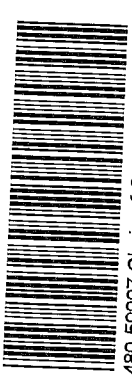
Lab ID	Client ID	Method Chain	Basis	8260 CORP mix_00010	ADD CORP mix_00008	BFB_WRK_00033	D_8260_IS_00021	D_8260_Surr_00025	GAS CORP mix_00023
BFB~480-179534/1		8260C				1 uL			
CCVIS~480-179534/ 2		8260C		12.5 uL			1.25 uL	1.25 uL	12.5 uL
CCV~480-179534/3		8260C			12.5 uL		1.25 uL	1.25 uL	
LCS~480-179534/4		8260C		12.5 uL			1.25 uL	1.25 uL	12.5 uL
MB~480-179534/5		8260C					1.25 uL	1.25 uL	
480-58638-A-1	TB	8260C	T				1.25 uL	1.25 uL	
480-58638-F-2	DUP1	8260C	T				1.25 uL	1.25 uL	
480-58638-F-3	GWB-2	8260C	T				1.25 uL	1.25 uL	
480-58638-F-4	GWB-3	8260C	T				1.25 uL	1.25 uL	
480-58638-F-5	GWC-10	8260C	T				1.25 uL	1.25 uL	
480-58638-F-6	GWC-13	8260C	T				1.25 uL	1.25 uL	
480-58638-F-7	GWC-1AR	8260C	T				1.25 uL	1.25 uL	
480-58638-F-8	GWC-3A	8260C	T				1.25 uL	1.25 uL	
480-58638-F-9	GWC-3RA	8260C	T				1.25 uL	1.25 uL	
480-58638-F-10	GWC-6A	8260C	T				1.25 uL	1.25 uL	
480-58638-F-11	GWC-7AR	8260C	T				1.25 uL	1.25 uL	
480-58638-F-13	GWC-8A	8260C	T				1.25 uL	1.25 uL	
480-58638-F-14	GWC-8R	8260C	T				1.25 uL	1.25 uL	
480-58638-F-15	GWC-9A	8260C	T				1.25 uL	1.25 uL	
480-58892-B-7	BIW-2	8260C	T				1.25 uL	1.25 uL	
480-58892-B-13	BMW-13S	8260C	T				1.25 uL	1.25 uL	
480-59007-A-1	1-2	8260C	T				1.25 uL	1.25 uL	
480-59007-A-2	1-3	8260C	T				1.25 uL	1.25 uL	
480-59007-A-3	TRIP BLANK	8260C	T				1.25 uL	1.25 uL	
LCSD~480-179534/ 25		8260C		12.5 uL			1.25 uL	1.25 uL	12.5 uL

Shipping and Receiving Documents

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____
 Drinking Water? Yes No



480-59007 Chain of Custody

Chain of Custody Receipt

TAL-4124 (1007)

Client: **ARCADIS** Date: **4/30/14** Chain of Custody Number: **223275**
 Address: **855 Route 146 STE 210** Lab Number: _____ Page: **1** of **1**
 City: **Clifton Park** State: **NY** Zip Code: **12065**
 Project Name and Location (State): **NYSDEC Stewardby - Vestal**
 Contract/Purchase Order/Quote No.: **00266401.0000**

Object Manager: **Jeremy Wreckoff** Date: **4/30/14**
 Telephone Number (Area Code)/Fax Number: **518-250-7300** Lab Number: _____
 Site Contact: **Jeremy Wreckoff** Lab Contact: **Sudy Stone**
 Carrier/Waybill Number: _____

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt		
			Air	Aqueous	Sed	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH				
1-2	4/23/14	1340	X								3					
1-3	4/23/14	1515	X								3					
Trip Blank	4/23/14	---	X								3					

Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant Poison B Unknown Return To Client Disposal By Lab Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

QC Requirements (Specify): **ASPA CAP 3**

Turn Around Time Required:
 24 Hours 48 Hours 7 Days 14 Days 21 Days Other _____

1. Relinquished By: *[Signature]* Date: **4/30/14** Time: **1630**
 2. Relinquished By: *[Signature]* Date: **5/1/14** Time: **0900**
 3. Relinquished By: *[Signature]* Date: _____ Time: _____

Comments: **# 3 2.4**

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-59007-1

Login Number: 59007

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.	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.	False	
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: 480-55128-1

Client Project/Site: Vestal Water Supply RSO

For:

ARCADIS U.S. Inc

855 Route 146

Suite 210

Clifton Park, New York 12065

Attn: Bruce Nelson



Authorized for release by:

2/28/2014 4:10:38 PM

Candace Fox, Manager of Project Management

(716)504-9844

candace.fox@testamericainc.com

LINKS

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results through

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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: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits
E	Result exceeded calibration range.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Job ID: 480-55128-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-55128-1

Comments

No additional comments.

Receipt

The samples were received on 2/24/2014 4:37 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.1° C and 2.4° C.

GC/MS VOA

Method(s) 8260C: The large number of analytes included in the continuing calibration verification (CCV) for batch 167465 gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes are outside the method-defined %D criteria.

Method(s) 8260C: The large number of analytes included in the continuing calibration verification (CCV) for batch 167472 gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes are outside the method-defined %D criteria.

Method(s) 8260C: The large number of analytes included in the continuing calibration verification (CCV) for batch 167657 gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes are outside the method-defined %D criteria.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-55128-46 MS), (480-55128-46 MSD), 4009-5-022014 (480-55128-5), 4009-8-022014 (480-55128-8), DUP-01-022014 (480-55128-46). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-1-022014

Lab Sample ID: 480-55128-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.3	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	10		10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.81	ug/L	1		8260C	Total/NA
Tetrachloroethene	1.4		1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	1.4		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-2-022014

Lab Sample ID: 480-55128-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichlorotrifluoroethane	1.1		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	2.7		1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	7.2	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	2.9		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	6.9		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-3-022014

Lab Sample ID: 480-55128-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	6.3		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	1.3		1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	10		10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	77		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	26		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: 4009-4-022014

Lab Sample ID: 480-55128-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.5	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	12		10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-5-022014

Lab Sample ID: 480-55128-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.7		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	2.2		1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	11		10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	270	E	1.0	0.81	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.0		1.0	0.90	ug/L	1		8260C	Total/NA
Trichloroethene	21		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	39		1.0	0.90	ug/L	1		8260C	Total/NA
1,1-Dichloroethane - DL	2.3	J	5.0	1.9	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene - DL	250		5.0	4.1	ug/L	5		8260C	Total/NA
Trichloroethene - DL	23		5.0	2.3	ug/L	5		8260C	Total/NA
Vinyl chloride - DL	44		5.0	4.5	ug/L	5		8260C	Total/NA

Client Sample ID: 4009-6-022014

Lab Sample ID: 480-55128-6

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-6-022014 (Continued)

Lab Sample ID: 480-55128-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.5	J	10	3.0	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.26	J	1.0	0.16	ug/L	1		8260C	Total/NA
Trichloroethene	0.53	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-7-022014

Lab Sample ID: 480-55128-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.98	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
cis-1,2-Dichloroethene	20		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	2.1		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	2.5		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-8-022014

Lab Sample ID: 480-55128-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	720	E	1.0	0.82	ug/L	1		8260C	Total/NA
1,1,2-Trichloroethane	0.51	J	1.0	0.23	ug/L	1		8260C	Total/NA
1,1,2-Trichlorotrifluoroethane	14		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	40		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	31		1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	9.6	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	0.67	J	1.0	0.41	ug/L	1		8260C	Total/NA
Chloroethane	2.2		1.0	0.32	ug/L	1		8260C	Total/NA
Chloroform	0.63	J	1.0	0.34	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	450	E	1.0	0.81	ug/L	1		8260C	Total/NA
Tetrachloroethene	1.3		1.0	0.36	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.1		1.0	0.90	ug/L	1		8260C	Total/NA
Trichloroethene	19		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	44		1.0	0.90	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane - DL	790		10	8.2	ug/L	10		8260C	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	12		10	3.1	ug/L	10		8260C	Total/NA
1,1-Dichloroethane - DL	39		10	3.8	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene - DL	440		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene - DL	20		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride - DL	54		10	9.0	ug/L	10		8260C	Total/NA

Client Sample ID: 4009-9-022014

Lab Sample ID: 480-55128-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.4	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	12		10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	6.3		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	0.54	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-10-022014

Lab Sample ID: 480-55128-10

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

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-10-022014 (Continued)

Lab Sample ID: 480-55128-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.60	J	1.0	0.41	ug/L	1		8260C	Total/NA
Toluene	2.0		1.0	0.51	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-11-022014

Lab Sample ID: 480-55128-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.8	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-11A-022014

Lab Sample ID: 480-55128-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.8	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-12-022014

Lab Sample ID: 480-55128-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	32		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	4.0		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	3.4		1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	5.8	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	17		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	6.1		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-12A-022014

Lab Sample ID: 480-55128-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	34		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	4.3		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	3.8		1.0	0.29	ug/L	1		8260C	Total/NA
Acetone	9.9	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	15		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	19		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	6.4		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-13-022014

Lab Sample ID: 480-55128-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.4	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-13A-022014

Lab Sample ID: 480-55128-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.4	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-14-022014

Lab Sample ID: 480-55128-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.3	J	10	3.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-15-022014

Lab Sample ID: 480-55128-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.52	J	1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	7.5	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-16-022014

Lab Sample ID: 480-55128-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.9	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: 4009-16A-022014

Lab Sample ID: 480-55128-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.6	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	12		10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: DUP-01-022014

Lab Sample ID: 480-55128-46

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1500	E	1.0	0.82	ug/L	1		8260C	Total/NA
1,1,2-Trichloroethane	0.86	J	1.0	0.23	ug/L	1		8260C	Total/NA
1,1,2-Trichlorotrifluoroethane	20		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	86		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	99		1.0	0.29	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.40	J	1.0	0.21	ug/L	1		8260C	Total/NA
Acetone	13		10	3.0	ug/L	1		8260C	Total/NA
Benzene	0.60	J	1.0	0.41	ug/L	1		8260C	Total/NA
Chlorobenzene	1.7		1.0	0.75	ug/L	1		8260C	Total/NA
Chloroethane	4.6		1.0	0.32	ug/L	1		8260C	Total/NA
Chloroform	1.2		1.0	0.34	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	430	E	1.0	0.81	ug/L	1		8260C	Total/NA
Tetrachloroethene	2.0		1.0	0.36	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.5		1.0	0.90	ug/L	1		8260C	Total/NA
Trichloroethene	450	E	1.0	0.46	ug/L	1		8260C	Total/NA
Trichlorofluoromethane	1.1		1.0	0.88	ug/L	1		8260C	Total/NA
Vinyl chloride	75		1.0	0.90	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane - DL	1500		25	21	ug/L	25		8260C	Total/NA
1,1-Dichloroethane - DL	73		25	9.5	ug/L	25		8260C	Total/NA
1,1-Dichloroethene - DL	130		25	7.3	ug/L	25		8260C	Total/NA
cis-1,2-Dichloroethene - DL	350		25	20	ug/L	25		8260C	Total/NA
Trichloroethene - DL	410		25	12	ug/L	25		8260C	Total/NA
Vinyl chloride - DL	72		25	23	ug/L	25		8260C	Total/NA

Client Sample ID: TB-01-022014

Lab Sample ID: 480-55128-48

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.56	J	1.0	0.46	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-1-022014

Lab Sample ID: 480-55128-1

Date Collected: 02/20/14 15:10

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 18:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 18:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 18:33	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 18:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 18:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 18:33	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 18:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 18:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 18:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 18:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 18:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 18:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 18:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 18:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 18:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 18:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 18:33	1
2-Butanone (MEK)	1.3	J	10	1.3	ug/L			02/25/14 18:33	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 18:33	1
Acetone	10		10	3.0	ug/L			02/25/14 18:33	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 18:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 18:33	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 18:33	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 18:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 18:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 18:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 18:33	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 18:33	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 18:33	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 18:33	1
cis-1,2-Dichloroethene	1.6		1.0	0.81	ug/L			02/25/14 18:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 18:33	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 18:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 18:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 18:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 18:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 18:33	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 18:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 18:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 18:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 18:33	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 18:33	1
Tetrachloroethene	1.4		1.0	0.36	ug/L			02/25/14 18:33	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 18:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 18:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 18:33	1
Trichloroethene	1.4		1.0	0.46	ug/L			02/25/14 18:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 18:33	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-1-022014

Lab Sample ID: 480-55128-1

Date Collected: 02/20/14 15:10

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 18:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 18:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137					02/25/14 18:33	1
4-Bromofluorobenzene (Surr)	100		73 - 120					02/25/14 18:33	1
Toluene-d8 (Surr)	93		71 - 126					02/25/14 18:33	1

Client Sample ID: 4009-2-022014

Lab Sample ID: 480-55128-2

Date Collected: 02/20/14 13:45

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 18:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 18:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 18:59	1
1,1,2-Trichlorotrifluoroethane	1.1		1.0	0.31	ug/L			02/25/14 18:59	1
1,1-Dichloroethane	2.7		1.0	0.38	ug/L			02/25/14 18:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 18:59	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 18:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 18:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 18:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 18:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 18:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 18:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 18:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 18:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 18:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 18:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 18:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 18:59	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 18:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 18:59	1
Acetone	7.2 J		10	3.0	ug/L			02/25/14 18:59	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 18:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 18:59	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 18:59	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 18:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 18:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 18:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 18:59	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 18:59	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 18:59	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 18:59	1
cis-1,2-Dichloroethene	14		1.0	0.81	ug/L			02/25/14 18:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 18:59	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 18:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 18:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 18:59	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-2-022014

Lab Sample ID: 480-55128-2

Date Collected: 02/20/14 13:45

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 18:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 18:59	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 18:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 18:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 18:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 18:59	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 18:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 18:59	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 18:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 18:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 18:59	1
Trichloroethene	2.9		1.0	0.46	ug/L			02/25/14 18:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 18:59	1
Vinyl chloride	6.9		1.0	0.90	ug/L			02/25/14 18:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137					02/25/14 18:59	1
4-Bromofluorobenzene (Surr)	102		73 - 120					02/25/14 18:59	1
Toluene-d8 (Surr)	97		71 - 126					02/25/14 18:59	1

Client Sample ID: 4009-3-022014

Lab Sample ID: 480-55128-3

Date Collected: 02/20/14 14:45

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 19:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 19:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 19:24	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 19:24	1
1,1-Dichloroethane	6.3		1.0	0.38	ug/L			02/25/14 19:24	1
1,1-Dichloroethene	1.3		1.0	0.29	ug/L			02/25/14 19:24	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 19:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 19:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 19:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 19:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 19:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 19:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 19:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 19:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 19:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 19:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 19:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 19:24	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 19:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 19:24	1
Acetone	10		10	3.0	ug/L			02/25/14 19:24	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 19:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 19:24	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-3-022014

Lab Sample ID: 480-55128-3

Date Collected: 02/20/14 14:45

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			02/25/14 19:24	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 19:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 19:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 19:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 19:24	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 19:24	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 19:24	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 19:24	1
cis-1,2-Dichloroethene	77		1.0	0.81	ug/L			02/25/14 19:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 19:24	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 19:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 19:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 19:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 19:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 19:24	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 19:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 19:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 19:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 19:24	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 19:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 19:24	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 19:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 19:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 19:24	1
Trichloroethene	26		1.0	0.46	ug/L			02/25/14 19:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 19:24	1
Vinyl chloride	11		1.0	0.90	ug/L			02/25/14 19:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 19:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		02/25/14 19:24	1
4-Bromofluorobenzene (Surr)	100		73 - 120		02/25/14 19:24	1
Toluene-d8 (Surr)	93		71 - 126		02/25/14 19:24	1

Client Sample ID: 4009-4-022014

Lab Sample ID: 480-55128-4

Date Collected: 02/20/14 14:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/26/14 00:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/14 00:52	1
1,1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/14 00:52	1
1,1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/26/14 00:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/26/14 00:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/14 00:52	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 00:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 00:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 00:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 00:52	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-4-022014

Lab Sample ID: 480-55128-4

Date Collected: 02/20/14 14:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 00:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 00:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 00:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 00:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 00:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 00:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 00:52	1
2-Butanone (MEK)	1.5	J	10	1.3	ug/L			02/26/14 00:52	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 00:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 00:52	1
Acetone	12		10	3.0	ug/L			02/26/14 00:52	1
Benzene	ND		1.0	0.41	ug/L			02/26/14 00:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 00:52	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 00:52	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 00:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 00:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 00:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 00:52	1
Chloroethane	ND		1.0	0.32	ug/L			02/26/14 00:52	1
Chloroform	ND		1.0	0.34	ug/L			02/26/14 00:52	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 00:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/26/14 00:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 00:52	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 00:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 00:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 00:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 00:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 00:52	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 00:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 00:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 00:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 00:52	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 00:52	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/14 00:52	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 00:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/26/14 00:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 00:52	1
Trichloroethene	ND		1.0	0.46	ug/L			02/26/14 00:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 00:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/26/14 00:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 00:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137					02/26/14 00:52	1
4-Bromofluorobenzene (Surr)	99		73 - 120					02/26/14 00:52	1
Toluene-d8 (Surr)	94		71 - 126					02/26/14 00:52	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-5-022014

Lab Sample ID: 480-55128-5

Date Collected: 02/20/14 14:10

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/26/14 01:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/14 01:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/14 01:18	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/26/14 01:18	1
1,1-Dichloroethane	2.7		1.0	0.38	ug/L			02/26/14 01:18	1
1,1-Dichloroethene	2.2		1.0	0.29	ug/L			02/26/14 01:18	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 01:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 01:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 01:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 01:18	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 01:18	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 01:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 01:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 01:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 01:18	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 01:18	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 01:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/14 01:18	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 01:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 01:18	1
Acetone	11		10	3.0	ug/L			02/26/14 01:18	1
Benzene	ND		1.0	0.41	ug/L			02/26/14 01:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 01:18	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 01:18	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 01:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 01:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 01:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 01:18	1
Chloroethane	ND		1.0	0.32	ug/L			02/26/14 01:18	1
Chloroform	ND		1.0	0.34	ug/L			02/26/14 01:18	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 01:18	1
cis-1,2-Dichloroethene	270 E		1.0	0.81	ug/L			02/26/14 01:18	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 01:18	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 01:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 01:18	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 01:18	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 01:18	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 01:18	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 01:18	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 01:18	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 01:18	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 01:18	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 01:18	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/14 01:18	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 01:18	1
trans-1,2-Dichloroethene	1.0		1.0	0.90	ug/L			02/26/14 01:18	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 01:18	1
Trichloroethene	21		1.0	0.46	ug/L			02/26/14 01:18	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 01:18	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-5-022014

Lab Sample ID: 480-55128-5

Date Collected: 02/20/14 14:10

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	39		1.0	0.90	ug/L			02/26/14 01:18	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 01:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137					02/26/14 01:18	1
4-Bromofluorobenzene (Surr)	101		73 - 120					02/26/14 01:18	1
Toluene-d8 (Surr)	95		71 - 126					02/26/14 01:18	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	ND		5.0	4.1	ug/L			02/26/14 13:22	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			02/26/14 13:22	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			02/26/14 13:22	5
1,1,2-Trichlorotrifluoroethane	ND		5.0	1.6	ug/L			02/26/14 13:22	5
1,1-Dichloroethane	2.3	J	5.0	1.9	ug/L			02/26/14 13:22	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			02/26/14 13:22	5
1,2,3-Trimethylbenzene	ND		5.0	1.3	ug/L			02/26/14 13:22	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			02/26/14 13:22	5
1,2,4-Trimethylbenzene	ND		5.0	3.8	ug/L			02/26/14 13:22	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			02/26/14 13:22	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			02/26/14 13:22	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			02/26/14 13:22	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			02/26/14 13:22	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			02/26/14 13:22	5
1,3,5-Trimethylbenzene	ND		5.0	3.9	ug/L			02/26/14 13:22	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			02/26/14 13:22	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			02/26/14 13:22	5
2-Butanone (MEK)	ND		50	6.6	ug/L			02/26/14 13:22	5
2-Hexanone	ND		25	6.2	ug/L			02/26/14 13:22	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			02/26/14 13:22	5
Acetone	ND		50	15	ug/L			02/26/14 13:22	5
Benzene	ND		5.0	2.1	ug/L			02/26/14 13:22	5
Bromodichloromethane	ND		5.0	2.0	ug/L			02/26/14 13:22	5
Bromoform	ND		5.0	1.3	ug/L			02/26/14 13:22	5
Bromomethane	ND		5.0	3.5	ug/L			02/26/14 13:22	5
Carbon disulfide	ND		5.0	0.95	ug/L			02/26/14 13:22	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			02/26/14 13:22	5
Chlorobenzene	ND		5.0	3.8	ug/L			02/26/14 13:22	5
Chloroethane	ND		5.0	1.6	ug/L			02/26/14 13:22	5
Chloroform	ND		5.0	1.7	ug/L			02/26/14 13:22	5
Chloromethane	ND		5.0	1.8	ug/L			02/26/14 13:22	5
cis-1,2-Dichloroethene	250		5.0	4.1	ug/L			02/26/14 13:22	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			02/26/14 13:22	5
Cyclohexane	ND		5.0	0.90	ug/L			02/26/14 13:22	5
Dibromochloromethane	ND		5.0	1.6	ug/L			02/26/14 13:22	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			02/26/14 13:22	5
Ethylbenzene	ND		5.0	3.7	ug/L			02/26/14 13:22	5
Isopropylbenzene	ND		5.0	4.0	ug/L			02/26/14 13:22	5
Methyl acetate	ND		13	2.5	ug/L			02/26/14 13:22	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			02/26/14 13:22	5

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-5-022014

Lab Sample ID: 480-55128-5

Date Collected: 02/20/14 14:10

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		5.0	0.80	ug/L			02/26/14 13:22	5
Methylene Chloride	ND		5.0	2.2	ug/L			02/26/14 13:22	5
Styrene	ND		5.0	3.7	ug/L			02/26/14 13:22	5
Tetrachloroethene	ND		5.0	1.8	ug/L			02/26/14 13:22	5
Toluene	ND		5.0	2.6	ug/L			02/26/14 13:22	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			02/26/14 13:22	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			02/26/14 13:22	5
Trichloroethene	23		5.0	2.3	ug/L			02/26/14 13:22	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			02/26/14 13:22	5
Vinyl chloride	44		5.0	4.5	ug/L			02/26/14 13:22	5
Xylenes, Total	ND		10	3.3	ug/L			02/26/14 13:22	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137					02/26/14 13:22	5
4-Bromofluorobenzene (Surr)	97		73 - 120					02/26/14 13:22	5
Toluene-d8 (Surr)	101		71 - 126					02/26/14 13:22	5

Client Sample ID: 4009-6-022014

Lab Sample ID: 480-55128-6

Date Collected: 02/20/14 13:40

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/26/14 13:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/14 13:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/14 13:44	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/26/14 13:44	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/26/14 13:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/14 13:44	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 13:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 13:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 13:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 13:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 13:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 13:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 13:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 13:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 13:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 13:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 13:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/14 13:44	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 13:44	1
Acetone	8.5 J		10	3.0	ug/L			02/26/14 13:44	1
Benzene	ND		1.0	0.41	ug/L			02/26/14 13:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 13:44	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 13:44	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 13:44	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 13:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 13:44	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-6-022014

Lab Sample ID: 480-55128-6

Date Collected: 02/20/14 13:40

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 13:44	1
Chloroethane	ND		1.0	0.32	ug/L			02/26/14 13:44	1
Chloroform	ND		1.0	0.34	ug/L			02/26/14 13:44	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 13:44	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/26/14 13:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 13:44	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 13:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 13:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 13:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 13:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 13:44	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 13:44	1
Methyl tert-butyl ether	0.26	J	1.0	0.16	ug/L			02/26/14 13:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 13:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 13:44	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 13:44	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/14 13:44	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 13:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/26/14 13:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 13:44	1
Trichloroethene	0.53	J	1.0	0.46	ug/L			02/26/14 13:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 13:44	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/26/14 13:44	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		02/26/14 13:44	1
4-Bromofluorobenzene (Surr)	99		73 - 120		02/26/14 13:44	1
Toluene-d8 (Surr)	101		71 - 126		02/26/14 13:44	1

Client Sample ID: 4009-7-022014

Lab Sample ID: 480-55128-7

Date Collected: 02/20/14 14:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/26/14 02:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/14 02:08	1
1,1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/14 02:08	1
1,1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/26/14 02:08	1
1,1-Dichloroethane	0.98	J	1.0	0.38	ug/L			02/26/14 02:08	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/14 02:08	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 02:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 02:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 02:08	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 02:08	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 02:08	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 02:08	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 02:08	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 02:08	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-7-022014

Lab Sample ID: 480-55128-7

Date Collected: 02/20/14 14:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 02:08	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 02:08	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 02:08	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/14 02:08	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 02:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 02:08	1
Acetone	5.3	J	10	3.0	ug/L			02/26/14 02:08	1
Benzene	1.1		1.0	0.41	ug/L			02/26/14 02:08	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 02:08	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 02:08	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 02:08	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 02:08	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 02:08	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 02:08	1
Chloroethane	ND		1.0	0.32	ug/L			02/26/14 02:08	1
Chloroform	ND		1.0	0.34	ug/L			02/26/14 02:08	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 02:08	1
cis-1,2-Dichloroethene	20		1.0	0.81	ug/L			02/26/14 02:08	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 02:08	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 02:08	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 02:08	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 02:08	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 02:08	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 02:08	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 02:08	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 02:08	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 02:08	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 02:08	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 02:08	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/14 02:08	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 02:08	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/26/14 02:08	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 02:08	1
Trichloroethene	2.1		1.0	0.46	ug/L			02/26/14 02:08	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 02:08	1
Vinyl chloride	2.5		1.0	0.90	ug/L			02/26/14 02:08	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 02:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		02/26/14 02:08	1
4-Bromofluorobenzene (Surr)	97		73 - 120		02/26/14 02:08	1
Toluene-d8 (Surr)	96		71 - 126		02/26/14 02:08	1

Client Sample ID: 4009-8-022014

Lab Sample ID: 480-55128-8

Date Collected: 02/20/14 13:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	720	E	1.0	0.82	ug/L			02/26/14 02:33	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-8-022014

Lab Sample ID: 480-55128-8

Date Collected: 02/20/14 13:20

Matrix: Water

Date Received: 02/24/14 16:37

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	ND		1.0	0.21	ug/L			02/26/14 02:33	1
1,1,2-Trichloroethane	0.51	J	1.0	0.23	ug/L			02/26/14 02:33	1
1,1,2-Trichlorotrifluoroethane	14		1.0	0.31	ug/L			02/26/14 02:33	1
1,1-Dichloroethane	40		1.0	0.38	ug/L			02/26/14 02:33	1
1,1-Dichloroethene	31		1.0	0.29	ug/L			02/26/14 02:33	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 02:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 02:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 02:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 02:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 02:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 02:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 02:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 02:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 02:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 02:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 02:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/14 02:33	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 02:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 02:33	1
Acetone	9.6	J	10	3.0	ug/L			02/26/14 02:33	1
Benzene	0.67	J	1.0	0.41	ug/L			02/26/14 02:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 02:33	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 02:33	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 02:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 02:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 02:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 02:33	1
Chloroethane	2.2		1.0	0.32	ug/L			02/26/14 02:33	1
Chloroform	0.63	J	1.0	0.34	ug/L			02/26/14 02:33	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 02:33	1
cis-1,2-Dichloroethene	450	E	1.0	0.81	ug/L			02/26/14 02:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 02:33	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 02:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 02:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 02:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 02:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 02:33	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 02:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 02:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 02:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 02:33	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 02:33	1
Tetrachloroethene	1.3		1.0	0.36	ug/L			02/26/14 02:33	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 02:33	1
trans-1,2-Dichloroethene	1.1		1.0	0.90	ug/L			02/26/14 02:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 02:33	1
Trichloroethene	19		1.0	0.46	ug/L			02/26/14 02:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 02:33	1
Vinyl chloride	44		1.0	0.90	ug/L			02/26/14 02:33	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-8-022014

Lab Sample ID: 480-55128-8

Date Collected: 02/20/14 13:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 02:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137					02/26/14 02:33	1
4-Bromofluorobenzene (Surr)	101		73 - 120					02/26/14 02:33	1
Toluene-d8 (Surr)	95		71 - 126					02/26/14 02:33	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	790		10	8.2	ug/L			02/26/14 14:06	10
1,1,1,2-Tetrachloroethane	ND		10	2.1	ug/L			02/26/14 14:06	10
1,1,1,2-Trichloroethane	ND		10	2.3	ug/L			02/26/14 14:06	10
1,1,2-Trichlorotrifluoroethane	12		10	3.1	ug/L			02/26/14 14:06	10
1,1-Dichloroethane	39		10	3.8	ug/L			02/26/14 14:06	10
1,1-Dichloroethene	ND		10	2.9	ug/L			02/26/14 14:06	10
1,2,3-Trimethylbenzene	ND		10	2.6	ug/L			02/26/14 14:06	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			02/26/14 14:06	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			02/26/14 14:06	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			02/26/14 14:06	10
1,2-Dibromoethane	ND		10	7.3	ug/L			02/26/14 14:06	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			02/26/14 14:06	10
1,2-Dichloroethane	ND		10	2.1	ug/L			02/26/14 14:06	10
1,2-Dichloropropane	ND		10	7.2	ug/L			02/26/14 14:06	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			02/26/14 14:06	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			02/26/14 14:06	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			02/26/14 14:06	10
2-Butanone (MEK)	ND		100	13	ug/L			02/26/14 14:06	10
2-Hexanone	ND		50	12	ug/L			02/26/14 14:06	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			02/26/14 14:06	10
Acetone	ND		100	30	ug/L			02/26/14 14:06	10
Benzene	ND		10	4.1	ug/L			02/26/14 14:06	10
Bromodichloromethane	ND		10	3.9	ug/L			02/26/14 14:06	10
Bromoform	ND		10	2.6	ug/L			02/26/14 14:06	10
Bromomethane	ND		10	6.9	ug/L			02/26/14 14:06	10
Carbon disulfide	ND		10	1.9	ug/L			02/26/14 14:06	10
Carbon tetrachloride	ND		10	2.7	ug/L			02/26/14 14:06	10
Chlorobenzene	ND		10	7.5	ug/L			02/26/14 14:06	10
Chloroethane	ND		10	3.2	ug/L			02/26/14 14:06	10
Chloroform	ND		10	3.4	ug/L			02/26/14 14:06	10
Chloromethane	ND		10	3.5	ug/L			02/26/14 14:06	10
cis-1,2-Dichloroethene	440		10	8.1	ug/L			02/26/14 14:06	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			02/26/14 14:06	10
Cyclohexane	ND		10	1.8	ug/L			02/26/14 14:06	10
Dibromochloromethane	ND		10	3.2	ug/L			02/26/14 14:06	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			02/26/14 14:06	10
Ethylbenzene	ND		10	7.4	ug/L			02/26/14 14:06	10
Isopropylbenzene	ND		10	7.9	ug/L			02/26/14 14:06	10
Methyl acetate	ND		25	5.0	ug/L			02/26/14 14:06	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			02/26/14 14:06	10
Methylcyclohexane	ND		10	1.6	ug/L			02/26/14 14:06	10

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-8-022014

Lab Sample ID: 480-55128-8

Date Collected: 02/20/14 13:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		10	4.4	ug/L			02/26/14 14:06	10
Styrene	ND		10	7.3	ug/L			02/26/14 14:06	10
Tetrachloroethene	ND		10	3.6	ug/L			02/26/14 14:06	10
Toluene	ND		10	5.1	ug/L			02/26/14 14:06	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			02/26/14 14:06	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			02/26/14 14:06	10
Trichloroethene	20		10	4.6	ug/L			02/26/14 14:06	10
Trichlorofluoromethane	ND		10	8.8	ug/L			02/26/14 14:06	10
Vinyl chloride	54		10	9.0	ug/L			02/26/14 14:06	10
Xylenes, Total	ND		20	6.6	ug/L			02/26/14 14:06	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137					02/26/14 14:06	10
4-Bromofluorobenzene (Surr)	98		73 - 120					02/26/14 14:06	10
Toluene-d8 (Surr)	101		71 - 126					02/26/14 14:06	10

Client Sample ID: 4009-9-022014

Lab Sample ID: 480-55128-9

Date Collected: 02/20/14 10:40

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/26/14 14:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/14 14:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/14 14:27	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/26/14 14:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/26/14 14:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/14 14:27	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 14:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 14:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 14:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 14:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 14:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 14:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 14:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 14:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 14:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 14:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 14:27	1
2-Butanone (MEK)	1.4	J	10	1.3	ug/L			02/26/14 14:27	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 14:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 14:27	1
Acetone	12		10	3.0	ug/L			02/26/14 14:27	1
Benzene	ND		1.0	0.41	ug/L			02/26/14 14:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 14:27	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 14:27	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 14:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 14:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 14:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 14:27	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-9-022014

Lab Sample ID: 480-55128-9

Date Collected: 02/20/14 10:40

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0	0.32	ug/L			02/26/14 14:27	1
Chloroform	ND		1.0	0.34	ug/L			02/26/14 14:27	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 14:27	1
cis-1,2-Dichloroethene	6.3		1.0	0.81	ug/L			02/26/14 14:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 14:27	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 14:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 14:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 14:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 14:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 14:27	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 14:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 14:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 14:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 14:27	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 14:27	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/14 14:27	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 14:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/26/14 14:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 14:27	1
Trichloroethene	0.54 J		1.0	0.46	ug/L			02/26/14 14:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 14:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/26/14 14:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137		02/26/14 14:27	1
4-Bromofluorobenzene (Surr)	98		73 - 120		02/26/14 14:27	1
Toluene-d8 (Surr)	101		71 - 126		02/26/14 14:27	1

Client Sample ID: 4009-10-022014

Lab Sample ID: 480-55128-10

Date Collected: 02/20/14 10:35

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/26/14 03:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/14 03:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/14 03:22	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/26/14 03:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/26/14 03:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/14 03:22	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 03:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 03:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 03:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 03:22	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 03:22	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 03:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 03:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 03:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 03:22	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-10-022014

Lab Sample ID: 480-55128-10

Date Collected: 02/20/14 10:35

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 03:22	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 03:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/14 03:22	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 03:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 03:22	1
Acetone	10		10	3.0	ug/L			02/26/14 03:22	1
Benzene	0.60	J	1.0	0.41	ug/L			02/26/14 03:22	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 03:22	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 03:22	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 03:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 03:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 03:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 03:22	1
Chloroethane	ND		1.0	0.32	ug/L			02/26/14 03:22	1
Chloroform	ND		1.0	0.34	ug/L			02/26/14 03:22	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 03:22	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/26/14 03:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 03:22	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 03:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 03:22	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 03:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 03:22	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 03:22	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 03:22	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 03:22	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 03:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 03:22	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 03:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/14 03:22	1
Toluene	2.0		1.0	0.51	ug/L			02/26/14 03:22	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/26/14 03:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 03:22	1
Trichloroethene	ND		1.0	0.46	ug/L			02/26/14 03:22	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 03:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/26/14 03:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 03:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137					02/26/14 03:22	1
4-Bromofluorobenzene (Surr)	99		73 - 120					02/26/14 03:22	1
Toluene-d8 (Surr)	92		71 - 126					02/26/14 03:22	1

Client Sample ID: 4009-11-022014

Lab Sample ID: 480-55128-11

Date Collected: 02/20/14 11:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 12:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 12:40	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-11-022014

Lab Sample ID: 480-55128-11

Date Collected: 02/20/14 11:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 12:40	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 12:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 12:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 12:40	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 12:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 12:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 12:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 12:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 12:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 12:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 12:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 12:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 12:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 12:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 12:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 12:40	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 12:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 12:40	1
Acetone	7.8	J	10	3.0	ug/L			02/25/14 12:40	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 12:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 12:40	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 12:40	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 12:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 12:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 12:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 12:40	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 12:40	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 12:40	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 12:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 12:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 12:40	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 12:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 12:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 12:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 12:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 12:40	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 12:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 12:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 12:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 12:40	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 12:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 12:40	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 12:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 12:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 12:40	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 12:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 12:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 12:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 12:40	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-11-022014

Lab Sample ID: 480-55128-11

Date Collected: 02/20/14 11:00

Matrix: Water

Date Received: 02/24/14 16:37

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137		02/25/14 12:40	1
4-Bromofluorobenzene (Surr)	98		73 - 120		02/25/14 12:40	1
Toluene-d8 (Surr)	99		71 - 126		02/25/14 12:40	1

Client Sample ID: 4009-11A-022014

Lab Sample ID: 480-55128-12

Date Collected: 02/20/14 11:05

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 13:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 13:02	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 13:02	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 13:02	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 13:02	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 13:02	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 13:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 13:02	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 13:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 13:02	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 13:02	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 13:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 13:02	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 13:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 13:02	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 13:02	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 13:02	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 13:02	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 13:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 13:02	1
Acetone	9.8	J	10	3.0	ug/L			02/25/14 13:02	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 13:02	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 13:02	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 13:02	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 13:02	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 13:02	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 13:02	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 13:02	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 13:02	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 13:02	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 13:02	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 13:02	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 13:02	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 13:02	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 13:02	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 13:02	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 13:02	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 13:02	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 13:02	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 13:02	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-11A-022014

Lab Sample ID: 480-55128-12

Date Collected: 02/20/14 11:05

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 13:02	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 13:02	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 13:02	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 13:02	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 13:02	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 13:02	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 13:02	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 13:02	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 13:02	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 13:02	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 13:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137					02/25/14 13:02	1
4-Bromofluorobenzene (Surr)	99		73 - 120					02/25/14 13:02	1
Toluene-d8 (Surr)	101		71 - 126					02/25/14 13:02	1

Client Sample ID: 4009-12-022014

Lab Sample ID: 480-55128-13

Date Collected: 02/20/14 10:15

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	32		1.0	0.82	ug/L			02/25/14 13:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 13:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 13:24	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 13:24	1
1,1-Dichloroethane	4.0		1.0	0.38	ug/L			02/25/14 13:24	1
1,1-Dichloroethene	3.4		1.0	0.29	ug/L			02/25/14 13:24	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 13:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 13:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 13:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 13:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 13:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 13:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 13:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 13:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 13:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 13:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 13:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 13:24	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 13:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 13:24	1
Acetone	5.8	J	10	3.0	ug/L			02/25/14 13:24	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 13:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 13:24	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 13:24	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 13:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 13:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 13:24	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-12-022014

Lab Sample ID: 480-55128-13

Date Collected: 02/20/14 10:15

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 13:24	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 13:24	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 13:24	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 13:24	1
cis-1,2-Dichloroethene	13		1.0	0.81	ug/L			02/25/14 13:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 13:24	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 13:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 13:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 13:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 13:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 13:24	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 13:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 13:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 13:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 13:24	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 13:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 13:24	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 13:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 13:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 13:24	1
Trichloroethene	17		1.0	0.46	ug/L			02/25/14 13:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 13:24	1
Vinyl chloride	6.1		1.0	0.90	ug/L			02/25/14 13:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 13:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137		02/25/14 13:24	1
4-Bromofluorobenzene (Surr)	97		73 - 120		02/25/14 13:24	1
Toluene-d8 (Surr)	99		71 - 126		02/25/14 13:24	1

Client Sample ID: 4009-12A-022014

Lab Sample ID: 480-55128-14

Date Collected: 02/20/14 10:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	34		1.0	0.82	ug/L			02/25/14 13:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 13:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 13:45	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 13:45	1
1,1-Dichloroethane	4.3		1.0	0.38	ug/L			02/25/14 13:45	1
1,1-Dichloroethene	3.8		1.0	0.29	ug/L			02/25/14 13:45	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 13:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 13:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 13:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 13:45	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 13:45	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 13:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 13:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 13:45	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-12A-022014

Lab Sample ID: 480-55128-14

Date Collected: 02/20/14 10:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 13:45	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 13:45	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 13:45	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 13:45	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 13:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 13:45	1
Acetone	9.9	J	10	3.0	ug/L			02/25/14 13:45	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 13:45	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 13:45	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 13:45	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 13:45	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 13:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 13:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 13:45	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 13:45	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 13:45	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 13:45	1
cis-1,2-Dichloroethene	15		1.0	0.81	ug/L			02/25/14 13:45	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 13:45	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 13:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 13:45	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 13:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 13:45	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 13:45	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 13:45	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 13:45	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 13:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 13:45	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 13:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 13:45	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 13:45	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 13:45	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 13:45	1
Trichloroethene	19		1.0	0.46	ug/L			02/25/14 13:45	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 13:45	1
Vinyl chloride	6.4		1.0	0.90	ug/L			02/25/14 13:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137		02/25/14 13:45	1
4-Bromofluorobenzene (Surr)	98		73 - 120		02/25/14 13:45	1
Toluene-d8 (Surr)	101		71 - 126		02/25/14 13:45	1

Client Sample ID: 4009-13-022014

Lab Sample ID: 480-55128-15

Date Collected: 02/20/14 11:50

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 14:07	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-13-022014

Lab Sample ID: 480-55128-15

Date Collected: 02/20/14 11:50

Matrix: Water

Date Received: 02/24/14 16:37

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	ND		1.0	0.21	ug/L			02/25/14 14:07	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 14:07	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 14:07	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 14:07	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 14:07	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 14:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 14:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 14:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 14:07	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 14:07	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 14:07	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 14:07	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 14:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 14:07	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 14:07	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 14:07	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 14:07	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 14:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 14:07	1
Acetone	8.4	J	10	3.0	ug/L			02/25/14 14:07	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 14:07	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 14:07	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 14:07	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 14:07	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 14:07	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 14:07	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 14:07	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 14:07	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 14:07	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 14:07	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 14:07	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 14:07	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 14:07	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 14:07	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 14:07	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 14:07	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 14:07	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 14:07	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 14:07	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 14:07	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 14:07	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 14:07	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 14:07	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 14:07	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 14:07	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 14:07	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 14:07	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 14:07	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 14:07	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-13-022014

Lab Sample ID: 480-55128-15

Date Collected: 02/20/14 11:50

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 14:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137					02/25/14 14:07	1
4-Bromofluorobenzene (Surr)	98		73 - 120					02/25/14 14:07	1
Toluene-d8 (Surr)	100		71 - 126					02/25/14 14:07	1

Client Sample ID: 4009-13A-022014

Lab Sample ID: 480-55128-16

Date Collected: 02/20/14 11:55

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 14:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 14:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 14:29	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 14:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 14:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 14:29	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 14:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 14:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 14:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 14:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 14:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 14:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 14:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 14:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 14:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 14:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 14:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 14:29	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 14:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 14:29	1
Acetone	8.4	J	10	3.0	ug/L			02/25/14 14:29	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 14:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 14:29	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 14:29	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 14:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 14:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 14:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 14:29	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 14:29	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 14:29	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 14:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 14:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 14:29	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 14:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 14:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 14:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 14:29	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-13A-022014

Lab Sample ID: 480-55128-16

Date Collected: 02/20/14 11:55

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 14:29	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 14:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 14:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 14:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 14:29	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 14:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 14:29	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 14:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 14:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 14:29	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 14:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 14:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 14:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 14:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137					02/25/14 14:29	1
4-Bromofluorobenzene (Surr)	97		73 - 120					02/25/14 14:29	1
Toluene-d8 (Surr)	98		71 - 126					02/25/14 14:29	1

Client Sample ID: 4009-14-022014

Lab Sample ID: 480-55128-17

Date Collected: 02/20/14 09:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 14:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 14:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 14:51	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 14:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 14:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 14:51	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 14:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 14:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 14:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 14:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 14:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 14:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 14:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 14:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 14:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 14:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 14:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 14:51	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 14:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 14:51	1
Acetone	6.3	J	10	3.0	ug/L			02/25/14 14:51	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 14:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 14:51	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 14:51	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-14-022014

Lab Sample ID: 480-55128-17

Date Collected: 02/20/14 09:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 14:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 14:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 14:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 14:51	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 14:51	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 14:51	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 14:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 14:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 14:51	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 14:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 14:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 14:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 14:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 14:51	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 14:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 14:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 14:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 14:51	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 14:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 14:51	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 14:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 14:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 14:51	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 14:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 14:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 14:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 14:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137					02/25/14 14:51	1
4-Bromofluorobenzene (Surr)	99		73 - 120					02/25/14 14:51	1
Toluene-d8 (Surr)	100		71 - 126					02/25/14 14:51	1

Client Sample ID: 4009-15-022014

Lab Sample ID: 480-55128-18

Date Collected: 02/20/14 09:35

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 15:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 15:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 15:12	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 15:12	1
1,1-Dichloroethane	0.52	J	1.0	0.38	ug/L			02/25/14 15:12	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 15:12	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 15:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 15:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 15:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 15:12	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 15:12	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-15-022014

Lab Sample ID: 480-55128-18

Date Collected: 02/20/14 09:35

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 15:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 15:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 15:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 15:12	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 15:12	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 15:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 15:12	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 15:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 15:12	1
Acetone	7.5	J	10	3.0	ug/L			02/25/14 15:12	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 15:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 15:12	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 15:12	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 15:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 15:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 15:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 15:12	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 15:12	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 15:12	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 15:12	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 15:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 15:12	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 15:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 15:12	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 15:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 15:12	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 15:12	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 15:12	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 15:12	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 15:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 15:12	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 15:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 15:12	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 15:12	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 15:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 15:12	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 15:12	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 15:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 15:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		02/25/14 15:12	1
4-Bromofluorobenzene (Surr)	99		73 - 120		02/25/14 15:12	1
Toluene-d8 (Surr)	99		71 - 126		02/25/14 15:12	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-16-022014

Lab Sample ID: 480-55128-19

Date Collected: 02/20/14 09:25

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 15:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 15:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 15:34	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 15:34	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 15:34	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 15:34	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 15:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 15:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 15:34	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 15:34	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 15:34	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 15:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 15:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 15:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 15:34	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 15:34	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 15:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 15:34	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 15:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 15:34	1
Acetone	5.9	J	10	3.0	ug/L			02/25/14 15:34	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 15:34	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 15:34	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 15:34	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 15:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 15:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 15:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 15:34	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 15:34	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 15:34	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 15:34	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 15:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 15:34	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 15:34	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 15:34	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 15:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 15:34	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 15:34	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 15:34	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 15:34	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 15:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 15:34	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 15:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 15:34	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 15:34	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 15:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 15:34	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 15:34	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 15:34	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-16-022014

Lab Sample ID: 480-55128-19

Date Collected: 02/20/14 09:25

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 15:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 15:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137					02/25/14 15:34	1
4-Bromofluorobenzene (Surr)	98		73 - 120					02/25/14 15:34	1
Toluene-d8 (Surr)	99		71 - 126					02/25/14 15:34	1

Client Sample ID: 4009-16A-022014

Lab Sample ID: 480-55128-20

Date Collected: 02/20/14 09:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/25/14 15:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 15:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 15:56	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 15:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 15:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 15:56	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 15:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 15:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 15:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 15:56	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 15:56	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 15:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 15:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 15:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 15:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 15:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 15:56	1
2-Butanone (MEK)	1.6	J	10	1.3	ug/L			02/25/14 15:56	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 15:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 15:56	1
Acetone	12		10	3.0	ug/L			02/25/14 15:56	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 15:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 15:56	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 15:56	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 15:56	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 15:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 15:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 15:56	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 15:56	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 15:56	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 15:56	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 15:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 15:56	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 15:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 15:56	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 15:56	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-16A-022014

Lab Sample ID: 480-55128-20

Date Collected: 02/20/14 09:20

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 15:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 15:56	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 15:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 15:56	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 15:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 15:56	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 15:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 15:56	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 15:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 15:56	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 15:56	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 15:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 15:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 15:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 15:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137					02/25/14 15:56	1
4-Bromofluorobenzene (Surr)	96		73 - 120					02/25/14 15:56	1
Toluene-d8 (Surr)	99		71 - 126					02/25/14 15:56	1

Client Sample ID: DUP-01-022014

Lab Sample ID: 480-55128-46

Date Collected: 02/20/14 00:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1500	E	1.0	0.82	ug/L			02/26/14 04:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/14 04:12	1
1,1,2-Trichloroethane	0.86	J	1.0	0.23	ug/L			02/26/14 04:12	1
1,1,2-Trichlorotrifluoroethane	20		1.0	0.31	ug/L			02/26/14 04:12	1
1,1-Dichloroethane	86		1.0	0.38	ug/L			02/26/14 04:12	1
1,1-Dichloroethene	99		1.0	0.29	ug/L			02/26/14 04:12	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 04:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 04:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 04:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 04:12	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 04:12	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 04:12	1
1,2-Dichloroethane	0.40	J	1.0	0.21	ug/L			02/26/14 04:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 04:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 04:12	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 04:12	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 04:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/14 04:12	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 04:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 04:12	1
Acetone	13		10	3.0	ug/L			02/26/14 04:12	1
Benzene	0.60	J	1.0	0.41	ug/L			02/26/14 04:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 04:12	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: DUP-01-022014

Lab Sample ID: 480-55128-46

Date Collected: 02/20/14 00:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			02/26/14 04:12	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 04:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 04:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 04:12	1
Chlorobenzene	1.7		1.0	0.75	ug/L			02/26/14 04:12	1
Chloroethane	4.6		1.0	0.32	ug/L			02/26/14 04:12	1
Chloroform	1.2		1.0	0.34	ug/L			02/26/14 04:12	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 04:12	1
cis-1,2-Dichloroethene	430 E		1.0	0.81	ug/L			02/26/14 04:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 04:12	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 04:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 04:12	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 04:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 04:12	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 04:12	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 04:12	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 04:12	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 04:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 04:12	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 04:12	1
Tetrachloroethene	2.0		1.0	0.36	ug/L			02/26/14 04:12	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 04:12	1
trans-1,2-Dichloroethene	1.5		1.0	0.90	ug/L			02/26/14 04:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 04:12	1
Trichloroethene	450 E		1.0	0.46	ug/L			02/26/14 04:12	1
Trichlorofluoromethane	1.1		1.0	0.88	ug/L			02/26/14 04:12	1
Vinyl chloride	75		1.0	0.90	ug/L			02/26/14 04:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 04:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		66 - 137		02/26/14 04:12	1
4-Bromofluorobenzene (Surr)	99		73 - 120		02/26/14 04:12	1
Toluene-d8 (Surr)	96		71 - 126		02/26/14 04:12	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	1500		25	21	ug/L			02/26/14 19:09	25
1,1,2,2-Tetrachloroethane	ND		25	5.3	ug/L			02/26/14 19:09	25
1,1,2-Trichloroethane	ND		25	5.8	ug/L			02/26/14 19:09	25
1,1,2-Trichlorotrifluoroethane	ND		25	7.8	ug/L			02/26/14 19:09	25
1,1-Dichloroethane	73		25	9.5	ug/L			02/26/14 19:09	25
1,1-Dichloroethene	130		25	7.3	ug/L			02/26/14 19:09	25
1,2,3-Trimethylbenzene	ND		25	6.5	ug/L			02/26/14 19:09	25
1,2,4-Trichlorobenzene	ND		25	10	ug/L			02/26/14 19:09	25
1,2,4-Trimethylbenzene	ND		25	19	ug/L			02/26/14 19:09	25
1,2-Dibromo-3-Chloropropane	ND		25	9.8	ug/L			02/26/14 19:09	25
1,2-Dibromoethane	ND		25	18	ug/L			02/26/14 19:09	25
1,2-Dichlorobenzene	ND		25	20	ug/L			02/26/14 19:09	25
1,2-Dichloroethane	ND		25	5.3	ug/L			02/26/14 19:09	25
1,2-Dichloropropane	ND		25	18	ug/L			02/26/14 19:09	25

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: DUP-01-022014

Lab Sample ID: 480-55128-46

Date Collected: 02/20/14 00:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		25	19	ug/L			02/26/14 19:09	25
1,3-Dichlorobenzene	ND		25	20	ug/L			02/26/14 19:09	25
1,4-Dichlorobenzene	ND		25	21	ug/L			02/26/14 19:09	25
2-Butanone (MEK)	ND		250	33	ug/L			02/26/14 19:09	25
2-Hexanone	ND		130	31	ug/L			02/26/14 19:09	25
4-Methyl-2-pentanone (MIBK)	ND		130	53	ug/L			02/26/14 19:09	25
Acetone	ND		250	75	ug/L			02/26/14 19:09	25
Benzene	ND		25	10	ug/L			02/26/14 19:09	25
Bromodichloromethane	ND		25	9.8	ug/L			02/26/14 19:09	25
Bromoform	ND		25	6.5	ug/L			02/26/14 19:09	25
Bromomethane	ND		25	17	ug/L			02/26/14 19:09	25
Carbon disulfide	ND		25	4.8	ug/L			02/26/14 19:09	25
Carbon tetrachloride	ND		25	6.8	ug/L			02/26/14 19:09	25
Chlorobenzene	ND		25	19	ug/L			02/26/14 19:09	25
Chloroethane	ND		25	8.0	ug/L			02/26/14 19:09	25
Chloroform	ND		25	8.5	ug/L			02/26/14 19:09	25
Chloromethane	ND		25	8.8	ug/L			02/26/14 19:09	25
cis-1,2-Dichloroethene	350		25	20	ug/L			02/26/14 19:09	25
cis-1,3-Dichloropropene	ND		25	9.0	ug/L			02/26/14 19:09	25
Cyclohexane	ND		25	4.5	ug/L			02/26/14 19:09	25
Dibromochloromethane	ND		25	8.0	ug/L			02/26/14 19:09	25
Dichlorodifluoromethane	ND		25	17	ug/L			02/26/14 19:09	25
Ethylbenzene	ND		25	19	ug/L			02/26/14 19:09	25
Isopropylbenzene	ND		25	20	ug/L			02/26/14 19:09	25
Methyl acetate	ND		63	13	ug/L			02/26/14 19:09	25
Methyl tert-butyl ether	ND		25	4.0	ug/L			02/26/14 19:09	25
Methylcyclohexane	ND		25	4.0	ug/L			02/26/14 19:09	25
Methylene Chloride	ND		25	11	ug/L			02/26/14 19:09	25
Styrene	ND		25	18	ug/L			02/26/14 19:09	25
Tetrachloroethene	ND		25	9.0	ug/L			02/26/14 19:09	25
Toluene	ND		25	13	ug/L			02/26/14 19:09	25
trans-1,2-Dichloroethene	ND		25	23	ug/L			02/26/14 19:09	25
trans-1,3-Dichloropropene	ND		25	9.3	ug/L			02/26/14 19:09	25
Trichloroethene	410		25	12	ug/L			02/26/14 19:09	25
Trichlorofluoromethane	ND		25	22	ug/L			02/26/14 19:09	25
Vinyl chloride	72		25	23	ug/L			02/26/14 19:09	25
Xylenes, Total	ND		50	17	ug/L			02/26/14 19:09	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137		02/26/14 19:09	25
4-Bromofluorobenzene (Surr)	97		73 - 120		02/26/14 19:09	25
Toluene-d8 (Surr)	100		71 - 126		02/26/14 19:09	25

Client Sample ID: TB-01-022014

Lab Sample ID: 480-55128-48

Date Collected: 02/20/14 00:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/26/14 05:03	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: TB-01-022014

Lab Sample ID: 480-55128-48

Date Collected: 02/20/14 00:00

Matrix: Water

Date Received: 02/24/14 16:37

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	ND		1.0	0.21	ug/L			02/26/14 05:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/14 05:03	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/26/14 05:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/26/14 05:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/14 05:03	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 05:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 05:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 05:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 05:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 05:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 05:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 05:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 05:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 05:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 05:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 05:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/14 05:03	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 05:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 05:03	1
Acetone	ND		10	3.0	ug/L			02/26/14 05:03	1
Benzene	ND		1.0	0.41	ug/L			02/26/14 05:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 05:03	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 05:03	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 05:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 05:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 05:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 05:03	1
Chloroethane	ND		1.0	0.32	ug/L			02/26/14 05:03	1
Chloroform	ND		1.0	0.34	ug/L			02/26/14 05:03	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 05:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/26/14 05:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 05:03	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 05:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 05:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 05:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 05:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 05:03	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 05:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 05:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 05:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 05:03	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 05:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/14 05:03	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 05:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/26/14 05:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 05:03	1
Trichloroethene	0.56	J	1.0	0.46	ug/L			02/26/14 05:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 05:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/26/14 05:03	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: TB-01-022014

Lab Sample ID: 480-55128-48

Date Collected: 02/20/14 00:00

Matrix: Water

Date Received: 02/24/14 16:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 05:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		02/26/14 05:03	1
4-Bromofluorobenzene (Surr)	94		73 - 120		02/26/14 05:03	1
Toluene-d8 (Surr)	90		71 - 126		02/26/14 05:03	1



Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	BFB (73-120)	TOL (71-126)
480-55128-1	4009-1-022014	102	100	93
480-55128-2	4009-2-022014	101	102	97
480-55128-3	4009-3-022014	106	100	93
480-55128-3 MS	4009-3-022014	101	106	99
480-55128-3 MSD	4009-3-022014	97	105	100
480-55128-4	4009-4-022014	98	99	94
480-55128-5	4009-5-022014	98	101	95
480-55128-5 - DL	4009-5-022014	99	97	101
480-55128-6	4009-6-022014	100	99	101
480-55128-7	4009-7-022014	100	97	96
480-55128-8	4009-8-022014	98	101	95
480-55128-8 - DL	4009-8-022014	101	98	101
480-55128-9	4009-9-022014	98	98	101
480-55128-10	4009-10-022014	99	99	92
480-55128-11	4009-11-022014	97	98	99
480-55128-12	4009-11A-022014	97	99	101
480-55128-13	4009-12-022014	98	97	99
480-55128-14	4009-12A-022014	98	98	101
480-55128-15	4009-13-022014	100	98	100
480-55128-16	4009-13A-022014	101	97	98
480-55128-17	4009-14-022014	99	99	100
480-55128-18	4009-15-022014	99	99	99
480-55128-19	4009-16-022014	98	98	99
480-55128-20	4009-16A-022014	97	96	99
480-55128-46	DUP-01-022014	96	99	96
480-55128-46 - DL	DUP-01-022014	101	97	100
480-55128-46 MS	DUP-01-022014	99	103	101
480-55128-46 MSD	DUP-01-022014	99	104	99
480-55128-48	TB-01-022014	99	94	90
LCS 480-167465/5	Lab Control Sample	102	106	102
LCS 480-167472/4	Lab Control Sample	102	104	99
LCS 480-167570/4	Lab Control Sample	102	104	98
LCS 480-167657/5	Lab Control Sample	100	104	102
LCSD 480-167472/5	Lab Control Sample Dup	101	106	102
MB 480-167465/7	Method Blank	100	97	100
MB 480-167472/7	Method Blank	102	100	96
MB 480-167570/6	Method Blank	99	100	94
MB 480-167657/7	Method Blank	99	98	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: MB 480-167465/7

Matrix: Water

Analysis Batch: 167465

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	ND		1.0	0.82	ug/L			02/25/14 12:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 12:07	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 12:07	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 12:07	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 12:07	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 12:07	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 12:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 12:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 12:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 12:07	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 12:07	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 12:07	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 12:07	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 12:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 12:07	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 12:07	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 12:07	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 12:07	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 12:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 12:07	1
Acetone	ND		10	3.0	ug/L			02/25/14 12:07	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 12:07	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 12:07	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 12:07	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 12:07	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 12:07	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 12:07	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 12:07	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 12:07	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 12:07	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 12:07	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 12:07	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 12:07	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 12:07	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 12:07	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 12:07	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 12:07	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 12:07	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 12:07	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 12:07	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 12:07	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 12:07	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 12:07	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 12:07	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 12:07	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 12:07	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 12:07	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 12:07	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: MB 480-167465/7

Matrix: Water

Analysis Batch: 167465

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 12:07	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 12:07	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		02/25/14 12:07	1
4-Bromofluorobenzene (Surr)	97		73 - 120		02/25/14 12:07	1
Toluene-d8 (Surr)	100		71 - 126		02/25/14 12:07	1

Lab Sample ID: LCS 480-167465/5

Matrix: Water

Analysis Batch: 167465

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.2		ug/L		101	71 - 129
1,1-Dichloroethene	25.0	25.7		ug/L		103	58 - 121
1,2,4-Trimethylbenzene	25.0	24.6		ug/L		98	76 - 121
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	25.1		ug/L		101	75 - 127
Benzene	25.0	25.4		ug/L		102	71 - 124
Chlorobenzene	25.0	24.9		ug/L		99	72 - 120
cis-1,2-Dichloroethene	25.0	25.3		ug/L		101	74 - 124
Ethylbenzene	25.0	25.0		ug/L		100	77 - 123
Methyl tert-butyl ether	25.0	26.1		ug/L		104	64 - 127
Tetrachloroethene	25.0	25.2		ug/L		101	74 - 122
Toluene	25.0	24.6		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	25.4		ug/L		101	73 - 127
Trichloroethene	25.0	25.5		ug/L		102	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		66 - 137
4-Bromofluorobenzene (Surr)	106		73 - 120
Toluene-d8 (Surr)	102		71 - 126

Lab Sample ID: MB 480-167472/7

Matrix: Water

Analysis Batch: 167472

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	ND		1.0	0.82	ug/L			02/25/14 13:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 13:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 13:00	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 13:00	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 13:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 13:00	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 13:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 13:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 13:00	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: MB 480-167472/7

Matrix: Water

Analysis Batch: 167472

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 13:00	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 13:00	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 13:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 13:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 13:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 13:00	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 13:00	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 13:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 13:00	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 13:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 13:00	1
Acetone	ND		10	3.0	ug/L			02/25/14 13:00	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 13:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 13:00	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 13:00	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 13:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 13:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 13:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 13:00	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 13:00	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 13:00	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 13:00	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 13:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 13:00	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 13:00	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 13:00	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 13:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 13:00	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 13:00	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 13:00	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 13:00	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 13:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 13:00	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 13:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 13:00	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 13:00	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 13:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 13:00	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 13:00	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 13:00	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 13:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 13:00	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		66 - 137		02/25/14 13:00	1
4-Bromofluorobenzene (Surr)	100		73 - 120		02/25/14 13:00	1
Toluene-d8 (Surr)	96		71 - 126		02/25/14 13:00	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: LCS 480-167472/4

Matrix: Water

Analysis Batch: 167472

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.1		ug/L		100	71 - 129
1,1-Dichloroethene	25.0	25.3		ug/L		101	58 - 121
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	76 - 121
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	25.1		ug/L		100	75 - 127
Benzene	25.0	25.8		ug/L		103	71 - 124
Chlorobenzene	25.0	24.8		ug/L		99	72 - 120
cis-1,2-Dichloroethene	25.0	25.7		ug/L		103	74 - 124
Ethylbenzene	25.0	26.1		ug/L		104	77 - 123
Methyl tert-butyl ether	25.0	25.9		ug/L		104	64 - 127
Tetrachloroethene	25.0	25.3		ug/L		101	74 - 122
Toluene	25.0	25.4		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	73 - 127
Trichloroethene	25.0	27.1		ug/L		108	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		66 - 137
4-Bromofluorobenzene (Surr)	104		73 - 120
Toluene-d8 (Surr)	99		71 - 126

Lab Sample ID: LCSD 480-167472/5

Matrix: Water

Analysis Batch: 167472

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	25.0	25.3		ug/L		101	71 - 129	1	20
1,1-Dichloroethene	25.0	25.2		ug/L		101	58 - 121	0	16
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	76 - 121	3	20
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 124	1	20
1,2-Dichloroethane	25.0	25.6		ug/L		102	75 - 127	2	20
Benzene	25.0	25.6		ug/L		103	71 - 124	0	13
Chlorobenzene	25.0	24.8		ug/L		99	72 - 120	0	25
cis-1,2-Dichloroethene	25.0	25.7		ug/L		103	74 - 124	0	15
Ethylbenzene	25.0	25.9		ug/L		103	77 - 123	1	15
Methyl tert-butyl ether	25.0	27.3		ug/L		109	64 - 127	5	37
Tetrachloroethene	25.0	25.3		ug/L		101	74 - 122	0	20
Toluene	25.0	25.9		ug/L		104	80 - 122	2	15
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	73 - 127	0	20
Trichloroethene	25.0	27.0		ug/L		108	74 - 123	0	16

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
4-Bromofluorobenzene (Surr)	106		73 - 120
Toluene-d8 (Surr)	102		71 - 126

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: 480-55128-3 MS

Matrix: Water

Analysis Batch: 167472

Client Sample ID: 4009-3-022014

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1-Dichloroethane	6.3		25.0	34.5		ug/L		113	71 - 129
1,1-Dichloroethene	1.3		25.0	30.3		ug/L		116	58 - 121
1,2,4-Trimethylbenzene	ND		25.0	28.2		ug/L		113	76 - 121
1,2-Dichlorobenzene	ND		25.0	25.0		ug/L		100	80 - 124
1,2-Dichloroethane	ND		25.0	26.3		ug/L		105	75 - 127
Benzene	ND		25.0	27.7		ug/L		111	71 - 124
Chlorobenzene	ND		25.0	26.4		ug/L		105	72 - 120
cis-1,2-Dichloroethene	77		25.0	94.0	F1	ug/L		66	74 - 124
Ethylbenzene	ND		25.0	27.8		ug/L		111	77 - 123
Methyl tert-butyl ether	ND		25.0	28.3		ug/L		113	64 - 127
Tetrachloroethene	ND		25.0	26.6		ug/L		106	74 - 122
Toluene	ND		25.0	26.5		ug/L		106	80 - 122
trans-1,2-Dichloroethene	ND		25.0	28.2		ug/L		113	73 - 127
Trichloroethene	26		25.0	43.5	F1	ug/L		68	74 - 123

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
4-Bromofluorobenzene (Surr)	106		73 - 120
Toluene-d8 (Surr)	99		71 - 126

Lab Sample ID: 480-55128-3 MSD

Matrix: Water

Analysis Batch: 167472

Client Sample ID: 4009-3-022014

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier						Limit
1,1-Dichloroethane	6.3		25.0	33.2		ug/L		108	71 - 129	4	20
1,1-Dichloroethene	1.3		25.0	28.7		ug/L		110	58 - 121	5	16
1,2,4-Trimethylbenzene	ND		25.0	27.7		ug/L		111	76 - 121	2	20
1,2-Dichlorobenzene	ND		25.0	25.9		ug/L		103	80 - 124	3	20
1,2-Dichloroethane	ND		25.0	26.0		ug/L		104	75 - 127	1	20
Benzene	ND		25.0	27.2		ug/L		109	71 - 124	2	13
Chlorobenzene	ND		25.0	26.4		ug/L		106	72 - 120	0	25
cis-1,2-Dichloroethene	77		25.0	92.3	F1	ug/L		59	74 - 124	2	15
Ethylbenzene	ND		25.0	27.7		ug/L		111	77 - 123	0	15
Methyl tert-butyl ether	ND		25.0	27.4		ug/L		110	64 - 127	3	37
Tetrachloroethene	ND		25.0	26.4		ug/L		105	74 - 122	1	20
Toluene	ND		25.0	26.5		ug/L		106	80 - 122	0	15
trans-1,2-Dichloroethene	ND		25.0	27.4		ug/L		110	73 - 127	3	20
Trichloroethene	26		25.0	42.6	F1	ug/L		64	74 - 123	2	16

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
4-Bromofluorobenzene (Surr)	105		73 - 120
Toluene-d8 (Surr)	100		71 - 126

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: MB 480-167570/6

Matrix: Water

Analysis Batch: 167570

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	ND		1.0	0.82	ug/L			02/25/14 23:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/25/14 23:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/25/14 23:47	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/25/14 23:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/25/14 23:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/25/14 23:47	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/25/14 23:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/25/14 23:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/25/14 23:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/25/14 23:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/25/14 23:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/25/14 23:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/25/14 23:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/25/14 23:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/25/14 23:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/25/14 23:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/25/14 23:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/25/14 23:47	1
2-Hexanone	ND		5.0	1.2	ug/L			02/25/14 23:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/25/14 23:47	1
Acetone	ND		10	3.0	ug/L			02/25/14 23:47	1
Benzene	ND		1.0	0.41	ug/L			02/25/14 23:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/25/14 23:47	1
Bromoform	ND		1.0	0.26	ug/L			02/25/14 23:47	1
Bromomethane	ND		1.0	0.69	ug/L			02/25/14 23:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/25/14 23:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/25/14 23:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/25/14 23:47	1
Chloroethane	ND		1.0	0.32	ug/L			02/25/14 23:47	1
Chloroform	ND		1.0	0.34	ug/L			02/25/14 23:47	1
Chloromethane	ND		1.0	0.35	ug/L			02/25/14 23:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/25/14 23:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/25/14 23:47	1
Cyclohexane	ND		1.0	0.18	ug/L			02/25/14 23:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/25/14 23:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/25/14 23:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/25/14 23:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/25/14 23:47	1
Methyl acetate	ND		2.5	0.50	ug/L			02/25/14 23:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/25/14 23:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/25/14 23:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/25/14 23:47	1
Styrene	ND		1.0	0.73	ug/L			02/25/14 23:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/25/14 23:47	1
Toluene	ND		1.0	0.51	ug/L			02/25/14 23:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/25/14 23:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/25/14 23:47	1
Trichloroethene	ND		1.0	0.46	ug/L			02/25/14 23:47	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: MB 480-167570/6

Matrix: Water

Analysis Batch: 167570

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/25/14 23:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/25/14 23:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/25/14 23:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		02/25/14 23:47	1
4-Bromofluorobenzene (Surr)	100		73 - 120		02/25/14 23:47	1
Toluene-d8 (Surr)	94		71 - 126		02/25/14 23:47	1

Lab Sample ID: LCS 480-167570/4

Matrix: Water

Analysis Batch: 167570

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.2		ug/L		101	71 - 129
1,1-Dichloroethene	25.0	25.8		ug/L		103	58 - 121
1,2,4-Trimethylbenzene	25.0	25.8		ug/L		103	76 - 121
1,2-Dichlorobenzene	25.0	24.7		ug/L		99	80 - 124
1,2-Dichloroethane	25.0	25.3		ug/L		101	75 - 127
Benzene	25.0	25.5		ug/L		102	71 - 124
Chlorobenzene	25.0	24.5		ug/L		98	72 - 120
cis-1,2-Dichloroethene	25.0	26.4		ug/L		106	74 - 124
Ethylbenzene	25.0	25.4		ug/L		102	77 - 123
Methyl tert-butyl ether	25.0	26.7		ug/L		107	64 - 127
Tetrachloroethene	25.0	24.3		ug/L		97	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	73 - 127
Trichloroethene	25.0	25.6		ug/L		102	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		66 - 137
4-Bromofluorobenzene (Surr)	104		73 - 120
Toluene-d8 (Surr)	98		71 - 126

Lab Sample ID: MB 480-167657/7

Matrix: Water

Analysis Batch: 167657

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	ND		1.0	0.82	ug/L			02/26/14 12:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/14 12:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/14 12:47	1
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L			02/26/14 12:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/26/14 12:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/14 12:47	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/26/14 12:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/26/14 12:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/26/14 12:47	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: MB 480-167657/7

Matrix: Water

Analysis Batch: 167657

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/26/14 12:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/26/14 12:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/26/14 12:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/14 12:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/14 12:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/26/14 12:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/26/14 12:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/26/14 12:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/14 12:47	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/14 12:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/14 12:47	1
Acetone	ND		10	3.0	ug/L			02/26/14 12:47	1
Benzene	ND		1.0	0.41	ug/L			02/26/14 12:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/14 12:47	1
Bromoform	ND		1.0	0.26	ug/L			02/26/14 12:47	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/14 12:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/14 12:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/14 12:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/14 12:47	1
Chloroethane	ND		1.0	0.32	ug/L			02/26/14 12:47	1
Chloroform	ND		1.0	0.34	ug/L			02/26/14 12:47	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/14 12:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/26/14 12:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/14 12:47	1
Cyclohexane	ND		1.0	0.18	ug/L			02/26/14 12:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/14 12:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/26/14 12:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/14 12:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/26/14 12:47	1
Methyl acetate	ND		2.5	0.50	ug/L			02/26/14 12:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/26/14 12:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/26/14 12:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/14 12:47	1
Styrene	ND		1.0	0.73	ug/L			02/26/14 12:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/14 12:47	1
Toluene	ND		1.0	0.51	ug/L			02/26/14 12:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/26/14 12:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/14 12:47	1
Trichloroethene	ND		1.0	0.46	ug/L			02/26/14 12:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/26/14 12:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/26/14 12:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/14 12:47	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		02/26/14 12:47	1
4-Bromofluorobenzene (Surr)	98		73 - 120		02/26/14 12:47	1
Toluene-d8 (Surr)	101		71 - 126		02/26/14 12:47	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: LCS 480-167657/5

Matrix: Water

Analysis Batch: 167657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.1		ug/L		100	71 - 129
1,1-Dichloroethene	25.0	25.4		ug/L		101	58 - 121
1,2,4-Trimethylbenzene	25.0	24.2		ug/L		97	76 - 121
1,2-Dichlorobenzene	25.0	24.6		ug/L		99	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 127
Benzene	25.0	24.7		ug/L		99	71 - 124
Chlorobenzene	25.0	24.5		ug/L		98	72 - 120
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	74 - 124
Ethylbenzene	25.0	24.8		ug/L		99	77 - 123
Methyl tert-butyl ether	25.0	25.4		ug/L		101	64 - 127
Tetrachloroethene	25.0	25.4		ug/L		102	74 - 122
Toluene	25.0	24.4		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	73 - 127
Trichloroethene	25.0	25.2		ug/L		101	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
4-Bromofluorobenzene (Surr)	104		73 - 120
Toluene-d8 (Surr)	102		71 - 126

Lab Sample ID: 480-55128-46 MS

Matrix: Water

Analysis Batch: 167657

Client Sample ID: DUP-01-022014

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	73		625	671		ug/L		96	71 - 129
1,1-Dichloroethene	130		625	775		ug/L		103	58 - 121
1,2,4-Trimethylbenzene	ND		625	586		ug/L		94	76 - 121
1,2-Dichlorobenzene	ND		625	600		ug/L		96	80 - 124
1,2-Dichloroethane	ND		625	578		ug/L		92	75 - 127
Benzene	ND		625	610		ug/L		98	71 - 124
Chlorobenzene	ND		625	606		ug/L		97	72 - 120
cis-1,2-Dichloroethene	350		625	956		ug/L		97	74 - 124
Ethylbenzene	ND		625	609		ug/L		97	77 - 123
Methyl tert-butyl ether	ND		625	602		ug/L		96	64 - 127
Tetrachloroethene	ND		625	634		ug/L		101	74 - 122
Toluene	ND		625	599		ug/L		96	80 - 122
trans-1,2-Dichloroethene	ND		625	626		ug/L		100	73 - 127
Trichloroethene	410		625	977		ug/L		90	74 - 123

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
4-Bromofluorobenzene (Surr)	103		73 - 120
Toluene-d8 (Surr)	101		71 - 126

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

Lab Sample ID: 480-55128-46 MSD

Client Sample ID: DUP-01-022014

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 167657

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits			
1,1-Dichloroethane	73		625	691		ug/L		99	71 - 129	3		20
1,1-Dichloroethene	130		625	810		ug/L		109	58 - 121	4		16
1,2,4-Trimethylbenzene	ND		625	598		ug/L		96	76 - 121	2		20
1,2-Dichlorobenzene	ND		625	606		ug/L		97	80 - 124	1		20
1,2-Dichloroethane	ND		625	580		ug/L		93	75 - 127	0		20
Benzene	ND		625	619		ug/L		99	71 - 124	1		13
Chlorobenzene	ND		625	601		ug/L		96	72 - 120	1		25
cis-1,2-Dichloroethene	350		625	961		ug/L		98	74 - 124	0		15
Ethylbenzene	ND		625	609		ug/L		97	77 - 123	0		15
Methyl tert-butyl ether	ND		625	602		ug/L		96	64 - 127	0		37
Tetrachloroethene	ND		625	630		ug/L		101	74 - 122	1		20
Toluene	ND		625	598		ug/L		96	80 - 122	0		15
trans-1,2-Dichloroethene	ND		625	650		ug/L		104	73 - 127	4		20
Trichloroethene	410		625	988		ug/L		92	74 - 123	1		16

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
4-Bromofluorobenzene (Surr)	104		73 - 120
Toluene-d8 (Surr)	99		71 - 126

QC Association Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

GC/MS VOA

Analysis Batch: 167465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-55128-11	4009-11-022014	Total/NA	Water	8260C	
480-55128-12	4009-11A-022014	Total/NA	Water	8260C	
480-55128-13	4009-12-022014	Total/NA	Water	8260C	
480-55128-14	4009-12A-022014	Total/NA	Water	8260C	
480-55128-15	4009-13-022014	Total/NA	Water	8260C	
480-55128-16	4009-13A-022014	Total/NA	Water	8260C	
480-55128-17	4009-14-022014	Total/NA	Water	8260C	
480-55128-18	4009-15-022014	Total/NA	Water	8260C	
480-55128-19	4009-16-022014	Total/NA	Water	8260C	
480-55128-20	4009-16A-022014	Total/NA	Water	8260C	
LCS 480-167465/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-167465/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 167472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-55128-1	4009-1-022014	Total/NA	Water	8260C	
480-55128-2	4009-2-022014	Total/NA	Water	8260C	
480-55128-3	4009-3-022014	Total/NA	Water	8260C	
480-55128-3 MS	4009-3-022014	Total/NA	Water	8260C	
480-55128-3 MSD	4009-3-022014	Total/NA	Water	8260C	
LCS 480-167472/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-167472/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-167472/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 167570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-55128-4	4009-4-022014	Total/NA	Water	8260C	
480-55128-5	4009-5-022014	Total/NA	Water	8260C	
480-55128-7	4009-7-022014	Total/NA	Water	8260C	
480-55128-8	4009-8-022014	Total/NA	Water	8260C	
480-55128-10	4009-10-022014	Total/NA	Water	8260C	
480-55128-46	DUP-01-022014	Total/NA	Water	8260C	
480-55128-48	TB-01-022014	Total/NA	Water	8260C	
LCS 480-167570/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-167570/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 167657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-55128-5 - DL	4009-5-022014	Total/NA	Water	8260C	
480-55128-6	4009-6-022014	Total/NA	Water	8260C	
480-55128-8 - DL	4009-8-022014	Total/NA	Water	8260C	
480-55128-9	4009-9-022014	Total/NA	Water	8260C	
480-55128-46 - DL	DUP-01-022014	Total/NA	Water	8260C	
480-55128-46 MS	DUP-01-022014	Total/NA	Water	8260C	
480-55128-46 MSD	DUP-01-022014	Total/NA	Water	8260C	
LCS 480-167657/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-167657/7	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-1-022014

Lab Sample ID: 480-55128-1

Date Collected: 02/20/14 15:10

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167472	02/25/14 18:33	LCH	TAL BUF

Client Sample ID: 4009-2-022014

Lab Sample ID: 480-55128-2

Date Collected: 02/20/14 13:45

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167472	02/25/14 18:59	LCH	TAL BUF

Client Sample ID: 4009-3-022014

Lab Sample ID: 480-55128-3

Date Collected: 02/20/14 14:45

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167472	02/25/14 19:24	LCH	TAL BUF

Client Sample ID: 4009-4-022014

Lab Sample ID: 480-55128-4

Date Collected: 02/20/14 14:20

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167570	02/26/14 00:52	LCH	TAL BUF

Client Sample ID: 4009-5-022014

Lab Sample ID: 480-55128-5

Date Collected: 02/20/14 14:10

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167570	02/26/14 01:18	LCH	TAL BUF
Total/NA	Analysis	8260C	DL	5	167657	02/26/14 13:22	NMD1	TAL BUF

Client Sample ID: 4009-6-022014

Lab Sample ID: 480-55128-6

Date Collected: 02/20/14 13:40

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167657	02/26/14 13:44	NMD1	TAL BUF

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Lab Chronicle

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-7-022014

Lab Sample ID: 480-55128-7

Date Collected: 02/20/14 14:00

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167570	02/26/14 02:08	LCH	TAL BUF

Client Sample ID: 4009-8-022014

Lab Sample ID: 480-55128-8

Date Collected: 02/20/14 13:20

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167570	02/26/14 02:33	LCH	TAL BUF
Total/NA	Analysis	8260C	DL	10	167657	02/26/14 14:06	NMD1	TAL BUF

Client Sample ID: 4009-9-022014

Lab Sample ID: 480-55128-9

Date Collected: 02/20/14 10:40

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167657	02/26/14 14:27	NMD1	TAL BUF

Client Sample ID: 4009-10-022014

Lab Sample ID: 480-55128-10

Date Collected: 02/20/14 10:35

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167570	02/26/14 03:22	LCH	TAL BUF

Client Sample ID: 4009-11-022014

Lab Sample ID: 480-55128-11

Date Collected: 02/20/14 11:00

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 12:40	NMD1	TAL BUF

Client Sample ID: 4009-11A-022014

Lab Sample ID: 480-55128-12

Date Collected: 02/20/14 11:05

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 13:02	NMD1	TAL BUF

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Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-12-022014

Lab Sample ID: 480-55128-13

Date Collected: 02/20/14 10:15

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 13:24	NMD1	TAL BUF

Client Sample ID: 4009-12A-022014

Lab Sample ID: 480-55128-14

Date Collected: 02/20/14 10:20

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 13:45	NMD1	TAL BUF

Client Sample ID: 4009-13-022014

Lab Sample ID: 480-55128-15

Date Collected: 02/20/14 11:50

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 14:07	NMD1	TAL BUF

Client Sample ID: 4009-13A-022014

Lab Sample ID: 480-55128-16

Date Collected: 02/20/14 11:55

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 14:29	NMD1	TAL BUF

Client Sample ID: 4009-14-022014

Lab Sample ID: 480-55128-17

Date Collected: 02/20/14 09:00

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 14:51	NMD1	TAL BUF

Client Sample ID: 4009-15-022014

Lab Sample ID: 480-55128-18

Date Collected: 02/20/14 09:35

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 15:12	NMD1	TAL BUF

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Lab Chronicle

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Client Sample ID: 4009-16-022014

Lab Sample ID: 480-55128-19

Date Collected: 02/20/14 09:25

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 15:34	NMD1	TAL BUF

Client Sample ID: 4009-16A-022014

Lab Sample ID: 480-55128-20

Date Collected: 02/20/14 09:20

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167465	02/25/14 15:56	NMD1	TAL BUF

Client Sample ID: DUP-01-022014

Lab Sample ID: 480-55128-46

Date Collected: 02/20/14 00:00

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167570	02/26/14 04:12	LCH	TAL BUF
Total/NA	Analysis	8260C	DL	25	167657	02/26/14 19:09	NMD1	TAL BUF

Client Sample ID: TB-01-022014

Lab Sample ID: 480-55128-48

Date Collected: 02/20/14 00:00

Matrix: Water

Date Received: 02/24/14 16:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	167570	02/26/14 05:03	LCH	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	04-01-14
Kentucky (DW)	State Program	4	90029	12-31-14
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-14
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	03-31-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-30-14
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
West Virginia DEP	State Program	3	252	03-31-14
Wisconsin	State Program	5	998310390	08-31-14

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

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

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Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-55128-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-55128-1	4009-1-022014	Water	02/20/14 15:10	02/24/14 16:37
480-55128-2	4009-2-022014	Water	02/20/14 13:45	02/24/14 16:37
480-55128-3	4009-3-022014	Water	02/20/14 14:45	02/24/14 16:37
480-55128-4	4009-4-022014	Water	02/20/14 14:20	02/24/14 16:37
480-55128-5	4009-5-022014	Water	02/20/14 14:10	02/24/14 16:37
480-55128-6	4009-6-022014	Water	02/20/14 13:40	02/24/14 16:37
480-55128-7	4009-7-022014	Water	02/20/14 14:00	02/24/14 16:37
480-55128-8	4009-8-022014	Water	02/20/14 13:20	02/24/14 16:37
480-55128-9	4009-9-022014	Water	02/20/14 10:40	02/24/14 16:37
480-55128-10	4009-10-022014	Water	02/20/14 10:35	02/24/14 16:37
480-55128-11	4009-11-022014	Water	02/20/14 11:00	02/24/14 16:37
480-55128-12	4009-11A-022014	Water	02/20/14 11:05	02/24/14 16:37
480-55128-13	4009-12-022014	Water	02/20/14 10:15	02/24/14 16:37
480-55128-14	4009-12A-022014	Water	02/20/14 10:20	02/24/14 16:37
480-55128-15	4009-13-022014	Water	02/20/14 11:50	02/24/14 16:37
480-55128-16	4009-13A-022014	Water	02/20/14 11:55	02/24/14 16:37
480-55128-17	4009-14-022014	Water	02/20/14 09:00	02/24/14 16:37
480-55128-18	4009-15-022014	Water	02/20/14 09:35	02/24/14 16:37
480-55128-19	4009-16-022014	Water	02/20/14 09:25	02/24/14 16:37
480-55128-20	4009-16A-022014	Water	02/20/14 09:20	02/24/14 16:37
480-55128-46	DUP-01-022014	Water	02/20/14 00:00	02/24/14 16:37
480-55128-48	TB-01-022014	Water	02/20/14 00:00	02/24/14 16:37

Chain of Custody



COC No: 480-44450-12063.1
 Page: Page 1 of 5
 Job #:

480-55128 Chain of Custody

Client Information
 Client Contact: Ms. Katie Bidwell or Terry Wilcock
 Company: ARCADIS U.S. Inc
 Address: 855 Route 146 Suite 210
 City: Clifton Park
 State, Zip: NY, 12065
 Phone: 518-250-7360(Tel)
 PO #: 266401
 WO #:
 Project #: 48008914
 Vestal Water Supply RSO
 Site:
 Email: katie.bidwell@arcadis-us.com

Lab PM: Fox, Candace L
 E-Mail: candace.fox@tes.com

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, P=powder, T=tissue, A=air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform. MS/MSD (Yes or No)	Analysis Requested	Total Number of Containers	Special Instructions/Note:
4009-1 - 022014	02/20/14	15:10	G	Water						
4009-2		13:45		Water						
4009-3		14:45		Water						
4009-4		14:20		Water						
4009-5		14:10		Water						
4009-6		13:40		Water						
4009-7		14:00		Water						
4009-8		13:20		Water						
4009-9		10:40		Water						
4009-10		10:35		Water						
4009-11		11:00		Water						

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III 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: _____
Relinquished by: _____ Date/Time: 02/20/14 16:37
Relinquished by: _____ Date/Time: _____
Relinquished by: _____ Date/Time: _____
 Custody Seals Intact: Yes No
 Custody Seal No.: _____
 Cooler Temperature(s) °C and Other Remarks: #1 20.2, 21.2, 21.4

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Chain of Custody Record

Client Information		Lab PM: Fox, Candace L		Carrier Tracking No(s):		COC No: 480-44450-12063.2	
Client Contact: Ms. Katie Bidwell & Jenni Wickoff		E-Mail: candace.fox@testamericainc.com		Phone: 585-750-2601		Page 2 of 5	
Company: ARCADIS U.S. Inc		Due Date Requested:		Analysis Requested		Job #:	
Address: 855 Route 146 Suite 210		TAT Requested (days):		Field Filled Sample (Yes or No)		Preservation Codes:	
City: Clifton Park		Standard		Perform MS/MSD (Yes or No)		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
State, Zip: NY, 12065		PO #: 266401		Matrix (W=water, S=solid, O=waste/soil, BT=TISSUE, AL=AP)		Other:	
Phone: 518-250-7360(Tel)		WO #: 48008914		Sample Type (C=Comp, G=grab)		Special Instructions/Note:	
Email: katie.bidwell@arcadis-us.com		Project #: 48008914		Sample Time		Total Number of containers	
Project Name: Vestal Water Supply RSO		SSON#:		Sample Date		Special Instructions/Note:	
Site:		Sample Date		Sample Time		Special Instructions/Note:	
Sample Identification		Sample Date		Sample Time		Special Instructions/Note:	
4009-11A - 022014		2/20/14	11:05	6	Water		
4009-12			10:15		Water		
4009-12A			10:20		Water		
4009-13			11:50		Water		
4009-13A			11:55		Water		
4009-14			9:00		Water		
4009-15			9:35		Water		
4009-16			9:25		Water		
4009-16A			9:20		Water		
4009-22			8:50		Water		
4009-23S			13:55		Water		
Possible Hazard Identification		Date:		Time:		Method of Shipment:	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date/Time: 02/24/14 11:37		Date/Time: 02/24/14 16:37		Date/Time: 02/24/14 16:37	
Deliverable Requested: I, II, III <input checked="" type="checkbox"/> Other (specify)		Reinforced by: [Signature]		Reinforced by: [Signature]		Reinforced by: [Signature]	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: [Signature]		Date:		Time:		Method of Shipment:	
Relinquished by: [Signature]		Date:		Time:		Method of Shipment:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: #1 20.2, 21.2, 21.4		Cooler Temperature(s) °C and Other Remarks:	



Chain of Custody Record

Client Information Client Contact: Ms. Katie Bidwell or Jeremy Wyckoff Company: ARCADIS U.S. Inc Address: 855 Route 146 Suite 210 City: Clifton Park State, Zip: NY, 12065 Phone: 518-250-7360(Tel) Email: katie.bidwell@arcadis-us.com Project Name: Vestal Water Supply RSO Site:		Lab PM: Fox, Candace L E-Mail: candace.fox@testamericainc.com Carrier Tracking No(s): COC No: 480-44450-12063.3 Page: Page 3 of 5 Job #:	
Due Date Requested: TAT Requested (days): <i>Standard</i> PO #: 266401 WO #: Project #: 48008914 SOW#:		Analysis Requested Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> B280C - TCL list OLM04.24 <i>7MB5</i>	
Sample Identification Sample Date: <i>02/20/14</i> Sample Time: <i>13:50</i> Sample Type (C=comp, G=grab): Matrix (W=water, S=solid, O=water/soil, RT=tissue, A=air): Preservation Code:		Total Number of Containers: Special Instructions/Note:	
4009-23D	<i>-022014</i>	<i>Water</i>	<i>Water</i>
4009-24		<i>Water</i>	<i>Water</i>
4009-25S		<i>Water</i>	<i>Water</i>
4009-25D		<i>Water</i>	<i>Water</i>
4009-26		<i>Water</i>	<i>Water</i>
4009-27S		<i>Water</i>	<i>Water</i>
4009-27I		<i>Water</i>	<i>Water</i>
4009-27D		<i>Water</i>	<i>Water</i>
4009-28		<i>Water</i>	<i>Water</i>
4009-29S		<i>Water</i>	<i>Water</i>
4009-29I		<i>Water</i>	<i>Water</i>
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III <input checked="" type="checkbox"/> Other (specify)			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:			
Empty Kit Relinquished by: Relinquished by: <i>[Signature]</i> Relinquished Date: <i>02/20/14 16:57</i> Relinquished Company: <i>ARCADIS</i>		Method of Shipment: Date/Time: <i>2/20/14 16:37</i> Date/Time: <i>2/20/14 16:37</i> Date/Time: <i>2/20/14 16:37</i> Company: <i>ARCADIS</i> Company: <i>ARCADIS</i> Company: <i>ARCADIS</i>	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: <i>#1 20.2, 21.2, 21</i>	



Chain of Custody Record

Client Information		Sampler: <i>J. Beyer</i>		Lab PM: Fox, Candace L		Carrier Tracking No(s):		COC No: 480-44450-12063.4	
Client Contact: Ms. Katie Bidwell or Jason Wyckoff		Phone: 585-750-2606		E-Mail: candace.fox@testamericainc.com		Page: Page 4 of 5		Job #:	
Company: ARCADIS U.S. Inc		Address: 855 Route 146 Suite 210		City: Clifton Park		State Zip: NY, 12065		PO #: 266401	
Phone: 518-250-7360(Tel)		E-mail: katie.bidwell@arcadis-us.com		Project #: 48008914		SSOW#:		Due Date Requested:	
Project Name: Vestal Water Supply RSO		Site:		TAT Requested (days):		Matrix (W=water, S=solid, O=soil, G=grab, B=biological, T=tissue, A=air)		Sample Type (C=Comp, G=grab)	
Sample Identification		Sample Date		Sample Time		Preservation Code:		Field Filtered Sample (Yes or No)	
4009-29D - 022014		02/20/14 11:30		6		Water		X	
ERT-11		15:15		Water		Water		X	
ERT-1D		15:20		Water		Water		X	
ERT-3S		16:40		Water		Water		X	
ERT-3I		16:45		Water		Water		X	
ERT-3D		16:50		Water		Water		X	
ERT-4S		16:35		Water		Water		X	
ERT-4I		16:20		Water		Water		X	
ERT-4D		16:25		Water		Water		X	
ERT-7		16:30		Water		Water		X	
ERT-8		15:00		Water		Water		X	
Possible Hazard Identification		Poison B <input checked="" type="checkbox"/>		Radiological <input type="checkbox"/>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III (V) Other (specify)		Date:		Date/Time:		Special Instructions/QC Requirements:		Method of Shipment:	
Empty Kit Relinquished by:		Date:		Date/Time:		Received by:		Date/Time:	
Relinquished by: <i>[Signature]</i>		Date: 02/24/14		Time: 16:37		Received by: <i>[Signature]</i>		Date/Time: 2/24/14 16:37	
Relinquished by:		Date:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Date:		Date/Time:		Received by:		Date/Time:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: <i>[Signature]</i>		Company: <i>[Signature]</i>	



Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-55128-1

Login Number: 55128

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

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.	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	
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: 480-53547-1

Client Project/Site: Vestal Water Supply RSO

For:

ARCADIS U.S. Inc

855 Route 146

Suite 210

Clifton Park, New York 12065

Attn: Bruce Nelson



Authorized for release by:

1/28/2014 10:47:31 PM

Candace Fox, Manager of Project Management

(716)504-9844

candace.fox@testamericainc.com

LINKS

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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: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Job ID: 480-53547-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-53547-1

Comments

No additional comments.

Receipt

The samples were received on 1/17/2014 8:08 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA

Method(s) 8260C: The large number of analytes included in the continuing calibration verification (CCV) for batch 162430 gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes are outside the method-defined %D criteria. The Acetone RF for this run was outside of control limits (0.1) at 0.09287. (CCVIS 480-162430/3)

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 162430 recovered outside control limits for the following analytes: 2-Butanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. Also, the associated analyte is not a required spiking compound. (LCS 480-162430/5)

Method(s) 8260C: The associated soil sample was analyzed with the Acetone response factor in the CCVIS below 0.1 due to the samples hold time expiring.4009-28 (13-14') 010614 (480-53547-1) The sample was re-analyzed in the next analytical batch with acceptable acetone response factor and the sample results were similar, therefore the data inside of hold time has been reported.

Method(s) 8260C: Reported analyte concentrations in the following sample are below 200ug/kg and may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications: 4009-28 (13-14') 010614 (480-53547-1).

Method(s) 8260C: The large number of analytes included in the continuing calibration verification (CCV) in batch 162441 gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes are outside the method-defined %D criteria.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 162441 recovered outside control limits for the following analytes: 2-Hexanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The laboratory control sample (LCS) for batch 162649 recovered outside control limits for the following analytes: 2-Butanone. This analyte is not a required spiking compound for the associated jobs. (LCS 480-162649/4)

Method(s) 8260C: Reported analyte concentrations in the following samples are below 200ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: 4009-28 (13-14') 010614 (480-53547-1), 4009-29 (12-13') 011014 (480-53547-2), 4009-29 (12-13') 011014 (480-53547-2 MS), 4009-29 (12-13') 011014 (480-53547-2 MSD), DUP-01-011014 (480-53547-5).

Method(s) 8260C: Due to the abundance of non-TCLP compounds, the following sample(s) was diluted: (LB 480-162333/1-A), 4009-28 TCLP 010814 (480-53547-4), 4009-29 TCLP 011014 (480-53547-3). The TCLP quantitation limit exceeds the regulatory limit.

Method(s) 8260C: The following sample(s) was diluted due to the nature of theTCLP matrix: (LB 480-162333/1-A), 4009-28 TCLP 010814 (480-53547-4), 4009-29 TCLP 011014 (480-53547-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Job ID: 480-53547-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

GC Semi VOA

Method(s) 8081B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 162658 was not outside the control limits.

Method(s) 8151A: Surrogate recovery for the following samples was outside control limits: (LB 480-162320/1-E), 4009-28 TCLP 010814 (480-53547-4), 4009-29 TCLP 011014 (480-53547-3). This is routine for TCLP herbicides, due to the pH effects created during the leaching process, inhibiting the herbicide extraction procedure.

No other analytical or quality issues were noted.

Metals

Method(s) 6010C: The TCLP Extractor Blank, LB 480-162320, contained total barium above the reporting limit (RL). The associated samples 4009-28 TCLP 010814 (480-53547-4), 4009-29 TCLP 011014 (480-53547-3) contained detects for this analyte at concentrations greater than 10X the value found in the TCLP Extractor Blank; therefore, re-extraction and/or re-analysis of the samples was not performed.

Method(s) 6010C: The TCLP Extractor Blank, LB 480-162320, contained total chromium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples 4009-28 TCLP 010814 (480-53547-4), 4009-29 TCLP 011014 (480-53547-3) was not performed.

No other analytical or quality issues were noted.

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 162658, LCS/LCSD was performed.

No other analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-28 (13-14') 010614

Lab Sample ID: 480-53547-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.2	J	30	5.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: 4009-29 (12-13') 011014

Lab Sample ID: 480-53547-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.7	J	30	5.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: 4009-29 TCLP 011014

Lab Sample ID: 480-53547-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.19	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.00071	J	0.0010	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0027	J B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.0081		0.0050	0.0030	mg/L	1		6010C	TCLP

Client Sample ID: 4009-28 TCLP 010814

Lab Sample ID: 480-53547-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.011		0.010	0.0056	mg/L	1		6010C	TCLP
Barium	0.67	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.0014		0.0010	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0016	J B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.035		0.0050	0.0030	mg/L	1		6010C	TCLP

Client Sample ID: DUP-01-011014

Lab Sample ID: 480-53547-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.7	J	29	5.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: FB-01-010814

Lab Sample ID: 480-53547-6

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-28 (13-14') 010614

Lab Sample ID: 480-53547-1

Date Collected: 01/06/14 12:15

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 81.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.0	0.43	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,1,2,2-Tetrachloroethane	ND		6.0	0.97	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	1.4	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,1,2-Trichloroethane	ND		6.0	0.78	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,1-Dichloroethane	ND		6.0	0.73	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,1-Dichloroethene	ND		6.0	0.73	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,2,4-Trichlorobenzene	ND		6.0	0.36	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,2-Dibromo-3-Chloropropane	ND		6.0	3.0	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,2-Dibromoethane	ND		6.0	0.77	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,2-Dichlorobenzene	ND		6.0	0.47	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,2-Dichloroethane	ND		6.0	0.30	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,2-Dichloropropane	ND		6.0	3.0	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,3-Dichlorobenzene	ND		6.0	0.31	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
1,4-Dichlorobenzene	ND		6.0	0.84	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
2-Butanone (MEK)	ND	*	30	2.2	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
2-Hexanone	ND		30	3.0	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
4-Methyl-2-pentanone (MIBK)	ND		30	2.0	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Acetone	7.2	J	30	5.0	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Benzene	ND		6.0	0.29	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Bromodichloromethane	ND		6.0	0.80	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Bromoform	ND		6.0	3.0	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Bromomethane	ND		6.0	0.54	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Carbon disulfide	ND		6.0	3.0	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Carbon tetrachloride	ND		6.0	0.58	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Chlorobenzene	ND		6.0	0.79	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Chloroethane	ND		6.0	1.3	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Chloroform	ND		6.0	0.37	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Chloromethane	ND		6.0	0.36	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
cis-1,2-Dichloroethene	ND		6.0	0.76	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
cis-1,3-Dichloropropene	ND		6.0	0.86	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Cyclohexane	ND		6.0	0.84	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Dibromochloromethane	ND		6.0	0.76	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Dichlorodifluoromethane	ND		6.0	0.49	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Ethylbenzene	ND		6.0	0.41	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Isopropylbenzene	ND		6.0	0.90	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Methyl acetate	ND		6.0	1.1	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Methyl tert-butyl ether	ND		6.0	0.59	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Methylcyclohexane	ND		6.0	0.91	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Methylene Chloride	ND		6.0	2.7	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Styrene	ND		6.0	0.30	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Tetrachloroethene	ND		6.0	0.80	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Toluene	ND		6.0	0.45	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
trans-1,2-Dichloroethene	ND		6.0	0.62	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
trans-1,3-Dichloropropene	ND		6.0	2.6	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Trichloroethene	ND		6.0	1.3	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Trichlorofluoromethane	ND		6.0	0.56	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Vinyl chloride	ND		6.0	0.73	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	01/20/14 22:36	01/20/14 23:36	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-28 (13-14') 010614

Lab Sample ID: 480-53547-1

Date Collected: 01/06/14 12:15

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 81.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		71 - 125	01/20/14 22:36	01/20/14 23:36	1
1,2-Dichloroethane-d4 (Surr)	87		64 - 126	01/20/14 22:36	01/20/14 23:36	1
4-Bromofluorobenzene (Surr)	104		72 - 126	01/20/14 22:36	01/20/14 23:36	1

Client Sample ID: 4009-29 (12-13') 011014

Lab Sample ID: 480-53547-2

Date Collected: 01/10/14 13:30

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.0	0.43	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,1,2,2-Tetrachloroethane	ND		6.0	0.97	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	1.4	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,1,2-Trichloroethane	ND		6.0	0.78	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,1-Dichloroethane	ND		6.0	0.73	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,1-Dichloroethene	ND		6.0	0.73	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,2,4-Trichlorobenzene	ND		6.0	0.36	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,2-Dibromo-3-Chloropropane	ND		6.0	3.0	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,2-Dibromoethane	ND		6.0	0.77	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,2-Dichlorobenzene	ND		6.0	0.47	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,2-Dichloroethane	ND		6.0	0.30	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,2-Dichloropropane	ND		6.0	3.0	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,3-Dichlorobenzene	ND		6.0	0.31	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
1,4-Dichlorobenzene	ND		6.0	0.84	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
2-Butanone (MEK)	ND	*	30	2.2	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
2-Hexanone	ND		30	3.0	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
4-Methyl-2-pentanone (MIBK)	ND		30	2.0	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Acetone	5.7	J	30	5.0	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Benzene	ND		6.0	0.29	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Bromodichloromethane	ND		6.0	0.80	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Bromoform	ND		6.0	3.0	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Bromomethane	ND		6.0	0.54	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Carbon disulfide	ND		6.0	3.0	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Carbon tetrachloride	ND		6.0	0.58	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Chlorobenzene	ND		6.0	0.79	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Chloroethane	ND		6.0	1.3	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Chloroform	ND		6.0	0.37	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Chloromethane	ND		6.0	0.36	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
cis-1,2-Dichloroethene	ND		6.0	0.76	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
cis-1,3-Dichloropropene	ND		6.0	0.86	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Cyclohexane	ND		6.0	0.84	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Dibromochloromethane	ND		6.0	0.76	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Dichlorodifluoromethane	ND		6.0	0.49	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Ethylbenzene	ND		6.0	0.41	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Isopropylbenzene	ND		6.0	0.90	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Methyl acetate	ND		6.0	1.1	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Methyl tert-butyl ether	ND		6.0	0.59	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Methylcyclohexane	ND		6.0	0.91	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Methylene Chloride	ND		6.0	2.7	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1
Styrene	ND		6.0	0.30	ug/Kg	☼	01/21/14 01:14	01/22/14 04:31	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-29 (12-13') 011014

Lab Sample ID: 480-53547-2

Date Collected: 01/10/14 13:30

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		6.0	0.80	ug/Kg	*	01/21/14 01:14	01/22/14 04:31	1
Toluene	ND		6.0	0.45	ug/Kg	*	01/21/14 01:14	01/22/14 04:31	1
trans-1,2-Dichloroethene	ND		6.0	0.62	ug/Kg	*	01/21/14 01:14	01/22/14 04:31	1
trans-1,3-Dichloropropene	ND		6.0	2.6	ug/Kg	*	01/21/14 01:14	01/22/14 04:31	1
Trichloroethene	ND		6.0	1.3	ug/Kg	*	01/21/14 01:14	01/22/14 04:31	1
Trichlorofluoromethane	ND		6.0	0.56	ug/Kg	*	01/21/14 01:14	01/22/14 04:31	1
Vinyl chloride	ND		6.0	0.73	ug/Kg	*	01/21/14 01:14	01/22/14 04:31	1
Xylenes, Total	ND		12	1.0	ug/Kg	*	01/21/14 01:14	01/22/14 04:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125				01/21/14 01:14	01/22/14 04:31	1
1,2-Dichloroethane-d4 (Surr)	105		64 - 126				01/21/14 01:14	01/22/14 04:31	1
4-Bromofluorobenzene (Surr)	101		72 - 126				01/21/14 01:14	01/22/14 04:31	1

Client Sample ID: 4009-29 TCLP 011014

Lab Sample ID: 480-53547-3

Date Collected: 01/10/14 17:00

Matrix: Solid

Date Received: 01/17/14 20:08

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			01/22/14 07:09	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			01/22/14 07:09	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			01/22/14 07:09	10
Benzene	ND		0.010	0.0041	mg/L			01/22/14 07:09	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			01/22/14 07:09	10
Chlorobenzene	ND		0.010	0.0075	mg/L			01/22/14 07:09	10
Chloroform	ND		0.010	0.0034	mg/L			01/22/14 07:09	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			01/22/14 07:09	10
Trichloroethene	ND		0.010	0.0046	mg/L			01/22/14 07:09	10
Vinyl chloride	ND		0.010	0.0090	mg/L			01/22/14 07:09	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137					01/22/14 07:09	10
Toluene-d8 (Surr)	97		71 - 126					01/22/14 07:09	10
4-Bromofluorobenzene (Surr)	100		73 - 120					01/22/14 07:09	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		01/22/14 06:00	01/24/14 06:49	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		01/22/14 06:00	01/24/14 06:49	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		01/22/14 06:00	01/24/14 06:49	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		01/22/14 06:00	01/24/14 06:49	1
2-Methylphenol	ND		0.0050	0.00040	mg/L		01/22/14 06:00	01/24/14 06:49	1
3-Methylphenol	ND		0.010	0.00040	mg/L		01/22/14 06:00	01/24/14 06:49	1
4-Methylphenol	ND		0.010	0.00036	mg/L		01/22/14 06:00	01/24/14 06:49	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		01/22/14 06:00	01/24/14 06:49	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		01/22/14 06:00	01/24/14 06:49	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		01/22/14 06:00	01/24/14 06:49	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		01/22/14 06:00	01/24/14 06:49	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		01/22/14 06:00	01/24/14 06:49	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-29 TCLP 011014

Lab Sample ID: 480-53547-3

Date Collected: 01/10/14 17:00

Matrix: Solid

Date Received: 01/17/14 20:08

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		0.025	0.00041	mg/L		01/22/14 06:00	01/24/14 06:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		52 - 132				01/22/14 06:00	01/24/14 06:49	1
2-Fluorobiphenyl	65		48 - 120				01/22/14 06:00	01/24/14 06:49	1
2-Fluorophenol	35		20 - 120				01/22/14 06:00	01/24/14 06:49	1
Nitrobenzene-d5	63		46 - 120				01/22/14 06:00	01/24/14 06:49	1
p-Terphenyl-d14	95		67 - 150				01/22/14 06:00	01/24/14 06:49	1
Phenol-d5	26		16 - 120				01/22/14 06:00	01/24/14 06:49	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0020	0.000029	mg/L		01/22/14 06:16	01/23/14 14:17	1
Endrin	ND	*	0.00020	0.000014	mg/L		01/22/14 06:16	01/23/14 14:17	1
gamma-BHC (Lindane)	ND	*	0.00020	0.0000060	mg/L		01/22/14 06:16	01/23/14 14:17	1
Heptachlor	ND	*	0.00020	0.0000085	mg/L		01/22/14 06:16	01/23/14 14:17	1
Heptachlor epoxide	ND	*	0.00020	0.0000053	mg/L		01/22/14 06:16	01/23/14 14:17	1
Methoxychlor	ND	*	0.00020	0.000014	mg/L		01/22/14 06:16	01/23/14 14:17	1
Toxaphene	ND		0.0020	0.00012	mg/L		01/22/14 06:16	01/23/14 14:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	100		20 - 120				01/22/14 06:16	01/23/14 14:17	1
Tetrachloro-m-xylene	82		36 - 120				01/22/14 06:16	01/23/14 14:17	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.0020	0.00040	mg/L		01/23/14 05:55	01/24/14 19:25	1
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		01/23/14 05:55	01/24/14 19:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	20	X	40 - 135				01/23/14 05:55	01/24/14 19:25	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		01/21/14 10:10	01/22/14 11:44	1
Barium	0.19	B	0.0020	0.00070	mg/L		01/21/14 10:10	01/22/14 11:44	1
Cadmium	0.00071	J	0.0010	0.00050	mg/L		01/21/14 10:10	01/22/14 11:44	1
Chromium	0.0027	J B	0.0040	0.0010	mg/L		01/21/14 10:10	01/22/14 11:44	1
Lead	0.0081		0.0050	0.0030	mg/L		01/21/14 10:10	01/22/14 11:44	1
Selenium	ND		0.015	0.0087	mg/L		01/21/14 10:10	01/22/14 11:44	1
Silver	ND		0.0030	0.0017	mg/L		01/21/14 10:10	01/22/14 11:44	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/21/14 10:55	01/22/14 10:08	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-28 TCLP 010814

Lab Sample ID: 480-53547-4

Date Collected: 01/08/14 18:00

Matrix: Solid

Date Received: 01/17/14 20:08

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			01/22/14 07:32	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			01/22/14 07:32	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			01/22/14 07:32	10
Benzene	ND		0.010	0.0041	mg/L			01/22/14 07:32	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			01/22/14 07:32	10
Chlorobenzene	ND		0.010	0.0075	mg/L			01/22/14 07:32	10
Chloroform	ND		0.010	0.0034	mg/L			01/22/14 07:32	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			01/22/14 07:32	10
Trichloroethene	ND		0.010	0.0046	mg/L			01/22/14 07:32	10
Vinyl chloride	ND		0.010	0.0090	mg/L			01/22/14 07:32	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137					01/22/14 07:32	10
Toluene-d8 (Surr)	100		71 - 126					01/22/14 07:32	10
4-Bromofluorobenzene (Surr)	100		73 - 120					01/22/14 07:32	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		01/22/14 06:00	01/24/14 07:12	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		01/22/14 06:00	01/24/14 07:12	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		01/22/14 06:00	01/24/14 07:12	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		01/22/14 06:00	01/24/14 07:12	1
2-Methylphenol	ND		0.0050	0.00040	mg/L		01/22/14 06:00	01/24/14 07:12	1
3-Methylphenol	ND		0.010	0.00040	mg/L		01/22/14 06:00	01/24/14 07:12	1
4-Methylphenol	ND		0.010	0.00036	mg/L		01/22/14 06:00	01/24/14 07:12	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		01/22/14 06:00	01/24/14 07:12	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		01/22/14 06:00	01/24/14 07:12	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		01/22/14 06:00	01/24/14 07:12	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		01/22/14 06:00	01/24/14 07:12	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		01/22/14 06:00	01/24/14 07:12	1
Pyridine	ND		0.025	0.00041	mg/L		01/22/14 06:00	01/24/14 07:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	94		52 - 132				01/22/14 06:00	01/24/14 07:12	1
2-Fluorobiphenyl	83		48 - 120				01/22/14 06:00	01/24/14 07:12	1
2-Fluorophenol	42		20 - 120				01/22/14 06:00	01/24/14 07:12	1
Nitrobenzene-d5	75		46 - 120				01/22/14 06:00	01/24/14 07:12	1
p-Terphenyl-d14	109		67 - 150				01/22/14 06:00	01/24/14 07:12	1
Phenol-d5	32		16 - 120				01/22/14 06:00	01/24/14 07:12	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0020	0.000029	mg/L		01/22/14 06:16	01/23/14 14:34	1
Endrin	ND	*	0.00020	0.000014	mg/L		01/22/14 06:16	01/23/14 14:34	1
gamma-BHC (Lindane)	ND	*	0.00020	0.0000060	mg/L		01/22/14 06:16	01/23/14 14:34	1
Heptachlor	ND	*	0.00020	0.0000085	mg/L		01/22/14 06:16	01/23/14 14:34	1
Heptachlor epoxide	ND	*	0.00020	0.0000053	mg/L		01/22/14 06:16	01/23/14 14:34	1
Methoxychlor	ND	*	0.00020	0.000014	mg/L		01/22/14 06:16	01/23/14 14:34	1
Toxaphene	ND		0.0020	0.00012	mg/L		01/22/14 06:16	01/23/14 14:34	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-28 TCLP 010814

Lab Sample ID: 480-53547-4

Date Collected: 01/08/14 18:00

Matrix: Solid

Date Received: 01/17/14 20:08

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	96		20 - 120	01/22/14 06:16	01/23/14 14:34	1
Tetrachloro-m-xylene	80		36 - 120	01/22/14 06:16	01/23/14 14:34	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.0020	0.00040	mg/L		01/23/14 05:55	01/24/14 19:55	1
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		01/23/14 05:55	01/24/14 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	20	X	40 - 135	01/23/14 05:55	01/24/14 19:55	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011		0.010	0.0056	mg/L		01/21/14 10:10	01/22/14 11:47	1
Barium	0.67	B	0.0020	0.00070	mg/L		01/21/14 10:10	01/22/14 11:47	1
Cadmium	0.0014		0.0010	0.00050	mg/L		01/21/14 10:10	01/22/14 11:47	1
Chromium	0.0016	J B	0.0040	0.0010	mg/L		01/21/14 10:10	01/22/14 11:47	1
Lead	0.035		0.0050	0.0030	mg/L		01/21/14 10:10	01/22/14 11:47	1
Selenium	ND		0.015	0.0087	mg/L		01/21/14 10:10	01/22/14 11:47	1
Silver	ND		0.0030	0.0017	mg/L		01/21/14 10:10	01/22/14 11:47	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/21/14 10:55	01/22/14 10:10	1

Client Sample ID: DUP-01-011014

Lab Sample ID: 480-53547-5

Date Collected: 01/10/14 00:00

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.9	0.43	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,1,2,2-Tetrachloroethane	ND		5.9	0.96	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	1.3	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,1,2-Trichloroethane	ND		5.9	0.77	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,1-Dichloroethane	ND		5.9	0.72	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,1-Dichloroethene	ND		5.9	0.72	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,2,4-Trichlorobenzene	ND		5.9	0.36	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,2-Dibromo-3-Chloropropane	ND		5.9	2.9	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,2-Dibromoethane	ND		5.9	0.76	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,2-Dichlorobenzene	ND		5.9	0.46	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,2-Dichloroethane	ND		5.9	0.30	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,2-Dichloropropane	ND		5.9	2.9	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,3-Dichlorobenzene	ND		5.9	0.30	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
1,4-Dichlorobenzene	ND		5.9	0.82	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
2-Butanone (MEK)	ND	*	29	2.2	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
2-Hexanone	ND		29	2.9	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
4-Methyl-2-pentanone (MIBK)	ND		29	1.9	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
Acetone	7.7	J	29	5.0	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
Benzene	ND		5.9	0.29	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1
Bromodichloromethane	ND		5.9	0.79	ug/Kg	*	01/21/14 01:14	01/22/14 05:49	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: DUP-01-011014

Lab Sample ID: 480-53547-5

Date Collected: 01/10/14 00:00

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		5.9	2.9	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Bromomethane	ND		5.9	0.53	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Carbon disulfide	ND		5.9	2.9	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Carbon tetrachloride	ND		5.9	0.57	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Chlorobenzene	ND		5.9	0.78	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Chloroethane	ND		5.9	1.3	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Chloroform	ND		5.9	0.36	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Chloromethane	ND		5.9	0.36	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
cis-1,2-Dichloroethene	ND		5.9	0.75	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
cis-1,3-Dichloropropene	ND		5.9	0.85	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Cyclohexane	ND		5.9	0.82	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Dibromochloromethane	ND		5.9	0.75	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Dichlorodifluoromethane	ND		5.9	0.49	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Ethylbenzene	ND		5.9	0.41	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Isopropylbenzene	ND		5.9	0.89	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Methyl acetate	ND		5.9	1.1	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Methyl tert-butyl ether	ND		5.9	0.58	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Methylcyclohexane	ND		5.9	0.90	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Methylene Chloride	ND		5.9	2.7	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Styrene	ND		5.9	0.29	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Tetrachloroethene	ND		5.9	0.79	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Toluene	ND		5.9	0.45	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
trans-1,2-Dichloroethene	ND		5.9	0.61	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
trans-1,3-Dichloropropene	ND		5.9	2.6	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Trichloroethene	ND		5.9	1.3	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Trichlorofluoromethane	ND		5.9	0.56	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Vinyl chloride	ND		5.9	0.72	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1
Xylenes, Total	ND		12	0.99	ug/Kg	☼	01/21/14 01:14	01/22/14 05:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125	01/21/14 01:14	01/22/14 05:49	1
1,2-Dichloroethane-d4 (Surr)	102		64 - 126	01/21/14 01:14	01/22/14 05:49	1
4-Bromofluorobenzene (Surr)	101		72 - 126	01/21/14 01:14	01/22/14 05:49	1

Client Sample ID: FB-01-010814

Lab Sample ID: 480-53547-6

Date Collected: 01/08/14 15:30

Matrix: Water

Date Received: 01/17/14 20:08

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/21/14 08:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/21/14 08:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/21/14 08:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/21/14 08:44	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/21/14 08:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/21/14 08:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/21/14 08:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/21/14 08:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/21/14 08:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/21/14 08:44	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: FB-01-010814

Lab Sample ID: 480-53547-6

Date Collected: 01/08/14 15:30

Matrix: Water

Date Received: 01/17/14 20:08

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/21/14 08:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/21/14 08:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/21/14 08:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/21/14 08:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/21/14 08:44	1
2-Hexanone	ND	*	5.0	1.2	ug/L			01/21/14 08:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/21/14 08:44	1
Acetone	ND		10	3.0	ug/L			01/21/14 08:44	1
Benzene	ND		1.0	0.41	ug/L			01/21/14 08:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/21/14 08:44	1
Bromoform	ND		1.0	0.26	ug/L			01/21/14 08:44	1
Bromomethane	ND		1.0	0.69	ug/L			01/21/14 08:44	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/21/14 08:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/21/14 08:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/21/14 08:44	1
Chloroethane	ND		1.0	0.32	ug/L			01/21/14 08:44	1
Chloroform	ND		1.0	0.34	ug/L			01/21/14 08:44	1
Chloromethane	ND		1.0	0.35	ug/L			01/21/14 08:44	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/21/14 08:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/21/14 08:44	1
Cyclohexane	ND		1.0	0.18	ug/L			01/21/14 08:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/21/14 08:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/21/14 08:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/21/14 08:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/21/14 08:44	1
Methyl acetate	ND		1.0	0.50	ug/L			01/21/14 08:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/21/14 08:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/21/14 08:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/21/14 08:44	1
Styrene	ND		1.0	0.73	ug/L			01/21/14 08:44	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/21/14 08:44	1
Toluene	ND		1.0	0.51	ug/L			01/21/14 08:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/21/14 08:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/21/14 08:44	1
Trichloroethene	ND		1.0	0.46	ug/L			01/21/14 08:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/21/14 08:44	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/21/14 08:44	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/21/14 08:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 137		01/21/14 08:44	1
4-Bromofluorobenzene (Surr)	107		73 - 120		01/21/14 08:44	1
Toluene-d8 (Surr)	89		71 - 126		01/21/14 08:44	1

Surrogate Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 8260C - TCLP Volatiles

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	BFB (73-120)	TOL (71-126)
LCS 480-162635/4	Lab Control Sample	106	100	100
MB 480-162635/6	Method Blank	105	101	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)
 TOL = Toluene-d8 (Surr)

Method: 8260C - TCLP Volatiles

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-53547-3	4009-29 TCLP 011014	103	97	100
480-53547-4	4009-28 TCLP 010814	100	100	100
LB 480-162333/1-A	Method Blank	100	101	104

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (71-125)	12DCE (64-126)	BFB (72-126)
480-53547-1	4009-28 (13-14') 010614	96	87	104
480-53547-2	4009-29 (12-13') 011014	99	105	101
480-53547-2 MS	4009-29 (12-13') 011014	99	93	98
480-53547-2 MSD	4009-29 (12-13') 011014	98	94	100
480-53547-5	DUP-01-011014	99	102	101
LCS 480-162430/5	Lab Control Sample	95	81	103
LCS 480-162649/4	Lab Control Sample	98	101	100
LCSD 480-162430/8	Lab Control Sample Dup	96	81	105
MB 480-162430/6	Method Blank	96	79	103
MB 480-162649/5	Method Blank	99	100	100

Surrogate Legend

TOL = Toluene-d8 (Surr)
 12DCE = 1,2-Dichloroethane-d4 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

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	BFB	TOL
		(66-137)	(73-120)	(71-126)
480-53547-6	FB-01-010814	88	107	89
LCS 480-162441/4	Lab Control Sample	99	116	97
MB 480-162441/6	Method Blank	91	115	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP	FBP	2FP	NBZ	TPH	PHL
		(52-132)	(48-120)	(20-120)	(46-120)	(67-150)	(16-120)
LCS 480-162657/2-A	Lab Control Sample	99	93	49	87	111	36
LCSD 480-162657/3-A	Lab Control Sample Dup	92	81	41	75	104	31
MB 480-162657/1-A	Method Blank	75	76	38	70	98	29

Surrogate Legend

TBP = 2,4,6-Tribromophenol

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

TPH = p-Terphenyl-d14

PHL = Phenol-d5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP	FBP	2FP	NBZ	TPH	PHL
		(52-132)	(48-120)	(20-120)	(46-120)	(67-150)	(16-120)
480-53547-3	4009-29 TCLP 011014	83	65	35	63	95	26
480-53547-4	4009-28 TCLP 010814	94	83	42	75	109	32
LB 480-162320/1-D	Method Blank	88	81	40	71	102	30

Surrogate Legend

TBP = 2,4,6-Tribromophenol

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

TPH = p-Terphenyl-d14

PHL = Phenol-d5

TestAmerica Buffalo

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB2 (20-120)	TCX2 (36-120)
LB 480-162658/4-A	Method Blank	92	81
LCS 480-162658/2-A	Lab Control Sample	81	84
LCSD 480-162658/3-A	Lab Control Sample Dup	81	87
MB 480-162658/1-A	Method Blank	91	102

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB2 (20-120)	TCX2 (36-120)
480-53547-3	4009-29 TCLP 011014	100	82
480-53547-4	4009-28 TCLP 010814	96	80

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPA2 (40-135)
LCS 480-162857/2-A	Lab Control Sample	130
MB 480-162857/1-A	Method Blank	83

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPA2 (40-135)
480-53547-3	4009-29 TCLP 011014	20 X
480-53547-4	4009-28 TCLP 010814	20 X
LB 480-162320/1-E	Method Blank	15 X

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 8260C - TCLP Volatiles

Lab Sample ID: MB 480-162635/6

Matrix: Solid

Analysis Batch: 162635

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			01/21/14 22:17	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			01/21/14 22:17	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			01/21/14 22:17	1
Benzene	ND		0.0010	0.00041	mg/L			01/21/14 22:17	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			01/21/14 22:17	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			01/21/14 22:17	1
Chloroform	ND		0.0010	0.00034	mg/L			01/21/14 22:17	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			01/21/14 22:17	1
Trichloroethene	ND		0.0010	0.00046	mg/L			01/21/14 22:17	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			01/21/14 22:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137		01/21/14 22:17	1
4-Bromofluorobenzene (Surr)	101		73 - 120		01/21/14 22:17	1
Toluene-d8 (Surr)	100		71 - 126		01/21/14 22:17	1

Lab Sample ID: LCS 480-162635/4

Matrix: Solid

Analysis Batch: 162635

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.0250	0.0252		mg/L		101	58 - 121
1,2-Dichloroethane	0.0250	0.0252		mg/L		101	75 - 127
Benzene	0.0250	0.0249		mg/L		100	71 - 124
Chlorobenzene	0.0250	0.0251		mg/L		100	72 - 120
Tetrachloroethene	0.0250	0.0259		mg/L		104	74 - 122
Trichloroethene	0.0250	0.0254		mg/L		102	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120
Toluene-d8 (Surr)	100		71 - 126

Lab Sample ID: LB 480-162333/1-A

Matrix: Solid

Analysis Batch: 162635

Client Sample ID: Method Blank

Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			01/22/14 06:21	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			01/22/14 06:21	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			01/22/14 06:21	10
Benzene	ND		0.010	0.0041	mg/L			01/22/14 06:21	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			01/22/14 06:21	10
Chlorobenzene	ND		0.010	0.0075	mg/L			01/22/14 06:21	10
Chloroform	ND		0.010	0.0034	mg/L			01/22/14 06:21	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			01/22/14 06:21	10
Trichloroethene	ND		0.010	0.0046	mg/L			01/22/14 06:21	10

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 8260C - TCLP Volatiles (Continued)

Lab Sample ID: LB 480-162333/1-A
Matrix: Solid
Analysis Batch: 162635

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.010	0.0090	mg/L			01/22/14 06:21	10
Surrogate	%Recovery	LB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137					01/22/14 06:21	10
4-Bromofluorobenzene (Surr)	104		73 - 120					01/22/14 06:21	10
Toluene-d8 (Surr)	101		71 - 126					01/22/14 06:21	10

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

Lab Sample ID: MB 480-162430/6
Matrix: Solid
Analysis Batch: 162430

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	ND		5.0	0.36	ug/Kg			01/20/14 22:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			01/20/14 22:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			01/20/14 22:46	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			01/20/14 22:46	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			01/20/14 22:46	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			01/20/14 22:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			01/20/14 22:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			01/20/14 22:46	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			01/20/14 22:46	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			01/20/14 22:46	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			01/20/14 22:46	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			01/20/14 22:46	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			01/20/14 22:46	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			01/20/14 22:46	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			01/20/14 22:46	1
2-Hexanone	ND		25	2.5	ug/Kg			01/20/14 22:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			01/20/14 22:46	1
Acetone	ND		25	4.2	ug/Kg			01/20/14 22:46	1
Benzene	ND		5.0	0.25	ug/Kg			01/20/14 22:46	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			01/20/14 22:46	1
Bromoform	ND		5.0	2.5	ug/Kg			01/20/14 22:46	1
Bromomethane	ND		5.0	0.45	ug/Kg			01/20/14 22:46	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			01/20/14 22:46	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			01/20/14 22:46	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			01/20/14 22:46	1
Chloroethane	ND		5.0	1.1	ug/Kg			01/20/14 22:46	1
Chloroform	ND		5.0	0.31	ug/Kg			01/20/14 22:46	1
Chloromethane	ND		5.0	0.30	ug/Kg			01/20/14 22:46	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			01/20/14 22:46	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			01/20/14 22:46	1
Cyclohexane	ND		5.0	0.70	ug/Kg			01/20/14 22:46	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			01/20/14 22:46	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			01/20/14 22:46	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			01/20/14 22:46	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

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

Lab Sample ID: MB 480-162430/6

Matrix: Solid

Analysis Batch: 162430

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	0.75	ug/Kg			01/20/14 22:46	1
Methyl acetate	ND		5.0	0.93	ug/Kg			01/20/14 22:46	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			01/20/14 22:46	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			01/20/14 22:46	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			01/20/14 22:46	1
Styrene	ND		5.0	0.25	ug/Kg			01/20/14 22:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			01/20/14 22:46	1
Toluene	ND		5.0	0.38	ug/Kg			01/20/14 22:46	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			01/20/14 22:46	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			01/20/14 22:46	1
Trichloroethene	ND		5.0	1.1	ug/Kg			01/20/14 22:46	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			01/20/14 22:46	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			01/20/14 22:46	1
Xylenes, Total	ND		10	0.84	ug/Kg			01/20/14 22:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		64 - 126		01/20/14 22:46	1
4-Bromofluorobenzene (Surr)	103		72 - 126		01/20/14 22:46	1
Toluene-d8 (Surr)	96		71 - 125		01/20/14 22:46	1

Lab Sample ID: LCS 480-162430/5

Matrix: Solid

Analysis Batch: 162430

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	47.4		ug/Kg		95	73 - 126
1,1-Dichloroethene	50.0	48.2		ug/Kg		96	59 - 125
1,2-Dichlorobenzene	50.0	56.0		ug/Kg		112	75 - 120
1,2-Dichloroethane	50.0	40.5		ug/Kg		81	77 - 122
Benzene	50.0	47.0		ug/Kg		94	79 - 127
Chlorobenzene	50.0	53.1		ug/Kg		106	76 - 124
cis-1,2-Dichloroethene	50.0	47.4		ug/Kg		95	81 - 117
Ethylbenzene	50.0	53.8		ug/Kg		108	80 - 120
Methyl tert-butyl ether	50.0	47.8		ug/Kg		96	63 - 125
Tetrachloroethene	50.0	55.1		ug/Kg		110	74 - 122
Toluene	50.0	52.8		ug/Kg		106	74 - 128
trans-1,2-Dichloroethene	50.0	47.7		ug/Kg		95	78 - 126
Trichloroethene	50.0	48.4		ug/Kg		97	77 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	81		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Toluene-d8 (Surr)	95		71 - 125

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

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

Lab Sample ID: LCSD 480-162430/8

Matrix: Solid

Analysis Batch: 162430

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	50.0	47.6		ug/Kg		95	73 - 126	0	20
1,1-Dichloroethene	50.0	48.5		ug/Kg		97	59 - 125	0	20
1,2-Dichlorobenzene	50.0	55.2		ug/Kg		110	75 - 120	1	20
1,2-Dichloroethane	50.0	40.3		ug/Kg		81	77 - 122	1	20
Benzene	50.0	46.7		ug/Kg		93	79 - 127	1	20
Chlorobenzene	50.0	52.7		ug/Kg		105	76 - 124	1	20
cis-1,2-Dichloroethene	50.0	47.4		ug/Kg		95	81 - 117	0	20
Ethylbenzene	50.0	53.5		ug/Kg		107	80 - 120	1	20
Methyl tert-butyl ether	50.0	46.5		ug/Kg		93	63 - 125	3	20
Tetrachloroethene	50.0	54.4		ug/Kg		109	74 - 122	1	20
Toluene	50.0	52.8		ug/Kg		106	74 - 128	0	20
trans-1,2-Dichloroethene	50.0	47.5		ug/Kg		95	78 - 126	0	20
Trichloroethene	50.0	48.2		ug/Kg		96	77 - 129	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	81		64 - 126
4-Bromofluorobenzene (Surr)	105		72 - 126
Toluene-d8 (Surr)	96		71 - 125

Lab Sample ID: MB 480-162441/6

Matrix: Water

Analysis Batch: 162441

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	ND		1.0	0.82	ug/L			01/21/14 00:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/21/14 00:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/21/14 00:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/21/14 00:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/21/14 00:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/21/14 00:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/21/14 00:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/21/14 00:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/21/14 00:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/21/14 00:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/21/14 00:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/21/14 00:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/21/14 00:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/21/14 00:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/21/14 00:29	1
2-Hexanone	ND		5.0	1.2	ug/L			01/21/14 00:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/21/14 00:29	1
Acetone	ND		10	3.0	ug/L			01/21/14 00:29	1
Benzene	ND		1.0	0.41	ug/L			01/21/14 00:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/21/14 00:29	1
Bromoform	ND		1.0	0.26	ug/L			01/21/14 00:29	1
Bromomethane	ND		1.0	0.69	ug/L			01/21/14 00:29	1
Carbon disulfide	0.255	J	1.0	0.19	ug/L			01/21/14 00:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/21/14 00:29	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

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

Lab Sample ID: MB 480-162441/6

Matrix: Water

Analysis Batch: 162441

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			01/21/14 00:29	1
Chloroethane	ND		1.0	0.32	ug/L			01/21/14 00:29	1
Chloroform	ND		1.0	0.34	ug/L			01/21/14 00:29	1
Chloromethane	ND		1.0	0.35	ug/L			01/21/14 00:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/21/14 00:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/21/14 00:29	1
Cyclohexane	ND		1.0	0.18	ug/L			01/21/14 00:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/21/14 00:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/21/14 00:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/21/14 00:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/21/14 00:29	1
Methyl acetate	ND		1.0	0.50	ug/L			01/21/14 00:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/21/14 00:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/21/14 00:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/21/14 00:29	1
Styrene	ND		1.0	0.73	ug/L			01/21/14 00:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/21/14 00:29	1
Toluene	ND		1.0	0.51	ug/L			01/21/14 00:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/21/14 00:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/21/14 00:29	1
Trichloroethene	ND		1.0	0.46	ug/L			01/21/14 00:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/21/14 00:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/21/14 00:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/21/14 00:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 137		01/21/14 00:29	1
4-Bromofluorobenzene (Surr)	115		73 - 120		01/21/14 00:29	1
Toluene-d8 (Surr)	95		71 - 126		01/21/14 00:29	1

Lab Sample ID: LCS 480-162441/4

Matrix: Water

Analysis Batch: 162441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.2		ug/L		101	71 - 129
1,1-Dichloroethene	25.0	26.4		ug/L		106	58 - 121
1,2-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 124
1,2-Dichloroethane	25.0	24.1		ug/L		96	75 - 127
Benzene	25.0	25.6		ug/L		102	71 - 124
Chlorobenzene	25.0	24.9		ug/L		100	72 - 120
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	74 - 124
Ethylbenzene	25.0	24.1		ug/L		96	77 - 123
Methyl tert-butyl ether	25.0	26.0		ug/L		104	64 - 127
Tetrachloroethene	25.0	28.5		ug/L		114	74 - 122
Toluene	25.0	24.6		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	26.1		ug/L		104	73 - 127
Trichloroethene	25.0	26.2		ug/L		105	74 - 123

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

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

Lab Sample ID: LCS 480-162441/4
Matrix: Water
Analysis Batch: 162441

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

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
4-Bromofluorobenzene (Surr)	116		73 - 120
Toluene-d8 (Surr)	97		71 - 126

Lab Sample ID: 480-53547-2 MS
Matrix: Solid
Analysis Batch: 162649

Client Sample ID: 4009-29 (12-13') 011014
Prep Type: Total/NA
Prep Batch: 162459

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
1,1-Dichloroethane	ND		60.3	59.7		ug/Kg	*	99		73 - 126
1,1-Dichloroethene	ND		60.3	59.2		ug/Kg	*	98		59 - 125
1,2-Dichlorobenzene	ND		60.3	57.6		ug/Kg	*	96		75 - 120
1,2-Dichloroethane	ND		60.3	53.5		ug/Kg	*	89		77 - 122
Benzene	ND		60.3	58.5		ug/Kg	*	97		79 - 127
Chlorobenzene	ND		60.3	57.6		ug/Kg	*	96		76 - 124
cis-1,2-Dichloroethene	ND		60.3	59.0		ug/Kg	*	98		81 - 117
Ethylbenzene	ND		60.3	58.8		ug/Kg	*	97		80 - 120
Methyl tert-butyl ether	ND		60.3	51.6		ug/Kg	*	86		63 - 125
Tetrachloroethene	ND		60.3	60.3		ug/Kg	*	100		74 - 122
Toluene	ND		60.3	57.6		ug/Kg	*	96		74 - 128
trans-1,2-Dichloroethene	ND		60.3	58.9		ug/Kg	*	98		78 - 126
Trichloroethene	ND		60.3	56.6		ug/Kg	*	94		77 - 129

Surrogate	MS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	99		71 - 125
1,2-Dichloroethane-d4 (Surr)	93		64 - 126
4-Bromofluorobenzene (Surr)	98		72 - 126

Lab Sample ID: 480-53547-2 MSD
Matrix: Solid
Analysis Batch: 162649

Client Sample ID: 4009-29 (12-13') 011014
Prep Type: Total/NA
Prep Batch: 162459

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	Limits	RPD	
	Result	Qualifier		Result	Qualifier						RPD	Limit
1,1-Dichloroethane	ND		59.7	56.7		ug/Kg	*	95		73 - 126	5	30
1,1-Dichloroethene	ND		59.7	56.3		ug/Kg	*	94		59 - 125	5	30
1,2-Dichlorobenzene	ND		59.7	55.3		ug/Kg	*	93		75 - 120	4	30
1,2-Dichloroethane	ND		59.7	52.5		ug/Kg	*	88		77 - 122	2	30
Benzene	ND		59.7	55.9		ug/Kg	*	94		79 - 127	5	30
Chlorobenzene	ND		59.7	55.6		ug/Kg	*	93		76 - 124	4	30
cis-1,2-Dichloroethene	ND		59.7	56.9		ug/Kg	*	95		81 - 117	4	30
Ethylbenzene	ND		59.7	56.1		ug/Kg	*	94		80 - 120	5	30
Methyl tert-butyl ether	ND		59.7	52.9		ug/Kg	*	89		63 - 125	2	30
Tetrachloroethene	ND		59.7	58.1		ug/Kg	*	97		74 - 122	4	30
Toluene	ND		59.7	54.9		ug/Kg	*	92		74 - 128	5	30
trans-1,2-Dichloroethene	ND		59.7	55.6		ug/Kg	*	93		78 - 126	6	30
Trichloroethene	ND		59.7	54.3		ug/Kg	*	91		77 - 129	4	30

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

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

Lab Sample ID: 480-53547-2 MSD

Matrix: Solid

Analysis Batch: 162649

Client Sample ID: 4009-29 (12-13') 011014

Prep Type: Total/NA

Prep Batch: 162459

<i>Surrogate</i>	<i>MSD %Recovery</i>	<i>MSD Qualifier</i>	<i>Limits</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125
<i>1,2-Dichloroethane-d4 (Surr)</i>	94		64 - 126
<i>4-Bromofluorobenzene (Surr)</i>	100		72 - 126

Lab Sample ID: MB 480-162649/5

Matrix: Solid

Analysis Batch: 162649

Client Sample ID: Method Blank

Prep Type: Total/NA

<i>Analyte</i>	<i>MB Result</i>	<i>MB Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			01/22/14 03:26	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			01/22/14 03:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			01/22/14 03:26	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			01/22/14 03:26	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			01/22/14 03:26	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			01/22/14 03:26	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			01/22/14 03:26	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			01/22/14 03:26	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			01/22/14 03:26	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			01/22/14 03:26	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			01/22/14 03:26	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			01/22/14 03:26	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			01/22/14 03:26	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			01/22/14 03:26	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			01/22/14 03:26	1
2-Hexanone	ND		25	2.5	ug/Kg			01/22/14 03:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			01/22/14 03:26	1
Acetone	ND		25	4.2	ug/Kg			01/22/14 03:26	1
Benzene	ND		5.0	0.25	ug/Kg			01/22/14 03:26	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			01/22/14 03:26	1
Bromoform	ND		5.0	2.5	ug/Kg			01/22/14 03:26	1
Bromomethane	ND		5.0	0.45	ug/Kg			01/22/14 03:26	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			01/22/14 03:26	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			01/22/14 03:26	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			01/22/14 03:26	1
Chloroethane	ND		5.0	1.1	ug/Kg			01/22/14 03:26	1
Chloroform	ND		5.0	0.31	ug/Kg			01/22/14 03:26	1
Chloromethane	ND		5.0	0.30	ug/Kg			01/22/14 03:26	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			01/22/14 03:26	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			01/22/14 03:26	1
Cyclohexane	ND		5.0	0.70	ug/Kg			01/22/14 03:26	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			01/22/14 03:26	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			01/22/14 03:26	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			01/22/14 03:26	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			01/22/14 03:26	1
Methyl acetate	ND		5.0	0.93	ug/Kg			01/22/14 03:26	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			01/22/14 03:26	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			01/22/14 03:26	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			01/22/14 03:26	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

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

Lab Sample ID: MB 480-162649/5

Matrix: Solid

Analysis Batch: 162649

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	0.25	ug/Kg			01/22/14 03:26	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			01/22/14 03:26	1
Toluene	ND		5.0	0.38	ug/Kg			01/22/14 03:26	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			01/22/14 03:26	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			01/22/14 03:26	1
Trichloroethene	ND		5.0	1.1	ug/Kg			01/22/14 03:26	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			01/22/14 03:26	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			01/22/14 03:26	1
Xylenes, Total	ND		10	0.84	ug/Kg			01/22/14 03:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		64 - 126		01/22/14 03:26	1
4-Bromofluorobenzene (Surr)	100		72 - 126		01/22/14 03:26	1
Toluene-d8 (Surr)	99		71 - 125		01/22/14 03:26	1

Lab Sample ID: LCS 480-162649/4

Matrix: Solid

Analysis Batch: 162649

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	52.0		ug/Kg		104	73 - 126
1,1-Dichloroethene	50.0	52.5		ug/Kg		105	59 - 125
1,2-Dichlorobenzene	50.0	51.1		ug/Kg		102	75 - 120
1,2-Dichloroethane	50.0	51.1		ug/Kg		102	77 - 122
Benzene	50.0	51.4		ug/Kg		103	79 - 127
Chlorobenzene	50.0	51.0		ug/Kg		102	76 - 124
cis-1,2-Dichloroethene	50.0	52.0		ug/Kg		104	81 - 117
Ethylbenzene	50.0	51.4		ug/Kg		103	80 - 120
Methyl tert-butyl ether	50.0	51.1		ug/Kg		102	63 - 125
Tetrachloroethene	50.0	55.9		ug/Kg		112	74 - 122
Toluene	50.0	50.3		ug/Kg		101	74 - 128
trans-1,2-Dichloroethene	50.0	52.3		ug/Kg		105	78 - 126
Trichloroethene	50.0	50.4		ug/Kg		101	77 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		64 - 126
4-Bromofluorobenzene (Surr)	100		72 - 126
Toluene-d8 (Surr)	98		71 - 125

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162657/1-A

Matrix: Solid

Analysis Batch: 162997

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 162657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0025	0.00012	mg/L		01/22/14 06:00	01/24/14 03:45	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162657/1-A
Matrix: Solid
Analysis Batch: 162997

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.0013	0.00012	mg/L		01/22/14 06:00	01/24/14 03:45	1
2,4,6-Trichlorophenol	ND		0.0013	0.00015	mg/L		01/22/14 06:00	01/24/14 03:45	1
2,4-Dinitrotoluene	ND		0.0013	0.00011	mg/L		01/22/14 06:00	01/24/14 03:45	1
2-Methylphenol	ND		0.0013	0.00010	mg/L		01/22/14 06:00	01/24/14 03:45	1
3-Methylphenol	ND		0.0025	0.00010	mg/L		01/22/14 06:00	01/24/14 03:45	1
4-Methylphenol	ND		0.0025	0.000090	mg/L		01/22/14 06:00	01/24/14 03:45	1
Hexachlorobenzene	ND		0.0013	0.00013	mg/L		01/22/14 06:00	01/24/14 03:45	1
Hexachlorobutadiene	ND		0.0013	0.00017	mg/L		01/22/14 06:00	01/24/14 03:45	1
Hexachloroethane	ND		0.0013	0.00015	mg/L		01/22/14 06:00	01/24/14 03:45	1
Nitrobenzene	ND		0.0013	0.000073	mg/L		01/22/14 06:00	01/24/14 03:45	1
Pentachlorophenol	ND		0.0025	0.00055	mg/L		01/22/14 06:00	01/24/14 03:45	1
Pyridine	ND		0.0063	0.00010	mg/L		01/22/14 06:00	01/24/14 03:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		52 - 132	01/22/14 06:00	01/24/14 03:45	1
2-Fluorobiphenyl	76		48 - 120	01/22/14 06:00	01/24/14 03:45	1
2-Fluorophenol	38		20 - 120	01/22/14 06:00	01/24/14 03:45	1
Nitrobenzene-d5	70		46 - 120	01/22/14 06:00	01/24/14 03:45	1
p-Terphenyl-d14	98		67 - 150	01/22/14 06:00	01/24/14 03:45	1
Phenol-d5	29		16 - 120	01/22/14 06:00	01/24/14 03:45	1

Lab Sample ID: LCS 480-162657/2-A
Matrix: Solid
Analysis Batch: 162997

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 162657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0500	0.0377		mg/L		75	32 - 120
2,4-Dinitrotoluene	0.0500	0.0515		mg/L		103	65 - 154
Hexachloroethane	0.0500	0.0372		mg/L		74	14 - 101
Pentachlorophenol	0.100	0.0871		mg/L		87	39 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	99		52 - 132
2-Fluorobiphenyl	93		48 - 120
2-Fluorophenol	49		20 - 120
Nitrobenzene-d5	87		46 - 120
p-Terphenyl-d14	111		67 - 150
Phenol-d5	36		16 - 120

Lab Sample ID: LCSD 480-162657/3-A
Matrix: Solid
Analysis Batch: 162997

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 162657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.0500	0.0316		mg/L		63	32 - 120	18	36
2,4-Dinitrotoluene	0.0500	0.0468		mg/L		94	65 - 154	10	20
Hexachloroethane	0.0500	0.0308		mg/L		62	14 - 101	19	46
Pentachlorophenol	0.100	0.0801		mg/L		80	39 - 136	8	37

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162657/3-A
Matrix: Solid
Analysis Batch: 162997

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 162657

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	92		52 - 132
2-Fluorobiphenyl	81		48 - 120
2-Fluorophenol	41		20 - 120
Nitrobenzene-d5	75		46 - 120
p-Terphenyl-d14	104		67 - 150
Phenol-d5	31		16 - 120

Lab Sample ID: LB 480-162320/1-D
Matrix: Solid
Analysis Batch: 162997

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 162657

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		01/22/14 06:00	01/24/14 05:40	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		01/22/14 06:00	01/24/14 05:40	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		01/22/14 06:00	01/24/14 05:40	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		01/22/14 06:00	01/24/14 05:40	1
2-Methylphenol	ND		0.0050	0.00040	mg/L		01/22/14 06:00	01/24/14 05:40	1
3-Methylphenol	ND		0.010	0.00040	mg/L		01/22/14 06:00	01/24/14 05:40	1
4-Methylphenol	ND		0.010	0.00036	mg/L		01/22/14 06:00	01/24/14 05:40	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		01/22/14 06:00	01/24/14 05:40	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		01/22/14 06:00	01/24/14 05:40	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		01/22/14 06:00	01/24/14 05:40	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		01/22/14 06:00	01/24/14 05:40	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		01/22/14 06:00	01/24/14 05:40	1
Pyridine	ND		0.025	0.00041	mg/L		01/22/14 06:00	01/24/14 05:40	1

Surrogate	LB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol	88		52 - 132	01/22/14 06:00	01/24/14 05:40	1
2-Fluorobiphenyl	81		48 - 120	01/22/14 06:00	01/24/14 05:40	1
2-Fluorophenol	40		20 - 120	01/22/14 06:00	01/24/14 05:40	1
Nitrobenzene-d5	71		46 - 120	01/22/14 06:00	01/24/14 05:40	1
p-Terphenyl-d14	102		67 - 150	01/22/14 06:00	01/24/14 05:40	1
Phenol-d5	30		16 - 120	01/22/14 06:00	01/24/14 05:40	1

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LB 480-162658/4-A
Matrix: Solid
Analysis Batch: 162883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162658

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chlordane (technical)	ND		0.0020	0.000029	mg/L		01/22/14 06:16	01/23/14 13:12	1
Endrin	ND		0.00020	0.000014	mg/L		01/22/14 06:16	01/23/14 13:12	1
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		01/22/14 06:16	01/23/14 13:12	1
Heptachlor	ND		0.00020	0.0000085	mg/L		01/22/14 06:16	01/23/14 13:12	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		01/22/14 06:16	01/23/14 13:12	1
Methoxychlor	ND		0.00020	0.000014	mg/L		01/22/14 06:16	01/23/14 13:12	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LB 480-162658/4-A
Matrix: Solid
Analysis Batch: 162883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162658

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		0.0020	0.00012	mg/L		01/22/14 06:16	01/23/14 13:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	92		20 - 120				01/22/14 06:16	01/23/14 13:12	1
Tetrachloro-m-xylene	81		36 - 120				01/22/14 06:16	01/23/14 13:12	1

Lab Sample ID: MB 480-162658/1-A
Matrix: Solid
Analysis Batch: 162883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.00050	0.0000073	mg/L		01/22/14 06:16	01/23/14 12:20	1
Endrin	ND		0.00050	0.0000035	mg/L		01/22/14 06:16	01/23/14 12:20	1
gamma-BHC (Lindane)	ND		0.00050	0.0000015	mg/L		01/22/14 06:16	01/23/14 12:20	1
Heptachlor	ND		0.00050	0.0000021	mg/L		01/22/14 06:16	01/23/14 12:20	1
Heptachlor epoxide	ND		0.00050	0.0000013	mg/L		01/22/14 06:16	01/23/14 12:20	1
Methoxychlor	ND		0.00050	0.0000035	mg/L		01/22/14 06:16	01/23/14 12:20	1
Toxaphene	ND		0.00050	0.000030	mg/L		01/22/14 06:16	01/23/14 12:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	91		20 - 120				01/22/14 06:16	01/23/14 12:20	1
Tetrachloro-m-xylene	102		36 - 120				01/22/14 06:16	01/23/14 12:20	1

Lab Sample ID: LCS 480-162658/2-A
Matrix: Solid
Analysis Batch: 162883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 162658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin	0.000500	0.000559		mg/L		112	52 - 143
gamma-BHC (Lindane)	0.000500	0.000501		mg/L		100	56 - 127
Heptachlor	0.000500	0.000542		mg/L		108	51 - 125
Heptachlor epoxide	0.000500	0.000522		mg/L		104	50 - 140
Methoxychlor	0.000500	0.000624		mg/L		125	50 - 151
Surrogate	%Recovery	Qualifier	Limits				
DCB Decachlorobiphenyl	81		20 - 120				
Tetrachloro-m-xylene	84		36 - 120				

Lab Sample ID: LCSD 480-162658/3-A
Matrix: Solid
Analysis Batch: 162883

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 162658

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Endrin	0.00100	0.00108	*	mg/L		108	52 - 143	64	24
gamma-BHC (Lindane)	0.00100	0.000985	*	mg/L		99	56 - 127	65	24
Heptachlor	0.00100	0.00101	*	mg/L		101	51 - 125	60	25
Heptachlor epoxide	0.00100	0.00101	*	mg/L		101	50 - 140	64	23

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 480-162658/3-A
Matrix: Solid
Analysis Batch: 162883

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 162658

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methoxychlor	0.00100	0.00119	*	mg/L		119	50 - 151	62	26
Surrogate	%Recovery		Qualifier	Limits		Prepared	Analyzed	Dil Fac	
DCB Decachlorobiphenyl	81			20 - 120					
Tetrachloro-m-xylene	87			36 - 120					

Method: 8151 - TCLP Herbicides

Lab Sample ID: MB 480-162857/1-A
Matrix: Solid
Analysis Batch: 163188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162857

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.00050	0.00010	mg/L		01/23/14 05:55	01/24/14 16:58	1
Silvex (2,4,5-TP)	ND		0.00050	0.000090	mg/L		01/23/14 05:55	01/24/14 16:58	1
Surrogate	%Recovery		Qualifier	Limits		Prepared	Analyzed	Dil Fac	
2,4-Dichlorophenylacetic acid	83			40 - 135		01/23/14 05:55	01/24/14 16:58	1	

Lab Sample ID: LCS 480-162857/2-A
Matrix: Solid
Analysis Batch: 163188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 162857

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
2,4-D	0.00200	0.00197		mg/L		98	46 - 161	
Silvex (2,4,5-TP)	0.00200	0.00232		mg/L		116	44 - 154	
Surrogate	%Recovery		Qualifier	Limits		Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	130			40 - 135		01/23/14 05:55	01/24/14 18:56	1

Lab Sample ID: LB 480-162320/1-E
Matrix: Solid
Analysis Batch: 163188

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 162857

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.0020	0.00040	mg/L		01/23/14 05:55	01/24/14 18:56	1
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		01/23/14 05:55	01/24/14 18:56	1
Surrogate	%Recovery		Qualifier	Limits		Prepared	Analyzed	Dil Fac	
2,4-Dichlorophenylacetic acid	15		X	40 - 135		01/23/14 05:55	01/24/14 18:56	1	

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-162533/2-A
Matrix: Solid
Analysis Batch: 162760

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162533

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		01/21/14 10:10	01/22/14 11:03	1
Barium	ND		0.0020	0.00070	mg/L		01/21/14 10:10	01/22/14 11:03	1
Cadmium	ND		0.0010	0.00050	mg/L		01/21/14 10:10	01/22/14 11:03	1
Chromium	ND		0.0040	0.0010	mg/L		01/21/14 10:10	01/22/14 11:03	1
Lead	ND		0.0050	0.0030	mg/L		01/21/14 10:10	01/22/14 11:03	1
Selenium	ND		0.015	0.0087	mg/L		01/21/14 10:10	01/22/14 11:03	1
Silver	ND		0.0030	0.0017	mg/L		01/21/14 10:10	01/22/14 11:03	1

Lab Sample ID: LCS 480-162533/3-A
Matrix: Solid
Analysis Batch: 162760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 162533

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.13		mg/L		113	80 - 120
Barium	1.00	0.992		mg/L		99	80 - 120
Cadmium	1.00	1.06		mg/L		106	80 - 120
Chromium	1.00	0.997		mg/L		100	80 - 120
Lead	1.00	1.03		mg/L		103	80 - 120
Selenium	1.00	1.15		mg/L		115	80 - 120
Silver	1.00	1.13		mg/L		113	80 - 120

Lab Sample ID: LB 480-162320/1-B
Matrix: Solid
Analysis Batch: 162760

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 162533

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		01/21/14 10:10	01/22/14 11:00	1
Barium	0.00526		0.0020	0.00070	mg/L		01/21/14 10:10	01/22/14 11:00	1
Cadmium	ND		0.0010	0.00050	mg/L		01/21/14 10:10	01/22/14 11:00	1
Chromium	0.00307	J	0.0040	0.0010	mg/L		01/21/14 10:10	01/22/14 11:00	1
Lead	ND		0.0050	0.0030	mg/L		01/21/14 10:10	01/22/14 11:00	1
Selenium	ND		0.015	0.0087	mg/L		01/21/14 10:10	01/22/14 11:00	1
Silver	ND		0.0030	0.0017	mg/L		01/21/14 10:10	01/22/14 11:00	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 480-162542/2-A
Matrix: Solid
Analysis Batch: 162790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162542

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/21/14 10:55	01/22/14 09:48	1

Lab Sample ID: LCS 480-162542/3-A
Matrix: Solid
Analysis Batch: 162790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 162542

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00668	0.00642		mg/L		96	80 - 120

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LB 480-162320/1-C
Matrix: Solid
Analysis Batch: 162790

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 162542

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/21/14 10:55	01/22/14 09:46	1

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QC Association Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

GC/MS VOA

Leach Batch: 162333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	1311	
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	1311	
LB 480-162333/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 162430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-1	4009-28 (13-14') 010614	Total/NA	Solid	8260C	162446
LCS 480-162430/5	Lab Control Sample	Total/NA	Solid	8260C	
LCS 480-162430/8	Lab Control Sample Dup	Total/NA	Solid	8260C	
MB 480-162430/6	Method Blank	Total/NA	Solid	8260C	

Analysis Batch: 162441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-6	FB-01-010814	Total/NA	Water	8260C	
LCS 480-162441/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-162441/6	Method Blank	Total/NA	Water	8260C	

Prep Batch: 162446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-1	4009-28 (13-14') 010614	Total/NA	Solid	5035A	

Prep Batch: 162459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-2	4009-29 (12-13') 011014	Total/NA	Solid	5035A	
480-53547-2 MS	4009-29 (12-13') 011014	Total/NA	Solid	5035A	
480-53547-2 MSD	4009-29 (12-13') 011014	Total/NA	Solid	5035A	
480-53547-5	DUP-01-011014	Total/NA	Solid	5035A	

Analysis Batch: 162635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	8260C	162333
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	8260C	162333
LB 480-162333/1-A	Method Blank	TCLP	Solid	8260C	162333
LCS 480-162635/4	Lab Control Sample	Total/NA	Solid	8260C	
MB 480-162635/6	Method Blank	Total/NA	Solid	8260C	

Analysis Batch: 162649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-2	4009-29 (12-13') 011014	Total/NA	Solid	8260C	162459
480-53547-2 MS	4009-29 (12-13') 011014	Total/NA	Solid	8260C	162459
480-53547-2 MSD	4009-29 (12-13') 011014	Total/NA	Solid	8260C	162459
480-53547-5	DUP-01-011014	Total/NA	Solid	8260C	162459
LCS 480-162649/4	Lab Control Sample	Total/NA	Solid	8260C	
MB 480-162649/5	Method Blank	Total/NA	Solid	8260C	

GC/MS Semi VOA

Leach Batch: 162320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	1311	

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

GC/MS Semi VOA (Continued)

Leach Batch: 162320 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	1311	
LB 480-162320/1-D	Method Blank	TCLP	Solid	1311	

Prep Batch: 162657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	3510C	162320
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	3510C	162320
LB 480-162320/1-D	Method Blank	TCLP	Solid	3510C	162320
LCS 480-162657/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 480-162657/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
MB 480-162657/1-A	Method Blank	Total/NA	Solid	3510C	

Analysis Batch: 162997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	8270D	162657
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	8270D	162657
LB 480-162320/1-D	Method Blank	TCLP	Solid	8270D	162657
LCS 480-162657/2-A	Lab Control Sample	Total/NA	Solid	8270D	162657
LCSD 480-162657/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	162657
MB 480-162657/1-A	Method Blank	Total/NA	Solid	8270D	162657

GC Semi VOA

Leach Batch: 162320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	1311	
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	1311	
LB 480-162320/1-E	Method Blank	TCLP	Solid	1311	

Prep Batch: 162658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	3510C	162320
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	3510C	162320
LB 480-162658/4-A	Method Blank	Total/NA	Solid	3510C	
LCS 480-162658/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 480-162658/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
MB 480-162658/1-A	Method Blank	Total/NA	Solid	3510C	

Prep Batch: 162857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	8151A	162320
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	8151A	162320
LB 480-162320/1-E	Method Blank	TCLP	Solid	8151A	162320
LCS 480-162857/2-A	Lab Control Sample	Total/NA	Solid	8151A	
MB 480-162857/1-A	Method Blank	Total/NA	Solid	8151A	

Analysis Batch: 162883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	8081B	162658
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	8081B	162658

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

GC Semi VOA (Continued)

Analysis Batch: 162883 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 480-162658/4-A	Method Blank	Total/NA	Solid	8081B	162658
LCS 480-162658/2-A	Lab Control Sample	Total/NA	Solid	8081B	162658
LCSD 480-162658/3-A	Lab Control Sample Dup	Total/NA	Solid	8081B	162658
MB 480-162658/1-A	Method Blank	Total/NA	Solid	8081B	162658

Analysis Batch: 163188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	8151	162857
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	8151	162857
LB 480-162320/1-E	Method Blank	TCLP	Solid	8151	162857
LCS 480-162857/2-A	Lab Control Sample	Total/NA	Solid	8151	162857
MB 480-162857/1-A	Method Blank	Total/NA	Solid	8151	162857

Metals

Leach Batch: 162320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	1311	
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	1311	
LB 480-162320/1-B	Method Blank	TCLP	Solid	1311	
LB 480-162320/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 162533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	3010A	162320
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	3010A	162320
LB 480-162320/1-B	Method Blank	TCLP	Solid	3010A	162320
LCS 480-162533/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 480-162533/2-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 162542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	7470A	162320
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	7470A	162320
LB 480-162320/1-C	Method Blank	TCLP	Solid	7470A	162320
LCS 480-162542/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 480-162542/2-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 162760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	6010C	162533
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	6010C	162533
LB 480-162320/1-B	Method Blank	TCLP	Solid	6010C	162533
LCS 480-162533/3-A	Lab Control Sample	Total/NA	Solid	6010C	162533
MB 480-162533/2-A	Method Blank	Total/NA	Solid	6010C	162533

Analysis Batch: 162790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-3	4009-29 TCLP 011014	TCLP	Solid	7470A	162542
480-53547-4	4009-28 TCLP 010814	TCLP	Solid	7470A	162542

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Metals (Continued)

Analysis Batch: 162790 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 480-162320/1-C	Method Blank	TCLP	Solid	7470A	162542
LCS 480-162542/3-A	Lab Control Sample	Total/NA	Solid	7470A	162542
MB 480-162542/2-A	Method Blank	Total/NA	Solid	7470A	162542

General Chemistry

Analysis Batch: 162469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53547-1	4009-28 (13-14') 010614	Total/NA	Solid	Moisture	
480-53547-2	4009-29 (12-13') 011014	Total/NA	Solid	Moisture	
480-53547-2 MS	4009-29 (12-13') 011014	Total/NA	Solid	Moisture	
480-53547-2 MSD	4009-29 (12-13') 011014	Total/NA	Solid	Moisture	
480-53547-5	DUP-01-011014	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-28 (13-14') 010614

Lab Sample ID: 480-53547-1

Date Collected: 01/06/14 12:15

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			162446	01/20/14 22:36	CDC	TAL BUF
Total/NA	Analysis	8260C		1	162430	01/20/14 23:36	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	162469	01/21/14 02:50	CDC	TAL BUF

Client Sample ID: 4009-29 (12-13') 011014

Lab Sample ID: 480-53547-2

Date Collected: 01/10/14 13:30

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			162459	01/21/14 01:14	CDC	TAL BUF
Total/NA	Analysis	8260C		1	162649	01/22/14 04:31	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	162469	01/21/14 02:50	CDC	TAL BUF

Client Sample ID: 4009-29 TCLP 011014

Lab Sample ID: 480-53547-3

Date Collected: 01/10/14 17:00

Matrix: Solid

Date Received: 01/17/14 20:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			162333	01/20/14 11:12	MRB	TAL BUF
TCLP	Analysis	8260C		10	162635	01/22/14 07:09	GTG	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	3510C			162657	01/22/14 06:00	KEB	TAL BUF
TCLP	Analysis	8270D		1	162997	01/24/14 06:49	ANM	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	3510C			162658	01/22/14 06:16	KEB	TAL BUF
TCLP	Analysis	8081B		1	162883	01/23/14 14:17	LMW	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	8151A			162857	01/23/14 05:55	KEB	TAL BUF
TCLP	Analysis	8151		1	163188	01/24/14 19:25	DLE	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	3010A			162533	01/21/14 10:10	EHD	TAL BUF
TCLP	Analysis	6010C		1	162760	01/22/14 11:44	LMH	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	7470A			162542	01/21/14 10:55	JRK	TAL BUF
TCLP	Analysis	7470A		1	162790	01/22/14 10:08	JRK	TAL BUF

Client Sample ID: 4009-28 TCLP 010814

Lab Sample ID: 480-53547-4

Date Collected: 01/08/14 18:00

Matrix: Solid

Date Received: 01/17/14 20:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			162333	01/20/14 11:12	MRB	TAL BUF
TCLP	Analysis	8260C		10	162635	01/22/14 07:32	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Client Sample ID: 4009-28 TCLP 010814

Lab Sample ID: 480-53547-4

Date Collected: 01/08/14 18:00

Matrix: Solid

Date Received: 01/17/14 20:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	3510C			162657	01/22/14 06:00	KEB	TAL BUF
TCLP	Analysis	8270D		1	162997	01/24/14 07:12	ANM	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	3510C			162658	01/22/14 06:16	KEB	TAL BUF
TCLP	Analysis	8081B		1	162883	01/23/14 14:34	LMW	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	8151A			162857	01/23/14 05:55	KEB	TAL BUF
TCLP	Analysis	8151		1	163188	01/24/14 19:55	DLE	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	3010A			162533	01/21/14 10:10	EHD	TAL BUF
TCLP	Analysis	6010C		1	162760	01/22/14 11:47	LMH	TAL BUF
TCLP	Leach	1311			162320	01/20/14 10:05	MRB	TAL BUF
TCLP	Prep	7470A			162542	01/21/14 10:55	JRK	TAL BUF
TCLP	Analysis	7470A		1	162790	01/22/14 10:10	JRK	TAL BUF

Client Sample ID: DUP-01-011014

Lab Sample ID: 480-53547-5

Date Collected: 01/10/14 00:00

Matrix: Solid

Date Received: 01/17/14 20:08

Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			162459	01/21/14 01:14	CDC	TAL BUF
Total/NA	Analysis	8260C		1	162649	01/22/14 05:49	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	162469	01/21/14 02:50	CDC	TAL BUF

Client Sample ID: FB-01-010814

Lab Sample ID: 480-53547-6

Date Collected: 01/08/14 15:30

Matrix: Water

Date Received: 01/17/14 20:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	162441	01/21/14 08:44	LCH	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky (DW)	State Program	4	90029	12-31-14
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-14
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	03-31-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-30-14
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	03-31-14
Wisconsin	State Program	5	998310390	08-31-14

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C	TCLP Volatiles	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8151	TCLP Herbicides	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	TCLP Mercury	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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: Vestal Water Supply RSO

TestAmerica Job ID: 480-53547-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-53547-1	4009-28 (13-14') 010614	Solid	01/06/14 12:15	01/17/14 20:08
480-53547-2	4009-29 (12-13') 011014	Solid	01/10/14 13:30	01/17/14 20:08
480-53547-3	4009-29 TCLP 011014	Solid	01/10/14 17:00	01/17/14 20:08
480-53547-4	4009-28 TCLP 010814	Solid	01/08/14 18:00	01/17/14 20:08
480-53547-5	DUP-01-011014	Solid	01/10/14 00:00	01/17/14 20:08
480-53547-6	FB-01-010814	Water	01/08/14 15:30	01/17/14 20:08

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Chain of Custody Record

Client Information Client Contact: Ms. Katie Bidwell Company: ARCADIS U.S. Inc Address: 855 Route 146 Suite 210 City: Clifton Park State, Zip: NY, 12065 Phone: _____ Email: katie.bidwell@arcadis-us.com Project Name: Vestal Water Supply RSO Site: _____		Lab PM: Fox, Candace L E-Mail: candace.fox@testamericainc.com Carrier Tracking No(s): _____ COC No: 480-41979-11356.2 Page: Page 2 of 3 Job #: _____	
Due Date Requested: <u>Standard TAT</u> TAT Requested (days): _____ PO # _____ Purchase Order Requested _____ WO # _____ Project #: 48008914 SSOW# _____		Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> 6010C, 7470A, 8151A, 8270D N N N N 8081B - TCLP Pesticides N N N N 8260C - TCLP Volatiles N N N N 8260C - TCL H151 OL M04.2 N N N N	
Preservation Codes: A - HCL B - NaOH C - 7% Formalin M - Hexane N - None O - Other: _____ ydrate		Barcode:  480-53547 Chain of Custody	
Special Instructions/Note: <u>Hold Time fast approaching</u>		Total Number of containers: <u>2</u> Other: _____	
Sample Identification 4009-28 (13-14) 010614 4009-29 (12-13) 010614 4009-28 010614 4009-29 (12-13) 010614 MS 4009-29 (12-13) 010614 MSD 4009-28 TCLP 010614 4009-28 TCLP 010614 Dup-01-010614 FB-01-010614		Matrix (W=water, S=solid, O=oil, BT=tissue, A=air) Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid	
Sample Date 01/16/14 01/16/14 01/16/14 01/16/14 01/16/14 01/16/14 01/16/14 01/16/14 01/16/14		Sample Time 12:15 13:30 _____ 13:30 13:30 13:30 17:00 18:00 _____ 15:30	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify) _____		Special Instructions/QC Requirements: _____	
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <u>[Signature]</u> Date/Time: 01/17/14 20:00 Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____		Method of Shipment: _____ Received by: <u>[Signature]</u> Date/Time: 1/17/14 20:00 Received by: _____ Date/Time: _____ Received by: _____ Date/Time: _____	
Custody Seals Intact: Yes <input type="checkbox"/> No <input type="checkbox"/>		Cooler Temperature(s) °C and Other Remarks: <u>3, 1#2</u>	



Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-53547-1

Login Number: 53547

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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.	False	first sample collected on 01/06/14
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-52398-1

Client Project/Site: Vestal Water Supply RSO

For:

ARCADIS U.S. Inc

855 Route 146

Suite 210

Clifton Park, New York 12065

Attn: Bruce Nelson



Authorized for release by:

1/6/2014 3:17:45 PM

Candace Fox, Manager of Project Management

(716)504-9844

candace.fox@testamericainc.com

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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: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Job ID: 480-52398-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-52398-1

Comments

No additional comments.

Receipt

The samples were received on 12/20/2013 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA

Method(s) 8260C: Reported analyte concentrations in the following samples are below 200ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: 4009-23 (11-12') 121113 (480-52398-2), 4009-23 (5-6') 121113 (480-52398-1), 4009-24 (14-16') 121313 (480-52398-3), 4009-25 (14-16') 121413 (480-52398-4), 4009-26 (14-15') 121613 (480-52398-5), 4009-27 (13-14') 121813 (480-52398-6).

Method(s) 8260C: The following sample(s) was diluted due to the nature of the TCLP matrix: (LB 480-159122/1-A), 4009-23 TCLP 121113 (480-52398-7), 4009-24 TCLP 121313 (480-52398-8), 4009-25 TCLP 121413 (480-52398-9), 4009-26 TCLP 121613 (480-52398-10), 4009-27 TCLP 121813 (480-52398-11). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample(s) was prepared with 0.5g due to the nature of the sample matrix: 4009-23 (5-6') 121113 (480-52398-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method(s) 8270D: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 159727 recovered outside control limits for the following analytes: 2-Methylphenol and 4-Methylphenol. The recoveries were within quality control acceptance limits, therefore the data has been qualified and reported.

No other analytical or quality issues were noted.

GC Semi VOA

No analytical or quality issues were noted.

Metals

Method(s) 6010C: The TCLP Extractor Blank, LB 480-159062, contained total chromium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples 4009-23 TCLP 121113 (480-52398-7), 4009-24 TCLP 121313 (480-52398-8), 4009-25 TCLP 121413 (480-52398-9), 4009-26 TCLP 121613 (480-52398-10), 4009-27 TCLP 121813 (480-52398-11) was not performed.

Method(s) 6010C: The TCLP Extractor Blank, LB 480-159062, contained total barium above the reporting limit (RL). The associated samples 4009-23 TCLP 121113 (480-52398-7), 4009-24 TCLP 121313 (480-52398-8), 4009-25 TCLP 121413 (480-52398-9), 4009-26 TCLP 121613 (480-52398-10) contained detects for this analyte at concentrations greater than 10X the value found in the TCLP Extractor Blank; therefore, re-extraction and/or re-analysis of the samples was not performed.

Method(s) 6010C: The analyte total barium was detected in the TCLP Extractor Blank, LB 480-159062, at a concentration above the TestAmerica Laboratories standard quantitation limit. Sample 4009-27 TCLP 121813 (480-52398-11) associated with the blank was evaluated and determined to be at least five times less than the TCLP Regulatory Limit. The sample data was therefore accepted and no corrective action was performed.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-23 (5-6') 121113

Lab Sample ID: 480-52398-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	9.7	J	57	8.0	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	90		57	3.9	ug/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	130		57	8.6	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	27	J	57	8.7	ug/Kg	1	☼	8260C	Total/NA
Toluene	10	J	57	4.3	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	250		110	9.6	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: 4009-23 (11-12') 121113

Lab Sample ID: 480-52398-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	25	J	30	5.0	ug/Kg	1	☼	8260C	Total/NA
Cyclohexane	0.86	J	6.0	0.84	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	10		6.0	0.41	ug/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	15		6.0	0.90	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	2.7	J	6.0	0.91	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	23		12	1.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: 4009-24 (14-16') 121313

Lab Sample ID: 480-52398-3

No Detections.

Client Sample ID: 4009-25 (14-16') 121413

Lab Sample ID: 480-52398-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	15		5.8	0.42	ug/Kg	1	☼	8260C	Total/NA
1,1-Dichloroethane	1.5	J	5.8	0.71	ug/Kg	1	☼	8260C	Total/NA
Trichloroethane	1.6	J	5.8	1.3	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: 4009-26 (14-15') 121613

Lab Sample ID: 480-52398-5

No Detections.

Client Sample ID: 4009-27 (13-14') 121813

Lab Sample ID: 480-52398-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.72	J	5.6	0.41	ug/Kg	1	☼	8260C	Total/NA
Trichloroethane	1.5	J	5.6	1.2	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: 4009-23 TCLP 121113

Lab Sample ID: 480-52398-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.011		0.010	0.0056	mg/L	1		6010C	TCLP
Barium	0.63	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.00063	J	0.0010	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0048	B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.062		0.0050	0.0030	mg/L	1		6010C	TCLP

Client Sample ID: 4009-24 TCLP 121313

Lab Sample ID: 480-52398-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.011		0.010	0.0056	mg/L	1		6010C	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-24 TCLP 121313 (Continued)

Lab Sample ID: 480-52398-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.65	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Chromium	0.0091	B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.17		0.0050	0.0030	mg/L	1		6010C	TCLP

Client Sample ID: 4009-25 TCLP 121413

Lab Sample ID: 480-52398-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.011		0.010	0.0056	mg/L	1		6010C	TCLP
Barium	0.68	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.00089	J	0.0010	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0023	J B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.031		0.0050	0.0030	mg/L	1		6010C	TCLP
Selenium	0.011	J	0.015	0.0087	mg/L	1		6010C	TCLP

Client Sample ID: 4009-26 TCLP 121613

Lab Sample ID: 480-52398-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Heptachlor	0.000032	J B	0.00020	0.0000085	mg/L	1		8081B	TCLP
Arsenic	0.0059	J	0.010	0.0056	mg/L	1		6010C	TCLP
Barium	0.69	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.00070	J	0.0010	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0075	B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.0073		0.0050	0.0030	mg/L	1		6010C	TCLP
Selenium	0.011	J	0.015	0.0087	mg/L	1		6010C	TCLP

Client Sample ID: 4009-27 TCLP 121813

Lab Sample ID: 480-52398-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
gamma-BHC (Lindane)	0.000040	J	0.00020	0.0000060	mg/L	1		8081B	TCLP
Arsenic	0.0069	J	0.010	0.0056	mg/L	1		6010C	TCLP
Barium	0.40	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.00050	J	0.0010	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0060	B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.0038	J	0.0050	0.0030	mg/L	1		6010C	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-23 (5-6') 121113

Lab Sample ID: 480-52398-1

Date Collected: 12/11/13 11:30

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		57	4.1	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,1,1,2-Tetrachloroethane	ND		57	9.2	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,1,2-Trichloroethane	ND		57	7.4	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		57	13	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,1-Dichloroethane	ND		57	6.9	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,1-Dichloroethene	ND		57	7.0	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,2,4-Trichlorobenzene	ND		57	3.5	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,2-Dibromo-3-Chloropropane	ND		57	28	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,2-Dichlorobenzene	ND		57	4.5	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,2-Dichloroethane	ND		57	2.9	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,2-Dichloropropane	ND		57	28	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,3-Dichlorobenzene	ND		57	2.9	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,4-Dichlorobenzene	ND		57	8.0	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
2-Butanone (MEK)	ND		280	21	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
2-Hexanone	ND		280	28	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
4-Methyl-2-pentanone (MIBK)	ND		280	19	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Acetone	ND		280	48	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Benzene	ND		57	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Bromodichloromethane	ND		57	7.6	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Bromoform	ND		57	28	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Bromomethane	ND		57	5.1	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Carbon disulfide	ND		57	28	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Carbon tetrachloride	ND		57	5.5	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Chlorobenzene	ND		57	7.5	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Dibromochloromethane	ND		57	7.3	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Chloroethane	ND		57	13	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Chloroform	ND		57	3.5	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Chloromethane	ND		57	3.4	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
cis-1,2-Dichloroethene	ND		57	7.3	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
cis-1,3-Dichloropropene	ND		57	8.2	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Cyclohexane	9.7	J	57	8.0	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Dichlorodifluoromethane	ND		57	4.7	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Ethylbenzene	90		57	3.9	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
1,2-Dibromoethane	ND		57	7.3	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Isopropylbenzene	130		57	8.6	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Methyl acetate	ND		57	11	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Methyl tert-butyl ether	ND		57	5.6	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Methylcyclohexane	27	J	57	8.7	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Methylene Chloride	ND		57	26	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Styrene	ND		57	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Tetrachloroethene	ND		57	7.6	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Toluene	10	J	57	4.3	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
trans-1,2-Dichloroethene	ND		57	5.9	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
trans-1,3-Dichloropropene	ND		57	25	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Trichloroethene	ND		57	13	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Trichlorofluoromethane	ND		57	5.4	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Vinyl chloride	ND		57	6.9	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1
Xylenes, Total	250		110	9.6	ug/Kg	☼	12/22/13 12:21	12/22/13 14:56	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-23 (5-6') 121113

Lab Sample ID: 480-52398-1

Date Collected: 12/11/13 11:30

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 79.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		71 - 125	12/22/13 12:21	12/22/13 14:56	1
1,2-Dichloroethane-d4 (Surr)	92		64 - 126	12/22/13 12:21	12/22/13 14:56	1
4-Bromofluorobenzene (Surr)	96		72 - 126	12/22/13 12:21	12/22/13 14:56	1

Client Sample ID: 4009-23 (11-12') 121113

Lab Sample ID: 480-52398-2

Date Collected: 12/11/13 12:20

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.0	0.43	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,1,2,2-Tetrachloroethane	ND		6.0	0.97	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,1,2-Trichloroethane	ND		6.0	0.78	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	1.4	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,1-Dichloroethane	ND		6.0	0.73	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,1-Dichloroethene	ND		6.0	0.73	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,2,4-Trichlorobenzene	ND		6.0	0.36	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,2-Dibromo-3-Chloropropane	ND		6.0	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,2-Dichlorobenzene	ND		6.0	0.47	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,2-Dichloroethane	ND		6.0	0.30	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,2-Dichloropropane	ND		6.0	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,3-Dichlorobenzene	ND		6.0	0.31	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,4-Dichlorobenzene	ND		6.0	0.84	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
2-Hexanone	ND		30	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
4-Methyl-2-pentanone (MIBK)	ND		30	2.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Acetone	25	J	30	5.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Benzene	ND		6.0	0.29	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Bromodichloromethane	ND		6.0	0.80	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Bromoform	ND		6.0	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Bromomethane	ND		6.0	0.54	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Carbon disulfide	ND		6.0	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Carbon tetrachloride	ND		6.0	0.58	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Chlorobenzene	ND		6.0	0.79	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Dibromochloromethane	ND		6.0	0.76	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Chloroethane	ND		6.0	1.4	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Chloroform	ND		6.0	0.37	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Chloromethane	ND		6.0	0.36	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
cis-1,2-Dichloroethene	ND		6.0	0.76	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
cis-1,3-Dichloropropene	ND		6.0	0.86	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Cyclohexane	0.86	J	6.0	0.84	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Dichlorodifluoromethane	ND		6.0	0.49	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Ethylbenzene	10		6.0	0.41	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
1,2-Dibromoethane	ND		6.0	0.77	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Isopropylbenzene	15		6.0	0.90	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Methyl acetate	ND		6.0	1.1	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Methyl tert-butyl ether	ND		6.0	0.59	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Methylcyclohexane	2.7	J	6.0	0.91	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Methylene Chloride	ND		6.0	2.7	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Styrene	ND		6.0	0.30	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-23 (11-12') 121113

Lab Sample ID: 480-52398-2

Date Collected: 12/11/13 12:20

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		6.0	0.80	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Toluene	ND		6.0	0.45	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
trans-1,2-Dichloroethene	ND		6.0	0.62	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
trans-1,3-Dichloropropene	ND		6.0	2.6	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Trichloroethene	ND		6.0	1.3	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Trichlorofluoromethane	ND		6.0	0.57	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Vinyl chloride	ND		6.0	0.73	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Xylenes, Total	23		12	1.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		71 - 125				12/22/13 12:21	12/22/13 15:22	1
1,2-Dichloroethane-d4 (Surr)	96		64 - 126				12/22/13 12:21	12/22/13 15:22	1
4-Bromofluorobenzene (Surr)	97		72 - 126				12/22/13 12:21	12/22/13 15:22	1

Client Sample ID: 4009-24 (14-16') 121313

Lab Sample ID: 480-52398-3

Date Collected: 12/13/13 11:00

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.1	0.44	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,1,2,2-Tetrachloroethane	ND		6.1	0.98	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,1,2-Trichloroethane	ND		6.1	0.79	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.1	1.4	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,1-Dichloroethane	ND		6.1	0.74	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,1-Dichloroethene	ND		6.1	0.74	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,2,4-Trichlorobenzene	ND		6.1	0.37	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,2-Dibromo-3-Chloropropane	ND		6.1	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,2-Dichlorobenzene	ND		6.1	0.47	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,2-Dichloroethane	ND		6.1	0.30	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,2-Dichloropropane	ND		6.1	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,3-Dichlorobenzene	ND		6.1	0.31	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,4-Dichlorobenzene	ND		6.1	0.85	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
2-Hexanone	ND		30	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
4-Methyl-2-pentanone (MIBK)	ND		30	2.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Acetone	ND		30	5.1	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Benzene	ND		6.1	0.30	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Bromodichloromethane	ND		6.1	0.81	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Bromoform	ND		6.1	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Bromomethane	ND		6.1	0.55	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Carbon disulfide	ND		6.1	3.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Carbon tetrachloride	ND		6.1	0.59	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Chlorobenzene	ND		6.1	0.80	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Dibromochloromethane	ND		6.1	0.78	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Chloroethane	ND		6.1	1.4	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Chloroform	ND		6.1	0.37	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Chloromethane	ND		6.1	0.37	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
cis-1,2-Dichloroethene	ND		6.1	0.78	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
cis-1,3-Dichloropropene	ND		6.1	0.87	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-24 (14-16') 121313

Lab Sample ID: 480-52398-3

Date Collected: 12/13/13 11:00

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		6.1	0.85	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Dichlorodifluoromethane	ND		6.1	0.50	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Ethylbenzene	ND		6.1	0.42	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
1,2-Dibromoethane	ND		6.1	0.78	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Isopropylbenzene	ND		6.1	0.91	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Methyl acetate	ND		6.1	1.1	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Methyl tert-butyl ether	ND		6.1	0.60	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Methylcyclohexane	ND		6.1	0.92	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Methylene Chloride	ND		6.1	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Styrene	ND		6.1	0.30	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Tetrachloroethene	ND		6.1	0.81	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Toluene	ND		6.1	0.46	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
trans-1,2-Dichloroethene	ND		6.1	0.63	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
trans-1,3-Dichloropropene	ND		6.1	2.7	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Trichloroethene	ND		6.1	1.3	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Trichlorofluoromethane	ND		6.1	0.57	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Vinyl chloride	ND		6.1	0.74	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	12/22/13 12:21	12/22/13 15:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 125				12/22/13 12:21	12/22/13 15:48	1
1,2-Dichloroethane-d4 (Surr)	96		64 - 126				12/22/13 12:21	12/22/13 15:48	1
4-Bromofluorobenzene (Surr)	98		72 - 126				12/22/13 12:21	12/22/13 15:48	1

Client Sample ID: 4009-25 (14-16') 121413

Lab Sample ID: 480-52398-4

Date Collected: 12/14/13 10:15

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	15		5.8	0.42	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,1,2,2-Tetrachloroethane	ND		5.8	0.95	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,1,2-Trichloroethane	ND		5.8	0.76	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.8	1.3	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,1-Dichloroethane	ND		5.8	0.71	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,1-Dichloroethene	1.5 J		5.8	0.71	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,2,4-Trichlorobenzene	ND		5.8	0.35	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,2-Dibromo-3-Chloropropane	ND		5.8	2.9	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,2-Dichlorobenzene	ND		5.8	0.46	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,2-Dichloroethane	ND		5.8	0.29	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,2-Dichloropropane	ND		5.8	2.9	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,3-Dichlorobenzene	ND		5.8	0.30	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,4-Dichlorobenzene	ND		5.8	0.82	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
2-Butanone (MEK)	ND		29	2.1	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
2-Hexanone	ND		29	2.9	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
4-Methyl-2-pentanone (MIBK)	ND		29	1.9	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Acetone	ND		29	4.9	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Benzene	ND		5.8	0.29	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Bromodichloromethane	ND		5.8	0.78	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Bromoform	ND		5.8	2.9	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-25 (14-16') 121413

Lab Sample ID: 480-52398-4

Date Collected: 12/14/13 10:15

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		5.8	0.52	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Carbon disulfide	ND		5.8	2.9	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Carbon tetrachloride	ND		5.8	0.56	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Chlorobenzene	ND		5.8	0.77	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Dibromochloromethane	ND		5.8	0.75	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Chloroethane	ND		5.8	1.3	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Chloroform	ND		5.8	0.36	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Chloromethane	ND		5.8	0.35	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
cis-1,2-Dichloroethene	ND		5.8	0.75	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
cis-1,3-Dichloropropene	ND		5.8	0.84	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Cyclohexane	ND		5.8	0.82	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Dichlorodifluoromethane	ND		5.8	0.48	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Ethylbenzene	ND		5.8	0.40	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
1,2-Dibromoethane	ND		5.8	0.75	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Isopropylbenzene	ND		5.8	0.88	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Methyl acetate	ND		5.8	1.1	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Methyl tert-butyl ether	ND		5.8	0.57	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Methylcyclohexane	ND		5.8	0.89	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Methylene Chloride	ND		5.8	2.7	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Styrene	ND		5.8	0.29	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Tetrachloroethene	ND		5.8	0.78	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Toluene	ND		5.8	0.44	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
trans-1,2-Dichloroethene	ND		5.8	0.60	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
trans-1,3-Dichloropropene	ND		5.8	2.6	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Trichloroethene	1.6	J	5.8	1.3	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Trichlorofluoromethane	ND		5.8	0.55	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Vinyl chloride	ND		5.8	0.71	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1
Xylenes, Total	ND		12	0.98	ug/Kg	☼	12/22/13 12:21	12/22/13 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 125	12/22/13 12:21	12/22/13 16:13	1
1,2-Dichloroethane-d4 (Surr)	95		64 - 126	12/22/13 12:21	12/22/13 16:13	1
4-Bromofluorobenzene (Surr)	97		72 - 126	12/22/13 12:21	12/22/13 16:13	1

Client Sample ID: 4009-26 (14-15') 121613

Lab Sample ID: 480-52398-5

Date Collected: 12/16/13 13:00

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.2	0.45	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,1,2,2-Tetrachloroethane	ND		6.2	1.0	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,1,2-Trichloroethane	ND		6.2	0.80	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.2	1.4	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,1-Dichloroethane	ND		6.2	0.75	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,1-Dichloroethene	ND		6.2	0.75	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,2,4-Trichlorobenzene	ND		6.2	0.37	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,2-Dibromo-3-Chloropropane	ND		6.2	3.1	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,2-Dichlorobenzene	ND		6.2	0.48	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,2-Dichloroethane	ND		6.2	0.31	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-26 (14-15') 121613

Lab Sample ID: 480-52398-5

Date Collected: 12/16/13 13:00

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		6.2	3.1	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,3-Dichlorobenzene	ND		6.2	0.32	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,4-Dichlorobenzene	ND		6.2	0.86	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
2-Butanone (MEK)	ND		31	2.3	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
2-Hexanone	ND		31	3.1	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
4-Methyl-2-pentanone (MIBK)	ND		31	2.0	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Acetone	ND		31	5.2	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Benzene	ND		6.2	0.30	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Bromodichloromethane	ND		6.2	0.82	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Bromoform	ND		6.2	3.1	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Bromomethane	ND		6.2	0.55	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Carbon disulfide	ND		6.2	3.1	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Carbon tetrachloride	ND		6.2	0.60	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Chlorobenzene	ND		6.2	0.81	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Dibromochloromethane	ND		6.2	0.79	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Chloroethane	ND		6.2	1.4	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Chloroform	ND		6.2	0.38	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Chloromethane	ND		6.2	0.37	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
cis-1,2-Dichloroethene	ND		6.2	0.79	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
cis-1,3-Dichloropropene	ND		6.2	0.89	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Cyclohexane	ND		6.2	0.86	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Dichlorodifluoromethane	ND		6.2	0.51	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Ethylbenzene	ND		6.2	0.42	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
1,2-Dibromoethane	ND		6.2	0.79	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Isopropylbenzene	ND		6.2	0.93	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Methyl acetate	ND		6.2	1.1	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Methyl tert-butyl ether	ND		6.2	0.60	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Methylcyclohexane	ND		6.2	0.94	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Methylene Chloride	ND		6.2	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Styrene	ND		6.2	0.31	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Tetrachloroethene	ND		6.2	0.83	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Toluene	ND		6.2	0.47	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
trans-1,2-Dichloroethene	ND		6.2	0.64	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
trans-1,3-Dichloropropene	ND		6.2	2.7	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Trichloroethene	ND		6.2	1.4	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Trichlorofluoromethane	ND		6.2	0.58	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Vinyl chloride	ND		6.2	0.75	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	12/22/13 12:21	12/22/13 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		71 - 125	12/22/13 12:21	12/22/13 16:39	1
1,2-Dichloroethane-d4 (Surr)	97		64 - 126	12/22/13 12:21	12/22/13 16:39	1
4-Bromofluorobenzene (Surr)	98		72 - 126	12/22/13 12:21	12/22/13 16:39	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-27 (13-14') 121813

Lab Sample ID: 480-52398-6

Date Collected: 12/18/13 09:30

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 88.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.72	J	5.6	0.41	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,1,2,2-Tetrachloroethane	ND		5.6	0.91	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,1,2-Trichloroethane	ND		5.6	0.73	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.6	1.3	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,1-Dichloroethane	ND		5.6	0.69	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,1-Dichloroethene	ND		5.6	0.69	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,2,4-Trichlorobenzene	ND		5.6	0.34	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,2-Dibromo-3-Chloropropane	ND		5.6	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,2-Dichlorobenzene	ND		5.6	0.44	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,2-Dichloroethane	ND		5.6	0.28	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,2-Dichloropropane	ND		5.6	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,3-Dichlorobenzene	ND		5.6	0.29	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,4-Dichlorobenzene	ND		5.6	0.79	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
2-Butanone (MEK)	ND		28	2.1	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.8	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Acetone	ND		28	4.7	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Benzene	ND		5.6	0.28	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Bromodichloromethane	ND		5.6	0.75	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Bromoform	ND		5.6	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Bromomethane	ND		5.6	0.51	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Carbon disulfide	ND		5.6	2.8	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Carbon tetrachloride	ND		5.6	0.55	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Chlorobenzene	ND		5.6	0.74	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Dibromochloromethane	ND		5.6	0.72	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Chloroethane	ND		5.6	1.3	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Chloroform	ND		5.6	0.35	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Chloromethane	ND		5.6	0.34	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
cis-1,2-Dichloroethene	ND		5.6	0.72	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
cis-1,3-Dichloropropene	ND		5.6	0.81	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Cyclohexane	ND		5.6	0.79	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Dichlorodifluoromethane	ND		5.6	0.47	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Ethylbenzene	ND		5.6	0.39	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
1,2-Dibromoethane	ND		5.6	0.72	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Isopropylbenzene	ND		5.6	0.85	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Methyl acetate	ND		5.6	1.0	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Methyl tert-butyl ether	ND		5.6	0.55	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Methylcyclohexane	ND		5.6	0.86	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Methylene Chloride	ND		5.6	2.6	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Styrene	ND		5.6	0.28	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Tetrachloroethene	ND		5.6	0.76	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Toluene	ND		5.6	0.43	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
trans-1,2-Dichloroethene	ND		5.6	0.58	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
trans-1,3-Dichloropropene	ND		5.6	2.5	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Trichloroethene	1.5	J	5.6	1.2	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Trichlorofluoromethane	ND		5.6	0.53	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Vinyl chloride	ND		5.6	0.69	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1
Xylenes, Total	ND		11	0.95	ug/Kg	☼	12/22/13 12:21	12/22/13 17:05	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-27 (13-14') 121813

Lab Sample ID: 480-52398-6

Date Collected: 12/18/13 09:30

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 88.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 125	12/22/13 12:21	12/22/13 17:05	1
1,2-Dichloroethane-d4 (Surr)	94		64 - 126	12/22/13 12:21	12/22/13 17:05	1
4-Bromofluorobenzene (Surr)	96		72 - 126	12/22/13 12:21	12/22/13 17:05	1

Client Sample ID: 4009-23 TCLP 121113

Lab Sample ID: 480-52398-7

Date Collected: 12/11/13 16:00

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			12/24/13 16:27	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			12/24/13 16:27	10
Chlorobenzene	ND		0.010	0.0075	mg/L			12/24/13 16:27	10
Chloroform	ND		0.010	0.0034	mg/L			12/24/13 16:27	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			12/24/13 16:27	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			12/24/13 16:27	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			12/24/13 16:27	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			12/24/13 16:27	10
Trichloroethene	ND		0.010	0.0046	mg/L			12/24/13 16:27	10
Vinyl chloride	ND		0.010	0.0090	mg/L			12/24/13 16:27	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		12/24/13 16:27	10
Toluene-d8 (Surr)	98		71 - 126		12/24/13 16:27	10
4-Bromofluorobenzene (Surr)	98		73 - 120		12/24/13 16:27	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		12/28/13 07:28	12/31/13 05:16	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		12/28/13 07:28	12/31/13 05:16	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		12/28/13 07:28	12/31/13 05:16	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		12/28/13 07:28	12/31/13 05:16	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		12/28/13 07:28	12/31/13 05:16	1
3-Methylphenol	ND		0.010	0.00040	mg/L		12/28/13 07:28	12/31/13 05:16	1
2-Methylphenol	ND	*	0.0050	0.00040	mg/L		12/28/13 07:28	12/31/13 05:16	1
4-Methylphenol	ND	*	0.010	0.00036	mg/L		12/28/13 07:28	12/31/13 05:16	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		12/28/13 07:28	12/31/13 05:16	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		12/28/13 07:28	12/31/13 05:16	1
Pyridine	ND		0.025	0.00041	mg/L		12/28/13 07:28	12/31/13 05:16	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		12/28/13 07:28	12/31/13 05:16	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		12/28/13 07:28	12/31/13 05:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		52 - 132	12/28/13 07:28	12/31/13 05:16	1
2-Fluorobiphenyl	50		48 - 120	12/28/13 07:28	12/31/13 05:16	1
2-Fluorophenol	28		20 - 120	12/28/13 07:28	12/31/13 05:16	1
Nitrobenzene-d5	48		46 - 120	12/28/13 07:28	12/31/13 05:16	1
p-Terphenyl-d14	91		67 - 150	12/28/13 07:28	12/31/13 05:16	1
Phenol-d5	24		16 - 120	12/28/13 07:28	12/31/13 05:16	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-23 TCLP 121113

Lab Sample ID: 480-52398-7

Date Collected: 12/11/13 16:00

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		12/30/13 10:29	12/31/13 11:10	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		12/30/13 10:29	12/31/13 11:10	1
Endrin	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 11:10	1
Heptachlor	ND		0.00020	0.0000085	mg/L		12/30/13 10:29	12/31/13 11:10	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		12/30/13 10:29	12/31/13 11:10	1
Methoxychlor	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 11:10	1
Toxaphene	ND		0.0020	0.00012	mg/L		12/30/13 10:29	12/31/13 11:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	74		20 - 120				12/30/13 10:29	12/31/13 11:10	1
Tetrachloro-m-xylene	83		36 - 120				12/30/13 10:29	12/31/13 11:10	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		12/30/13 09:31	12/31/13 23:33	1
2,4-D	ND		0.0020	0.00040	mg/L		12/30/13 09:31	12/31/13 23:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	14	X	40 - 135				12/30/13 09:31	12/31/13 23:33	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011		0.010	0.0056	mg/L		12/26/13 08:30	12/30/13 20:05	1
Barium	0.63	B	0.0020	0.00070	mg/L		12/26/13 08:30	12/30/13 20:05	1
Cadmium	0.00063	J	0.0010	0.00050	mg/L		12/26/13 08:30	12/30/13 20:05	1
Chromium	0.0048	B	0.0040	0.0010	mg/L		12/26/13 08:30	12/30/13 20:05	1
Lead	0.062		0.0050	0.0030	mg/L		12/26/13 08:30	12/30/13 20:05	1
Selenium	ND		0.015	0.0087	mg/L		12/26/13 08:30	12/30/13 20:05	1
Silver	ND		0.0030	0.0017	mg/L		12/26/13 08:30	12/30/13 20:05	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/26/13 09:30	12/26/13 12:34	1

Client Sample ID: 4009-24 TCLP 121313

Lab Sample ID: 480-52398-8

Date Collected: 12/13/13 14:30

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			12/24/13 16:48	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			12/24/13 16:48	10
Chlorobenzene	ND		0.010	0.0075	mg/L			12/24/13 16:48	10
Chloroform	ND		0.010	0.0034	mg/L			12/24/13 16:48	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			12/24/13 16:48	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			12/24/13 16:48	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			12/24/13 16:48	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			12/24/13 16:48	10
Trichloroethene	ND		0.010	0.0046	mg/L			12/24/13 16:48	10
Vinyl chloride	ND		0.010	0.0090	mg/L			12/24/13 16:48	10

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-24 TCLP 121313

Lab Sample ID: 480-52398-8

Date Collected: 12/13/13 14:30

Matrix: Solid

Date Received: 12/20/13 10:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137		12/24/13 16:48	10
Toluene-d8 (Surr)	98		71 - 126		12/24/13 16:48	10
4-Bromofluorobenzene (Surr)	97		73 - 120		12/24/13 16:48	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		12/28/13 07:28	12/31/13 06:03	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		12/28/13 07:28	12/31/13 06:03	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		12/28/13 07:28	12/31/13 06:03	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		12/28/13 07:28	12/31/13 06:03	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		12/28/13 07:28	12/31/13 06:03	1
3-Methylphenol	ND		0.010	0.00040	mg/L		12/28/13 07:28	12/31/13 06:03	1
2-Methylphenol	ND	*	0.0050	0.00040	mg/L		12/28/13 07:28	12/31/13 06:03	1
4-Methylphenol	ND	*	0.010	0.00036	mg/L		12/28/13 07:28	12/31/13 06:03	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		12/28/13 07:28	12/31/13 06:03	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		12/28/13 07:28	12/31/13 06:03	1
Pyridine	ND		0.025	0.00041	mg/L		12/28/13 07:28	12/31/13 06:03	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		12/28/13 07:28	12/31/13 06:03	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		12/28/13 07:28	12/31/13 06:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		52 - 132	12/28/13 07:28	12/31/13 06:03	1
2-Fluorobiphenyl	92		48 - 120	12/28/13 07:28	12/31/13 06:03	1
2-Fluorophenol	57		20 - 120	12/28/13 07:28	12/31/13 06:03	1
Nitrobenzene-d5	96		46 - 120	12/28/13 07:28	12/31/13 06:03	1
p-Terphenyl-d14	96		67 - 150	12/28/13 07:28	12/31/13 06:03	1
Phenol-d5	43		16 - 120	12/28/13 07:28	12/31/13 06:03	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		12/30/13 10:29	12/31/13 11:27	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		12/30/13 10:29	12/31/13 11:27	1
Endrin	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 11:27	1
Heptachlor	ND		0.00020	0.0000085	mg/L		12/30/13 10:29	12/31/13 11:27	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		12/30/13 10:29	12/31/13 11:27	1
Methoxychlor	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 11:27	1
Toxaphene	ND		0.0020	0.00012	mg/L		12/30/13 10:29	12/31/13 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	69		20 - 120	12/30/13 10:29	12/31/13 11:27	1
Tetrachloro-m-xylene	90		36 - 120	12/30/13 10:29	12/31/13 11:27	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		12/30/13 09:31	01/01/14 00:02	1
2,4-D	ND		0.0020	0.00040	mg/L		12/30/13 09:31	01/01/14 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	19	X	40 - 135	12/30/13 09:31	01/01/14 00:02	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-24 TCLP 121313

Lab Sample ID: 480-52398-8

Date Collected: 12/13/13 14:30

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011		0.010	0.0056	mg/L		12/26/13 08:30	12/30/13 20:20	1
Barium	0.65	B	0.0020	0.00070	mg/L		12/26/13 08:30	12/30/13 20:20	1
Cadmium	ND		0.0010	0.00050	mg/L		12/26/13 08:30	12/30/13 20:20	1
Chromium	0.0091	B	0.0040	0.0010	mg/L		12/26/13 08:30	12/30/13 20:20	1
Lead	0.17		0.0050	0.0030	mg/L		12/26/13 08:30	12/30/13 20:20	1
Selenium	ND		0.015	0.0087	mg/L		12/26/13 08:30	12/30/13 20:20	1
Silver	ND		0.0030	0.0017	mg/L		12/26/13 08:30	12/30/13 20:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/26/13 09:30	12/26/13 12:42	1

Client Sample ID: 4009-25 TCLP 121413

Lab Sample ID: 480-52398-9

Date Collected: 12/14/13 15:15

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			12/24/13 17:09	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			12/24/13 17:09	10
Chlorobenzene	ND		0.010	0.0075	mg/L			12/24/13 17:09	10
Chloroform	ND		0.010	0.0034	mg/L			12/24/13 17:09	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			12/24/13 17:09	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			12/24/13 17:09	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			12/24/13 17:09	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			12/24/13 17:09	10
Trichloroethene	ND		0.010	0.0046	mg/L			12/24/13 17:09	10
Vinyl chloride	ND		0.010	0.0090	mg/L			12/24/13 17:09	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137		12/24/13 17:09	10
Toluene-d8 (Surr)	98		71 - 126		12/24/13 17:09	10
4-Bromofluorobenzene (Surr)	97		73 - 120		12/24/13 17:09	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		12/28/13 07:28	12/31/13 06:26	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		12/28/13 07:28	12/31/13 06:26	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		12/28/13 07:28	12/31/13 06:26	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		12/28/13 07:28	12/31/13 06:26	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		12/28/13 07:28	12/31/13 06:26	1
3-Methylphenol	ND		0.010	0.00040	mg/L		12/28/13 07:28	12/31/13 06:26	1
2-Methylphenol	ND	*	0.0050	0.00040	mg/L		12/28/13 07:28	12/31/13 06:26	1
4-Methylphenol	ND	*	0.010	0.00036	mg/L		12/28/13 07:28	12/31/13 06:26	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		12/28/13 07:28	12/31/13 06:26	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		12/28/13 07:28	12/31/13 06:26	1
Pyridine	ND		0.025	0.00041	mg/L		12/28/13 07:28	12/31/13 06:26	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		12/28/13 07:28	12/31/13 06:26	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		12/28/13 07:28	12/31/13 06:26	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-25 TCLP 121413

Lab Sample ID: 480-52398-9

Date Collected: 12/14/13 15:15

Matrix: Solid

Date Received: 12/20/13 10:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	87		52 - 132	12/28/13 07:28	12/31/13 06:26	1
2-Fluorobiphenyl	61		48 - 120	12/28/13 07:28	12/31/13 06:26	1
2-Fluorophenol	31		20 - 120	12/28/13 07:28	12/31/13 06:26	1
Nitrobenzene-d5	54		46 - 120	12/28/13 07:28	12/31/13 06:26	1
p-Terphenyl-d14	94		67 - 150	12/28/13 07:28	12/31/13 06:26	1
Phenol-d5	27		16 - 120	12/28/13 07:28	12/31/13 06:26	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		12/30/13 10:29	12/31/13 11:45	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		12/30/13 10:29	12/31/13 11:45	1
Endrin	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 11:45	1
Heptachlor	ND		0.00020	0.0000085	mg/L		12/30/13 10:29	12/31/13 11:45	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		12/30/13 10:29	12/31/13 11:45	1
Methoxychlor	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 11:45	1
Toxaphene	ND		0.0020	0.00012	mg/L		12/30/13 10:29	12/31/13 11:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	69		20 - 120	12/30/13 10:29	12/31/13 11:45	1
Tetrachloro-m-xylene	81		36 - 120	12/30/13 10:29	12/31/13 11:45	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		12/30/13 09:31	01/01/14 00:32	1
2,4-D	ND		0.0020	0.00040	mg/L		12/30/13 09:31	01/01/14 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	21	X	40 - 135	12/30/13 09:31	01/01/14 00:32	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011		0.010	0.0056	mg/L		12/26/13 08:30	12/30/13 20:23	1
Barium	0.68	B	0.0020	0.00070	mg/L		12/26/13 08:30	12/30/13 20:23	1
Cadmium	0.00089	J	0.0010	0.00050	mg/L		12/26/13 08:30	12/30/13 20:23	1
Chromium	0.0023	J B	0.0040	0.0010	mg/L		12/26/13 08:30	12/30/13 20:23	1
Lead	0.031		0.0050	0.0030	mg/L		12/26/13 08:30	12/30/13 20:23	1
Selenium	0.011	J	0.015	0.0087	mg/L		12/26/13 08:30	12/30/13 20:23	1
Silver	ND		0.0030	0.0017	mg/L		12/26/13 08:30	12/30/13 20:23	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/26/13 09:30	12/26/13 12:43	1

Client Sample ID: 4009-26 TCLP 121613

Lab Sample ID: 480-52398-10

Date Collected: 12/16/13 16:45

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			12/24/13 17:30	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			12/24/13 17:30	10
Chlorobenzene	ND		0.010	0.0075	mg/L			12/24/13 17:30	10

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-26 TCLP 121613

Lab Sample ID: 480-52398-10

Date Collected: 12/16/13 16:45

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8260C - TCLP Volatiles - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.010	0.0034	mg/L			12/24/13 17:30	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			12/24/13 17:30	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			12/24/13 17:30	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			12/24/13 17:30	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			12/24/13 17:30	10
Trichloroethene	ND		0.010	0.0046	mg/L			12/24/13 17:30	10
Vinyl chloride	ND		0.010	0.0090	mg/L			12/24/13 17:30	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		66 - 137		12/24/13 17:30	10
Toluene-d8 (Surr)	101		71 - 126		12/24/13 17:30	10
4-Bromofluorobenzene (Surr)	99		73 - 120		12/24/13 17:30	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		12/28/13 07:28	12/31/13 06:48	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		12/28/13 07:28	12/31/13 06:48	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		12/28/13 07:28	12/31/13 06:48	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		12/28/13 07:28	12/31/13 06:48	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		12/28/13 07:28	12/31/13 06:48	1
3-Methylphenol	ND		0.010	0.00040	mg/L		12/28/13 07:28	12/31/13 06:48	1
2-Methylphenol	ND	*	0.0050	0.00040	mg/L		12/28/13 07:28	12/31/13 06:48	1
4-Methylphenol	ND	*	0.010	0.00036	mg/L		12/28/13 07:28	12/31/13 06:48	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		12/28/13 07:28	12/31/13 06:48	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		12/28/13 07:28	12/31/13 06:48	1
Pyridine	ND		0.025	0.00041	mg/L		12/28/13 07:28	12/31/13 06:48	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		12/28/13 07:28	12/31/13 06:48	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		12/28/13 07:28	12/31/13 06:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		52 - 132	12/28/13 07:28	12/31/13 06:48	1
2-Fluorobiphenyl	88		48 - 120	12/28/13 07:28	12/31/13 06:48	1
2-Fluorophenol	52		20 - 120	12/28/13 07:28	12/31/13 06:48	1
Nitrobenzene-d5	93		46 - 120	12/28/13 07:28	12/31/13 06:48	1
p-Terphenyl-d14	97		67 - 150	12/28/13 07:28	12/31/13 06:48	1
Phenol-d5	38		16 - 120	12/28/13 07:28	12/31/13 06:48	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		12/30/13 10:29	12/31/13 13:11	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		12/30/13 10:29	12/31/13 13:11	1
Endrin	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 13:11	1
Heptachlor	0.000032	J B	0.00020	0.0000085	mg/L		12/30/13 10:29	12/31/13 13:11	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		12/30/13 10:29	12/31/13 13:11	1
Methoxychlor	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 13:11	1
Toxaphene	ND		0.0020	0.00012	mg/L		12/30/13 10:29	12/31/13 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	72		20 - 120	12/30/13 10:29	12/31/13 13:11	1
Tetrachloro-m-xylene	91		36 - 120	12/30/13 10:29	12/31/13 13:11	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-26 TCLP 121613

Lab Sample ID: 480-52398-10

Date Collected: 12/16/13 16:45

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		12/30/13 09:31	01/01/14 01:01	1
2,4-D	ND		0.0020	0.00040	mg/L		12/30/13 09:31	01/01/14 01:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	20	X	40 - 135				12/30/13 09:31	01/01/14 01:01	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0059	J	0.010	0.0056	mg/L		12/26/13 08:30	12/30/13 20:26	1
Barium	0.69	B	0.0020	0.00070	mg/L		12/26/13 08:30	12/30/13 20:26	1
Cadmium	0.00070	J	0.0010	0.00050	mg/L		12/26/13 08:30	12/30/13 20:26	1
Chromium	0.0075	B	0.0040	0.0010	mg/L		12/26/13 08:30	12/30/13 20:26	1
Lead	0.0073		0.0050	0.0030	mg/L		12/26/13 08:30	12/30/13 20:26	1
Selenium	0.011	J	0.015	0.0087	mg/L		12/26/13 08:30	12/30/13 20:26	1
Silver	ND		0.0030	0.0017	mg/L		12/26/13 08:30	12/30/13 20:26	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/26/13 09:30	12/26/13 12:45	1

Client Sample ID: 4009-27 TCLP 121813

Lab Sample ID: 480-52398-11

Date Collected: 12/18/13 16:30

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8260C - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			12/24/13 17:51	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			12/24/13 17:51	10
Chlorobenzene	ND		0.010	0.0075	mg/L			12/24/13 17:51	10
Chloroform	ND		0.010	0.0034	mg/L			12/24/13 17:51	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			12/24/13 17:51	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			12/24/13 17:51	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			12/24/13 17:51	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			12/24/13 17:51	10
Trichloroethene	ND		0.010	0.0046	mg/L			12/24/13 17:51	10
Vinyl chloride	ND		0.010	0.0090	mg/L			12/24/13 17:51	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		66 - 137					12/24/13 17:51	10
Toluene-d8 (Surr)	97		71 - 126					12/24/13 17:51	10
4-Bromofluorobenzene (Surr)	99		73 - 120					12/24/13 17:51	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		12/28/13 07:28	12/31/13 07:11	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		12/28/13 07:28	12/31/13 07:11	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		12/28/13 07:28	12/31/13 07:11	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		12/28/13 07:28	12/31/13 07:11	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		12/28/13 07:28	12/31/13 07:11	1
3-Methylphenol	ND		0.010	0.00040	mg/L		12/28/13 07:28	12/31/13 07:11	1
2-Methylphenol	ND	*	0.0050	0.00040	mg/L		12/28/13 07:28	12/31/13 07:11	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-27 TCLP 121813

Lab Sample ID: 480-52398-11

Date Collected: 12/18/13 16:30

Matrix: Solid

Date Received: 12/20/13 10:30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	ND	*	0.010	0.00036	mg/L		12/28/13 07:28	12/31/13 07:11	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		12/28/13 07:28	12/31/13 07:11	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		12/28/13 07:28	12/31/13 07:11	1
Pyridine	ND		0.025	0.00041	mg/L		12/28/13 07:28	12/31/13 07:11	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		12/28/13 07:28	12/31/13 07:11	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		12/28/13 07:28	12/31/13 07:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	96		52 - 132	12/28/13 07:28	12/31/13 07:11	1
2-Fluorobiphenyl	99		48 - 120	12/28/13 07:28	12/31/13 07:11	1
2-Fluorophenol	61		20 - 120	12/28/13 07:28	12/31/13 07:11	1
Nitrobenzene-d5	102		46 - 120	12/28/13 07:28	12/31/13 07:11	1
p-Terphenyl-d14	98		67 - 150	12/28/13 07:28	12/31/13 07:11	1
Phenol-d5	45		16 - 120	12/28/13 07:28	12/31/13 07:11	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	0.000040	J	0.00020	0.0000060	mg/L		12/30/13 10:29	12/31/13 13:29	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		12/30/13 10:29	12/31/13 13:29	1
Endrin	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 13:29	1
Heptachlor	ND		0.00020	0.0000085	mg/L		12/30/13 10:29	12/31/13 13:29	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		12/30/13 10:29	12/31/13 13:29	1
Methoxychlor	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 13:29	1
Toxaphene	ND		0.0020	0.00012	mg/L		12/30/13 10:29	12/31/13 13:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	76		20 - 120	12/30/13 10:29	12/31/13 13:29	1
Tetrachloro-m-xylene	87		36 - 120	12/30/13 10:29	12/31/13 13:29	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		12/30/13 09:31	01/01/14 02:00	1
2,4-D	ND		0.0020	0.00040	mg/L		12/30/13 09:31	01/01/14 02:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	20	X	40 - 135	12/30/13 09:31	01/01/14 02:00	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0069	J	0.010	0.0056	mg/L		12/26/13 08:30	12/30/13 20:29	1
Barium	0.40	B	0.0020	0.00070	mg/L		12/26/13 08:30	12/30/13 20:29	1
Cadmium	0.00050	J	0.0010	0.00050	mg/L		12/26/13 08:30	12/30/13 20:29	1
Chromium	0.0060	B	0.0040	0.0010	mg/L		12/26/13 08:30	12/30/13 20:29	1
Lead	0.0038	J	0.0050	0.0030	mg/L		12/26/13 08:30	12/30/13 20:29	1
Selenium	ND		0.015	0.0087	mg/L		12/26/13 08:30	12/30/13 20:29	1
Silver	ND		0.0030	0.0017	mg/L		12/26/13 08:30	12/30/13 20:29	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/26/13 09:30	12/26/13 12:50	1

TestAmerica Buffalo

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8260C - TCLP Volatiles

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (71-126)	12DCE (66-137)	BFB (73-120)
LCS 480-159293/5	Lab Control Sample	100	105	96
MB 480-159293/6	Method Blank	98	108	100

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - TCLP Volatiles

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-52398-7	4009-23 TCLP 121113	106	98	98
480-52398-8	4009-24 TCLP 121313	107	98	97
480-52398-9	4009-25 TCLP 121413	107	98	97
480-52398-10	4009-26 TCLP 121613	109	101	99
480-52398-11	4009-27 TCLP 121813	108	97	99
LB 480-159122/1-A	Method Blank	106	98	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (71-125)	12DCE (64-126)	BFB (72-126)
480-52398-1	4009-23 (5-6') 121113	95	92	96
480-52398-2	4009-23 (11-12') 121113	95	96	97
480-52398-3	4009-24 (14-16') 121313	98	96	98
480-52398-4	4009-25 (14-16') 121413	98	95	97
480-52398-5	4009-26 (14-15') 121613	97	97	98
480-52398-6	4009-27 (13-14') 121813	98	94	96
LCS 480-159003/5	Lab Control Sample	100	93	100
MB 480-159003/6	Method Blank	99	90	94

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

TestAmerica Buffalo

Surrogate Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (52-132)	FBP (48-120)	2FP (20-120)	NBZ (46-120)	TPH (67-150)	PHL (16-120)
LCS 480-159727/2-A	Lab Control Sample	104	87	52	85	111	37
LCSD 480-159727/3-A	Lab Control Sample Dup	105	93	50	86	85	37
MB 480-159727/1-A	Method Blank	93	89	51	85	109	40

Surrogate Legend

TBP = 2,4,6-Tribromophenol
 FBP = 2-Fluorobiphenyl
 2FP = 2-Fluorophenol
 NBZ = Nitrobenzene-d5
 TPH = p-Terphenyl-d14
 PHL = Phenol-d5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (52-132)	FBP (48-120)	2FP (20-120)	NBZ (46-120)	TPH (67-150)	PHL (16-120)
480-52398-7	4009-23 TCLP 121113	77	50	28	48	91	24
480-52398-8	4009-24 TCLP 121313	88	92	57	96	96	43
480-52398-9	4009-25 TCLP 121413	87	61	31	54	94	27
480-52398-10	4009-26 TCLP 121613	91	88	52	93	97	38
480-52398-11	4009-27 TCLP 121813	96	99	61	102	98	45
LB 480-159062/1-D	Method Blank	105	95	52	89	116	39

Surrogate Legend

TBP = 2,4,6-Tribromophenol
 FBP = 2-Fluorobiphenyl
 2FP = 2-Fluorophenol
 NBZ = Nitrobenzene-d5
 TPH = p-Terphenyl-d14
 PHL = Phenol-d5

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB2 (20-120)	TCX2 (36-120)
LCS 480-159844/2-A	Lab Control Sample	50	81
LCSD 480-159844/3-A	Lab Control Sample Dup	20	88
MB 480-159844/1-A	Method Blank	47	81

Surrogate Legend

DCB = DCB Decachlorobiphenyl
 TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB2 (20-120)	TCX2 (36-120)
480-52398-7	4009-23 TCLP 121113	74	83
480-52398-8	4009-24 TCLP 121313	69	90
480-52398-9	4009-25 TCLP 121413	69	81
480-52398-10	4009-26 TCLP 121613	72	91
480-52398-11	4009-27 TCLP 121813	76	87
LB 480-159062/1-F	Method Blank	80	88

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPA1 (40-135)
LCS 480-159801/2-A	Lab Control Sample	113
LCS 480-159801/3-A	Lab Control Sample Dup	109
MB 480-159801/1-A	Method Blank	124

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPA1 (40-135)
480-52398-7	4009-23 TCLP 121113	14 X
480-52398-8	4009-24 TCLP 121313	19 X
480-52398-9	4009-25 TCLP 121413	21 X
480-52398-10	4009-26 TCLP 121613	20 X
480-52398-11	4009-27 TCLP 121813	20 X
LB 480-159062/1-E	Method Blank	16 X

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8260C - TCLP Volatiles

Lab Sample ID: MB 480-159293/6

Matrix: Solid

Analysis Batch: 159293

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			12/24/13 11:51	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			12/24/13 11:51	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			12/24/13 11:51	1
Benzene	ND		0.0010	0.00041	mg/L			12/24/13 11:51	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			12/24/13 11:51	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			12/24/13 11:51	1
Chloroform	ND		0.0010	0.00034	mg/L			12/24/13 11:51	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			12/24/13 11:51	1
Trichloroethene	ND		0.0010	0.00046	mg/L			12/24/13 11:51	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			12/24/13 11:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 126		12/24/13 11:51	1
1,2-Dichloroethane-d4 (Surr)	108		66 - 137		12/24/13 11:51	1
4-Bromofluorobenzene (Surr)	100		73 - 120		12/24/13 11:51	1

Lab Sample ID: LCS 480-159293/5

Matrix: Solid

Analysis Batch: 159293

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.0250	0.0232		mg/L		93	58 - 121
1,2-Dichloroethane	0.0250	0.0234		mg/L		94	75 - 127
Benzene	0.0250	0.0249		mg/L		100	71 - 124
Chlorobenzene	0.0250	0.0224		mg/L		90	72 - 120
Tetrachloroethene	0.0250	0.0218		mg/L		87	74 - 122
Trichloroethene	0.0250	0.0243		mg/L		97	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		71 - 126
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
4-Bromofluorobenzene (Surr)	96		73 - 120

Lab Sample ID: LB 480-159122/1-A

Matrix: Solid

Analysis Batch: 159293

Client Sample ID: Method Blank

Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			12/24/13 15:24	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			12/24/13 15:24	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			12/24/13 15:24	10
Benzene	ND		0.010	0.0041	mg/L			12/24/13 15:24	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			12/24/13 15:24	10
Chlorobenzene	ND		0.010	0.0075	mg/L			12/24/13 15:24	10
Chloroform	ND		0.010	0.0034	mg/L			12/24/13 15:24	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			12/24/13 15:24	10
Trichloroethene	ND		0.010	0.0046	mg/L			12/24/13 15:24	10

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8260C - TCLP Volatiles (Continued)

Lab Sample ID: LB 480-159122/1-A

Matrix: Solid

Analysis Batch: 159293

Client Sample ID: Method Blank

Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.010	0.0090	mg/L			12/24/13 15:24	10

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 126		12/24/13 15:24	10
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		12/24/13 15:24	10
4-Bromofluorobenzene (Surr)	95		73 - 120		12/24/13 15:24	10

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

Lab Sample ID: MB 480-159003/6

Matrix: Solid

Analysis Batch: 159003

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	ND		5.0	0.36	ug/Kg			12/22/13 13:51	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			12/22/13 13:51	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			12/22/13 13:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			12/22/13 13:51	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			12/22/13 13:51	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			12/22/13 13:51	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			12/22/13 13:51	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			12/22/13 13:51	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			12/22/13 13:51	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			12/22/13 13:51	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			12/22/13 13:51	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			12/22/13 13:51	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			12/22/13 13:51	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			12/22/13 13:51	1
2-Hexanone	ND		25	2.5	ug/Kg			12/22/13 13:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			12/22/13 13:51	1
Acetone	ND		25	4.2	ug/Kg			12/22/13 13:51	1
Benzene	ND		5.0	0.25	ug/Kg			12/22/13 13:51	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			12/22/13 13:51	1
Bromoform	ND		5.0	2.5	ug/Kg			12/22/13 13:51	1
Bromomethane	ND		5.0	0.45	ug/Kg			12/22/13 13:51	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			12/22/13 13:51	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			12/22/13 13:51	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			12/22/13 13:51	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			12/22/13 13:51	1
Chloroethane	ND		5.0	1.1	ug/Kg			12/22/13 13:51	1
Chloroform	ND		5.0	0.31	ug/Kg			12/22/13 13:51	1
Chloromethane	ND		5.0	0.30	ug/Kg			12/22/13 13:51	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			12/22/13 13:51	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			12/22/13 13:51	1
Cyclohexane	ND		5.0	0.70	ug/Kg			12/22/13 13:51	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			12/22/13 13:51	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			12/22/13 13:51	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			12/22/13 13:51	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

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

Lab Sample ID: MB 480-159003/6

Matrix: Solid

Analysis Batch: 159003

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	0.75	ug/Kg			12/22/13 13:51	1
Methyl acetate	ND		5.0	0.93	ug/Kg			12/22/13 13:51	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			12/22/13 13:51	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			12/22/13 13:51	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			12/22/13 13:51	1
Styrene	ND		5.0	0.25	ug/Kg			12/22/13 13:51	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			12/22/13 13:51	1
Toluene	ND		5.0	0.38	ug/Kg			12/22/13 13:51	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			12/22/13 13:51	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			12/22/13 13:51	1
Trichloroethene	ND		5.0	1.1	ug/Kg			12/22/13 13:51	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			12/22/13 13:51	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			12/22/13 13:51	1
Xylenes, Total	ND		10	0.84	ug/Kg			12/22/13 13:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125		12/22/13 13:51	1
1,2-Dichloroethane-d4 (Surr)	90		64 - 126		12/22/13 13:51	1
4-Bromofluorobenzene (Surr)	94		72 - 126		12/22/13 13:51	1

Lab Sample ID: LCS 480-159003/5

Matrix: Solid

Analysis Batch: 159003

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	48.2		ug/Kg		96	73 - 126
1,1-Dichloroethene	50.0	48.1		ug/Kg		96	59 - 125
1,2-Dichlorobenzene	50.0	49.4		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	46.5		ug/Kg		93	77 - 122
Benzene	50.0	48.9		ug/Kg		98	79 - 127
Chlorobenzene	50.0	50.1		ug/Kg		100	76 - 124
cis-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	81 - 117
Ethylbenzene	50.0	50.7		ug/Kg		101	80 - 120
Methyl tert-butyl ether	50.0	53.6		ug/Kg		107	63 - 125
Tetrachloroethene	50.0	50.9		ug/Kg		102	74 - 122
Toluene	50.0	50.2		ug/Kg		100	74 - 128
trans-1,2-Dichloroethene	50.0	48.6		ug/Kg		97	78 - 126
Trichloroethene	50.0	49.1		ug/Kg		98	77 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		71 - 125
1,2-Dichloroethane-d4 (Surr)	93		64 - 126
4-Bromofluorobenzene (Surr)	100		72 - 126

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-159727/1-A

Matrix: Solid

Analysis Batch: 159804

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 159727

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0025	0.00012	mg/L		12/28/13 07:28	12/30/13 16:27	1
2,4-Dinitrotoluene	ND		0.0013	0.00011	mg/L		12/28/13 07:28	12/30/13 16:27	1
Hexachlorobenzene	ND		0.0013	0.00013	mg/L		12/28/13 07:28	12/30/13 16:27	1
Hexachlorobutadiene	ND		0.0013	0.00017	mg/L		12/28/13 07:28	12/30/13 16:27	1
Hexachloroethane	ND		0.0013	0.00015	mg/L		12/28/13 07:28	12/30/13 16:27	1
3-Methylphenol	ND		0.0025	0.00010	mg/L		12/28/13 07:28	12/30/13 16:27	1
2-Methylphenol	ND		0.0013	0.00010	mg/L		12/28/13 07:28	12/30/13 16:27	1
4-Methylphenol	ND		0.0025	0.000090	mg/L		12/28/13 07:28	12/30/13 16:27	1
Nitrobenzene	ND		0.0013	0.000073	mg/L		12/28/13 07:28	12/30/13 16:27	1
Pentachlorophenol	ND		0.0025	0.00055	mg/L		12/28/13 07:28	12/30/13 16:27	1
Pyridine	ND		0.0063	0.00010	mg/L		12/28/13 07:28	12/30/13 16:27	1
2,4,5-Trichlorophenol	ND		0.0013	0.00012	mg/L		12/28/13 07:28	12/30/13 16:27	1
2,4,6-Trichlorophenol	ND		0.0013	0.00015	mg/L		12/28/13 07:28	12/30/13 16:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		52 - 132	12/28/13 07:28	12/30/13 16:27	1
2-Fluorobiphenyl	89		48 - 120	12/28/13 07:28	12/30/13 16:27	1
2-Fluorophenol	51		20 - 120	12/28/13 07:28	12/30/13 16:27	1
Nitrobenzene-d5	85		46 - 120	12/28/13 07:28	12/30/13 16:27	1
p-Terphenyl-d14	109		67 - 150	12/28/13 07:28	12/30/13 16:27	1
Phenol-d5	40		16 - 120	12/28/13 07:28	12/30/13 16:27	1

Lab Sample ID: LCS 480-159727/2-A

Matrix: Solid

Analysis Batch: 159804

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 159727

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0500	0.0345		mg/L		69	32 - 120
2,4-Dinitrotoluene	0.0500	0.0541		mg/L		108	65 - 154
Hexachloroethane	0.0500	0.0222		mg/L		44	14 - 101
Pentachlorophenol	0.100	0.103		mg/L		103	39 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	104		52 - 132
2-Fluorobiphenyl	87		48 - 120
2-Fluorophenol	52		20 - 120
Nitrobenzene-d5	85		46 - 120
p-Terphenyl-d14	111		67 - 150
Phenol-d5	37		16 - 120

Lab Sample ID: LCSD 480-159727/3-A

Matrix: Solid

Analysis Batch: 159804

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 159727

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.0500	0.0383		mg/L		77	32 - 120	10	36
2,4-Dinitrotoluene	0.0500	0.0533		mg/L		107	65 - 154	2	20

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-159727/3-A

Matrix: Solid

Analysis Batch: 159804

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 159727

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	0.0500	0.0327		mg/L		65	14 - 101	38	46
Pentachlorophenol	0.100	0.0984		mg/L		98	39 - 136	5	37

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	105		52 - 132
2-Fluorobiphenyl	93		48 - 120
2-Fluorophenol	50		20 - 120
Nitrobenzene-d5	86		46 - 120
p-Terphenyl-d14	85		67 - 150
Phenol-d5	37		16 - 120

Lab Sample ID: LB 480-159062/1-D

Matrix: Solid

Analysis Batch: 159804

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 159727

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		12/28/13 07:28	12/30/13 18:00	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		12/28/13 07:28	12/30/13 18:00	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		12/28/13 07:28	12/30/13 18:00	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		12/28/13 07:28	12/30/13 18:00	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		12/28/13 07:28	12/30/13 18:00	1
3-Methylphenol	ND		0.010	0.00040	mg/L		12/28/13 07:28	12/30/13 18:00	1
2-Methylphenol	ND		0.0050	0.00040	mg/L		12/28/13 07:28	12/30/13 18:00	1
4-Methylphenol	ND		0.010	0.00036	mg/L		12/28/13 07:28	12/30/13 18:00	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		12/28/13 07:28	12/30/13 18:00	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		12/28/13 07:28	12/30/13 18:00	1
Pyridine	ND		0.025	0.00041	mg/L		12/28/13 07:28	12/30/13 18:00	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		12/28/13 07:28	12/30/13 18:00	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		12/28/13 07:28	12/30/13 18:00	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	105		52 - 132	12/28/13 07:28	12/30/13 18:00	1
2-Fluorobiphenyl	95		48 - 120	12/28/13 07:28	12/30/13 18:00	1
2-Fluorophenol	52		20 - 120	12/28/13 07:28	12/30/13 18:00	1
Nitrobenzene-d5	89		46 - 120	12/28/13 07:28	12/30/13 18:00	1
p-Terphenyl-d14	116		67 - 150	12/28/13 07:28	12/30/13 18:00	1
Phenol-d5	39		16 - 120	12/28/13 07:28	12/30/13 18:00	1

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-159844/1-A

Matrix: Solid

Analysis Batch: 159959

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 159844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.000050	0.0000015	mg/L		12/30/13 10:29	12/31/13 08:50	1
Chlordane (technical)	ND		0.00050	0.0000073	mg/L		12/30/13 10:29	12/31/13 08:50	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-159844/1-A
Matrix: Solid
Analysis Batch: 159959

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 159844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	ND		0.000050	0.0000035	mg/L		12/30/13 10:29	12/31/13 08:50	1
Heptachlor	ND		0.000050	0.0000021	mg/L		12/30/13 10:29	12/31/13 08:50	1
Heptachlor epoxide	ND		0.000050	0.0000013	mg/L		12/30/13 10:29	12/31/13 08:50	1
Methoxychlor	ND		0.000050	0.0000035	mg/L		12/30/13 10:29	12/31/13 08:50	1
Toxaphene	ND		0.00050	0.000030	mg/L		12/30/13 10:29	12/31/13 08:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	47		20 - 120	12/30/13 10:29	12/31/13 08:50	1
Tetrachloro-m-xylene	81		36 - 120	12/30/13 10:29	12/31/13 08:50	1

Lab Sample ID: LCS 480-159844/2-A
Matrix: Solid
Analysis Batch: 159959

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 159844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
gamma-BHC (Lindane)	0.000500	0.000453		mg/L		91	56 - 127
Endrin	0.000500	0.000490		mg/L		98	52 - 143
Heptachlor	0.000500	0.000443		mg/L		89	51 - 125
Heptachlor epoxide	0.000500	0.000466		mg/L		93	50 - 140
Methoxychlor	0.000500	0.000489		mg/L		98	50 - 151

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	50		20 - 120
Tetrachloro-m-xylene	81		36 - 120

Lab Sample ID: LCSD 480-159844/3-A
Matrix: Solid
Analysis Batch: 159959

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 159844

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
gamma-BHC (Lindane)	0.000500	0.000478		mg/L		96	56 - 127	5	24
Endrin	0.000500	0.000470		mg/L		94	52 - 143	4	24
Heptachlor	0.000500	0.000409		mg/L		82	51 - 125	8	25
Heptachlor epoxide	0.000500	0.000460		mg/L		92	50 - 140	1	23
Methoxychlor	0.000500	0.000398		mg/L		80	50 - 151	21	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	20		20 - 120
Tetrachloro-m-xylene	88		36 - 120

Lab Sample ID: LB 480-159062/1-F
Matrix: Solid
Analysis Batch: 159959

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 159844

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00020	0.0000060	mg/L		12/30/13 10:29	12/31/13 09:42	1
Chlordane (technical)	ND		0.0020	0.000029	mg/L		12/30/13 10:29	12/31/13 09:42	1

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QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LB 480-159062/1-F
Matrix: Solid
Analysis Batch: 159959

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 159844

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Endrin	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 09:42	1
Heptachlor	0.0000243	J	0.00020	0.0000085	mg/L		12/30/13 10:29	12/31/13 09:42	1
Heptachlor epoxide	ND		0.00020	0.0000053	mg/L		12/30/13 10:29	12/31/13 09:42	1
Methoxychlor	ND		0.00020	0.000014	mg/L		12/30/13 10:29	12/31/13 09:42	1
Toxaphene	ND		0.0020	0.00012	mg/L		12/30/13 10:29	12/31/13 09:42	1
Surrogate	LB LB		Limits			Prepared	Analyzed	Dil Fac	
%Recovery	Qualifier								
DCB Decachlorobiphenyl	80		20 - 120			12/30/13 10:29	12/31/13 09:42	1	
Tetrachloro-m-xylene	88		36 - 120			12/30/13 10:29	12/31/13 09:42	1	

Method: 8151 - TCLP Herbicides

Lab Sample ID: MB 480-159801/1-A
Matrix: Solid
Analysis Batch: 160069

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 159801

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Silvex (2,4,5-TP)	ND		0.00050	0.000090	mg/L		12/30/13 09:31	12/31/13 20:36	1
2,4-D	ND		0.00050	0.00010	mg/L		12/30/13 09:31	12/31/13 20:36	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac	
%Recovery	Qualifier								
2,4-Dichlorophenylacetic acid	124		40 - 135			12/30/13 09:31	12/31/13 20:36	1	

Lab Sample ID: LCS 480-159801/2-A
Matrix: Solid
Analysis Batch: 160069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 159801

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Limits	RPD
Silvex (2,4,5-TP)	0.00200	0.00192		mg/L		96	44 - 154	
2,4-D	0.00200	0.00187		mg/L		93	46 - 161	
Surrogate	LCS LCS		Limits			%Rec	Limits	RPD
%Recovery	Qualifier							
2,4-Dichlorophenylacetic acid	113		40 - 135					

Lab Sample ID: LCSD 480-159801/3-A
Matrix: Solid
Analysis Batch: 160069

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 159801

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
							Limits	RPD		
Silvex (2,4,5-TP)	0.00200	0.00177		mg/L		88	44 - 154	8	50	
2,4-D	0.00200	0.00161		mg/L		80	46 - 161	15	50	
Surrogate	LCSD LCSD		Limits			%Rec	Limits	RPD	Limit	
%Recovery	Qualifier									
2,4-Dichlorophenylacetic acid	109		40 - 135							

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QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 8151 - TCLP Herbicides (Continued)

Lab Sample ID: LB 480-159062/1-E
Matrix: Solid
Analysis Batch: 160069

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 159801

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.0020	0.00036	mg/L		12/30/13 09:31	12/31/13 23:03	1
2,4-D	ND		0.0020	0.00040	mg/L		12/30/13 09:31	12/31/13 23:03	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	16	X	40 - 135	12/30/13 09:31	12/31/13 23:03	1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-159358/2-A
Matrix: Solid
Analysis Batch: 159969

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 159358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		12/26/13 08:30	12/30/13 19:51	1
Barium	ND		0.0020	0.00070	mg/L		12/26/13 08:30	12/30/13 19:51	1
Cadmium	ND		0.0010	0.00050	mg/L		12/26/13 08:30	12/30/13 19:51	1
Chromium	ND		0.0040	0.0010	mg/L		12/26/13 08:30	12/30/13 19:51	1
Lead	ND		0.0050	0.0030	mg/L		12/26/13 08:30	12/30/13 19:51	1
Selenium	ND		0.015	0.0087	mg/L		12/26/13 08:30	12/30/13 19:51	1
Silver	ND		0.0030	0.0017	mg/L		12/26/13 08:30	12/30/13 19:51	1

Lab Sample ID: LCS 480-159358/3-A
Matrix: Solid
Analysis Batch: 159969

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 159358

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.13		mg/L		113	80 - 120
Barium	1.00	1.04		mg/L		104	80 - 120
Cadmium	1.00	1.08		mg/L		108	80 - 120
Chromium	1.00	1.06		mg/L		106	80 - 120
Lead	1.00	1.04		mg/L		104	80 - 120
Selenium	1.00	1.13		mg/L		113	80 - 120
Silver	1.00	1.15		mg/L		115	80 - 120

Lab Sample ID: LB 480-159062/1-B
Matrix: Solid
Analysis Batch: 159969

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 159358

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0056	mg/L		12/26/13 08:30	12/30/13 19:48	1
Barium	0.0414		0.0020	0.00070	mg/L		12/26/13 08:30	12/30/13 19:48	1
Cadmium	ND		0.0010	0.00050	mg/L		12/26/13 08:30	12/30/13 19:48	1
Chromium	0.00238	J	0.0040	0.0010	mg/L		12/26/13 08:30	12/30/13 19:48	1
Lead	ND		0.0050	0.0030	mg/L		12/26/13 08:30	12/30/13 19:48	1
Selenium	ND		0.015	0.0087	mg/L		12/26/13 08:30	12/30/13 19:48	1
Silver	ND		0.0030	0.0017	mg/L		12/26/13 08:30	12/30/13 19:48	1

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QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-52398-7 MS

Matrix: Solid

Analysis Batch: 159969

Client Sample ID: 4009-23 TCLP 121113

Prep Type: TCLP

Prep Batch: 159358

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Arsenic	0.011		1.00	1.14		mg/L		113	75 - 125	
Barium	0.63	B	1.00	1.66		mg/L		103	75 - 125	
Cadmium	0.00063	J	1.00	1.05		mg/L		105	75 - 125	
Chromium	0.0048	B	1.00	1.08		mg/L		107	75 - 125	
Lead	0.062		1.00	1.10		mg/L		104	75 - 125	
Selenium	ND		1.00	1.16		mg/L		116	75 - 125	
Silver	ND		1.00	1.13		mg/L		113	75 - 125	

Lab Sample ID: 480-52398-7 MSD

Matrix: Solid

Analysis Batch: 159969

Client Sample ID: 4009-23 TCLP 121113

Prep Type: TCLP

Prep Batch: 159358

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits	RPD	Limit
Arsenic	0.011		1.00	1.14		mg/L		113	75 - 125	0	20	
Barium	0.63	B	1.00	1.67		mg/L		104	75 - 125	1	20	
Cadmium	0.00063	J	1.00	1.05		mg/L		104	75 - 125	1	20	
Chromium	0.0048	B	1.00	1.08		mg/L		107	75 - 125	0	20	
Lead	0.062		1.00	1.11		mg/L		105	75 - 125	1	20	
Selenium	ND		1.00	1.14		mg/L		114	75 - 125	1	20	
Silver	ND		1.00	1.13		mg/L		113	75 - 125	0	20	

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 480-159401/2-A

Matrix: Solid

Analysis Batch: 159485

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 159401

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.00020	0.00012	mg/L		12/26/13 09:30	12/26/13 12:30	1

Lab Sample ID: LCS 480-159401/3-A

Matrix: Solid

Analysis Batch: 159485

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 159401

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	
							Added	Result
Mercury	0.00668	0.00552		mg/L		83	80 - 120	

Lab Sample ID: LB 480-159062/1-C

Matrix: Solid

Analysis Batch: 159485

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 159401

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.00020	0.00012	mg/L		12/26/13 09:30	12/26/13 12:29	1

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QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 480-52398-7 MS
Matrix: Solid
Analysis Batch: 159485

Client Sample ID: 4009-23 TCLP 121113
Prep Type: TCLP
Prep Batch: 159401

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00668	0.00592		mg/L		89	75 - 125

Lab Sample ID: 480-52398-7 MSD
Matrix: Solid
Analysis Batch: 159485

Client Sample ID: 4009-23 TCLP 121113
Prep Type: TCLP
Prep Batch: 159401

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00668	0.00583		mg/L		87	75 - 125	1	20



QC Association Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

GC/MS VOA

Analysis Batch: 159003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-1	4009-23 (5-6') 121113	Total/NA	Solid	8260C	159005
480-52398-2	4009-23 (11-12') 121113	Total/NA	Solid	8260C	159005
480-52398-3	4009-24 (14-16') 121313	Total/NA	Solid	8260C	159005
480-52398-4	4009-25 (14-16') 121413	Total/NA	Solid	8260C	159005
480-52398-5	4009-26 (14-15') 121613	Total/NA	Solid	8260C	159005
480-52398-6	4009-27 (13-14') 121813	Total/NA	Solid	8260C	159005
LCS 480-159003/5	Lab Control Sample	Total/NA	Solid	8260C	
MB 480-159003/6	Method Blank	Total/NA	Solid	8260C	

Prep Batch: 159005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-1	4009-23 (5-6') 121113	Total/NA	Solid	5035A	
480-52398-2	4009-23 (11-12') 121113	Total/NA	Solid	5035A	
480-52398-3	4009-24 (14-16') 121313	Total/NA	Solid	5035A	
480-52398-4	4009-25 (14-16') 121413	Total/NA	Solid	5035A	
480-52398-5	4009-26 (14-15') 121613	Total/NA	Solid	5035A	
480-52398-6	4009-27 (13-14') 121813	Total/NA	Solid	5035A	

Leach Batch: 159122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	1311	
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	1311	
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	1311	
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	1311	
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	1311	
LB 480-159122/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 159293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	8260C	159122
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	8260C	159122
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	8260C	159122
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	8260C	159122
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	8260C	159122
LB 480-159122/1-A	Method Blank	TCLP	Solid	8260C	159122
LCS 480-159293/5	Lab Control Sample	Total/NA	Solid	8260C	
MB 480-159293/6	Method Blank	Total/NA	Solid	8260C	

GC/MS Semi VOA

Leach Batch: 159062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	1311	
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	1311	
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	1311	
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	1311	
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	1311	
LB 480-159062/1-D	Method Blank	TCLP	Solid	1311	

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

GC/MS Semi VOA (Continued)

Prep Batch: 159727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	3510C	159062
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	3510C	159062
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	3510C	159062
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	3510C	159062
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	3510C	159062
LB 480-159062/1-D	Method Blank	TCLP	Solid	3510C	159062
LCS 480-159727/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 480-159727/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
MB 480-159727/1-A	Method Blank	Total/NA	Solid	3510C	

Analysis Batch: 159804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 480-159062/1-D	Method Blank	TCLP	Solid	8270D	159727
LCS 480-159727/2-A	Lab Control Sample	Total/NA	Solid	8270D	159727
LCSD 480-159727/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	159727
MB 480-159727/1-A	Method Blank	Total/NA	Solid	8270D	159727

Analysis Batch: 159928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	8270D	159727
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	8270D	159727
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	8270D	159727
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	8270D	159727
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	8270D	159727

GC Semi VOA

Leach Batch: 159062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	1311	
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	1311	
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	1311	
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	1311	
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	1311	
LB 480-159062/1-E	Method Blank	TCLP	Solid	1311	
LB 480-159062/1-F	Method Blank	TCLP	Solid	1311	

Prep Batch: 159801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	8151A	159062
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	8151A	159062
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	8151A	159062
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	8151A	159062
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	8151A	159062
LB 480-159062/1-E	Method Blank	TCLP	Solid	8151A	159062
LCS 480-159801/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 480-159801/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	
MB 480-159801/1-A	Method Blank	Total/NA	Solid	8151A	

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QC Association Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

GC Semi VOA (Continued)

Prep Batch: 159844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	3510C	159062
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	3510C	159062
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	3510C	159062
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	3510C	159062
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	3510C	159062
LB 480-159062/1-F	Method Blank	TCLP	Solid	3510C	159062
LCS 480-159844/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 480-159844/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
MB 480-159844/1-A	Method Blank	Total/NA	Solid	3510C	

Analysis Batch: 159959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	8081B	159844
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	8081B	159844
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	8081B	159844
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	8081B	159844
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	8081B	159844
LB 480-159062/1-F	Method Blank	TCLP	Solid	8081B	159844
LCS 480-159844/2-A	Lab Control Sample	Total/NA	Solid	8081B	159844
LCSD 480-159844/3-A	Lab Control Sample Dup	Total/NA	Solid	8081B	159844
MB 480-159844/1-A	Method Blank	Total/NA	Solid	8081B	159844

Analysis Batch: 160069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	8151	159801
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	8151	159801
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	8151	159801
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	8151	159801
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	8151	159801
LB 480-159062/1-E	Method Blank	TCLP	Solid	8151	159801
LCS 480-159801/2-A	Lab Control Sample	Total/NA	Solid	8151	159801
LCSD 480-159801/3-A	Lab Control Sample Dup	Total/NA	Solid	8151	159801
MB 480-159801/1-A	Method Blank	Total/NA	Solid	8151	159801

Metals

Leach Batch: 159062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	1311	
480-52398-7 MS	4009-23 TCLP 121113	TCLP	Solid	1311	
480-52398-7 MSD	4009-23 TCLP 121113	TCLP	Solid	1311	
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	1311	
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	1311	
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	1311	
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	1311	
LB 480-159062/1-B	Method Blank	TCLP	Solid	1311	
LB 480-159062/1-C	Method Blank	TCLP	Solid	1311	

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Metals (Continued)

Prep Batch: 159358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	3010A	159062
480-52398-7 MS	4009-23 TCLP 121113	TCLP	Solid	3010A	159062
480-52398-7 MSD	4009-23 TCLP 121113	TCLP	Solid	3010A	159062
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	3010A	159062
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	3010A	159062
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	3010A	159062
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	3010A	159062
LB 480-159062/1-B	Method Blank	TCLP	Solid	3010A	159062
LCS 480-159358/3-A	Lab Control Sample	Total/NA	Solid	3010A	159062
MB 480-159358/2-A	Method Blank	Total/NA	Solid	3010A	159062

Prep Batch: 159401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	7470A	159062
480-52398-7 MS	4009-23 TCLP 121113	TCLP	Solid	7470A	159062
480-52398-7 MSD	4009-23 TCLP 121113	TCLP	Solid	7470A	159062
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	7470A	159062
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	7470A	159062
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	7470A	159062
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	7470A	159062
LB 480-159062/1-C	Method Blank	TCLP	Solid	7470A	159062
LCS 480-159401/3-A	Lab Control Sample	Total/NA	Solid	7470A	159062
MB 480-159401/2-A	Method Blank	Total/NA	Solid	7470A	159062

Analysis Batch: 159485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	7470A	159401
480-52398-7 MS	4009-23 TCLP 121113	TCLP	Solid	7470A	159401
480-52398-7 MSD	4009-23 TCLP 121113	TCLP	Solid	7470A	159401
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	7470A	159401
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	7470A	159401
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	7470A	159401
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	7470A	159401
LB 480-159062/1-C	Method Blank	TCLP	Solid	7470A	159401
LCS 480-159401/3-A	Lab Control Sample	Total/NA	Solid	7470A	159401
MB 480-159401/2-A	Method Blank	Total/NA	Solid	7470A	159401

Analysis Batch: 159969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	TCLP	Solid	6010C	159358
480-52398-7 MS	4009-23 TCLP 121113	TCLP	Solid	6010C	159358
480-52398-7 MSD	4009-23 TCLP 121113	TCLP	Solid	6010C	159358
480-52398-8	4009-24 TCLP 121313	TCLP	Solid	6010C	159358
480-52398-9	4009-25 TCLP 121413	TCLP	Solid	6010C	159358
480-52398-10	4009-26 TCLP 121613	TCLP	Solid	6010C	159358
480-52398-11	4009-27 TCLP 121813	TCLP	Solid	6010C	159358
LB 480-159062/1-B	Method Blank	TCLP	Solid	6010C	159358
LCS 480-159358/3-A	Lab Control Sample	Total/NA	Solid	6010C	159358
MB 480-159358/2-A	Method Blank	Total/NA	Solid	6010C	159358

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

General Chemistry

Analysis Batch: 158911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-7	4009-23 TCLP 121113	Total/NA	Solid	Moisture	
480-52398-8	4009-24 TCLP 121313	Total/NA	Solid	Moisture	
480-52398-9	4009-25 TCLP 121413	Total/NA	Solid	Moisture	
480-52398-10	4009-26 TCLP 121613	Total/NA	Solid	Moisture	
480-52398-11	4009-27 TCLP 121813	Total/NA	Solid	Moisture	

Analysis Batch: 159195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-52398-1	4009-23 (5-6') 121113	Total/NA	Solid	Moisture	
480-52398-2	4009-23 (11-12') 121113	Total/NA	Solid	Moisture	
480-52398-3	4009-24 (14-16') 121313	Total/NA	Solid	Moisture	
480-52398-4	4009-25 (14-16') 121413	Total/NA	Solid	Moisture	
480-52398-5	4009-26 (14-15') 121613	Total/NA	Solid	Moisture	
480-52398-6	4009-27 (13-14') 121813	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-23 (5-6') 121113

Lab Sample ID: 480-52398-1

Date Collected: 12/11/13 11:30

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			159005	12/22/13 12:21	CDC	TAL BUF
Total/NA	Analysis	8260C		1	159003	12/22/13 14:56	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	159195	12/23/13 15:50	PJQ	TAL BUF

Client Sample ID: 4009-23 (11-12') 121113

Lab Sample ID: 480-52398-2

Date Collected: 12/11/13 12:20

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			159005	12/22/13 12:21	CDC	TAL BUF
Total/NA	Analysis	8260C		1	159003	12/22/13 15:22	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	159195	12/23/13 15:50	PJQ	TAL BUF

Client Sample ID: 4009-24 (14-16') 121313

Lab Sample ID: 480-52398-3

Date Collected: 12/13/13 11:00

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			159005	12/22/13 12:21	CDC	TAL BUF
Total/NA	Analysis	8260C		1	159003	12/22/13 15:48	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	159195	12/23/13 15:50	PJQ	TAL BUF

Client Sample ID: 4009-25 (14-16') 121413

Lab Sample ID: 480-52398-4

Date Collected: 12/14/13 10:15

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			159005	12/22/13 12:21	CDC	TAL BUF
Total/NA	Analysis	8260C		1	159003	12/22/13 16:13	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	159195	12/23/13 15:50	PJQ	TAL BUF

Client Sample ID: 4009-26 (14-15') 121613

Lab Sample ID: 480-52398-5

Date Collected: 12/16/13 13:00

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			159005	12/22/13 12:21	CDC	TAL BUF
Total/NA	Analysis	8260C		1	159003	12/22/13 16:39	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	159195	12/23/13 15:50	PJQ	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-27 (13-14') 121813

Lab Sample ID: 480-52398-6

Date Collected: 12/18/13 09:30

Matrix: Solid

Date Received: 12/20/13 10:30

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			159005	12/22/13 12:21	CDC	TAL BUF
Total/NA	Analysis	8260C		1	159003	12/22/13 17:05	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	159195	12/23/13 15:50	PJQ	TAL BUF

Client Sample ID: 4009-23 TCLP 121113

Lab Sample ID: 480-52398-7

Date Collected: 12/11/13 16:00

Matrix: Solid

Date Received: 12/20/13 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			159122	12/23/13 11:14	MRB	TAL BUF
TCLP	Analysis	8260C		10	159293	12/24/13 16:27	TRB	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159727	12/28/13 07:28	TRG	TAL BUF
TCLP	Analysis	8270D		1	159928	12/31/13 05:16	ANM	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159844	12/30/13 10:29	MRB	TAL BUF
TCLP	Analysis	8081B		1	159959	12/31/13 11:10	LMW	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	8151A			159801	12/30/13 09:31	MRB	TAL BUF
TCLP	Analysis	8151		1	160069	12/31/13 23:33	GSR	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	7470A			159401	12/26/13 09:30	SS1	TAL BUF
TCLP	Analysis	7470A		1	159485	12/26/13 12:34	SS1	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3010A			159358	12/26/13 08:30	EHD	TAL BUF
TCLP	Analysis	6010C		1	159969	12/30/13 20:05	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	158911	12/20/13 22:08		TAL BUF

Client Sample ID: 4009-24 TCLP 121313

Lab Sample ID: 480-52398-8

Date Collected: 12/13/13 14:30

Matrix: Solid

Date Received: 12/20/13 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			159122	12/23/13 11:14	MRB	TAL BUF
TCLP	Analysis	8260C		10	159293	12/24/13 16:48	TRB	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159727	12/28/13 07:28	TRG	TAL BUF
TCLP	Analysis	8270D		1	159928	12/31/13 06:03	ANM	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159844	12/30/13 10:29	MRB	TAL BUF
TCLP	Analysis	8081B		1	159959	12/31/13 11:27	LMW	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	8151A			159801	12/30/13 09:31	MRB	TAL BUF
TCLP	Analysis	8151		1	160069	01/01/14 00:02	GSR	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-24 TCLP 121313

Lab Sample ID: 480-52398-8

Date Collected: 12/13/13 14:30

Matrix: Solid

Date Received: 12/20/13 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	7470A			159401	12/26/13 09:30	SS1	TAL BUF
TCLP	Analysis	7470A		1	159485	12/26/13 12:42	SS1	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3010A			159358	12/26/13 08:30	EHD	TAL BUF
TCLP	Analysis	6010C		1	159969	12/30/13 20:20	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	158911	12/20/13 22:08		TAL BUF

Client Sample ID: 4009-25 TCLP 121413

Lab Sample ID: 480-52398-9

Date Collected: 12/14/13 15:15

Matrix: Solid

Date Received: 12/20/13 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			159122	12/23/13 11:14	MRB	TAL BUF
TCLP	Analysis	8260C		10	159293	12/24/13 17:09	TRB	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159727	12/28/13 07:28	TRG	TAL BUF
TCLP	Analysis	8270D		1	159928	12/31/13 06:26	ANM	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159844	12/30/13 10:29	MRB	TAL BUF
TCLP	Analysis	8081B		1	159959	12/31/13 11:45	LMW	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	8151A			159801	12/30/13 09:31	MRB	TAL BUF
TCLP	Analysis	8151		1	160069	01/01/14 00:32	GSR	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	7470A			159401	12/26/13 09:30	SS1	TAL BUF
TCLP	Analysis	7470A		1	159485	12/26/13 12:43	SS1	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3010A			159358	12/26/13 08:30	EHD	TAL BUF
TCLP	Analysis	6010C		1	159969	12/30/13 20:23	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	158911	12/20/13 22:08		TAL BUF

Client Sample ID: 4009-26 TCLP 121613

Lab Sample ID: 480-52398-10

Date Collected: 12/16/13 16:45

Matrix: Solid

Date Received: 12/20/13 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			159122	12/23/13 11:14	MRB	TAL BUF
TCLP	Analysis	8260C		10	159293	12/24/13 17:30	TRB	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159727	12/28/13 07:28	TRG	TAL BUF
TCLP	Analysis	8270D		1	159928	12/31/13 06:48	ANM	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159844	12/30/13 10:29	MRB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Client Sample ID: 4009-26 TCLP 121613

Lab Sample ID: 480-52398-10

Date Collected: 12/16/13 16:45

Matrix: Solid

Date Received: 12/20/13 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	8081B		1	159959	12/31/13 13:11	LMW	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	8151A			159801	12/30/13 09:31	MRB	TAL BUF
TCLP	Analysis	8151		1	160069	01/01/14 01:01	GSR	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	7470A			159401	12/26/13 09:30	SS1	TAL BUF
TCLP	Analysis	7470A		1	159485	12/26/13 12:45	SS1	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3010A			159358	12/26/13 08:30	EHD	TAL BUF
TCLP	Analysis	6010C		1	159969	12/30/13 20:26	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	158911	12/20/13 22:08		TAL BUF

Client Sample ID: 4009-27 TCLP 121813

Lab Sample ID: 480-52398-11

Date Collected: 12/18/13 16:30

Matrix: Solid

Date Received: 12/20/13 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			159122	12/23/13 11:14	MRB	TAL BUF
TCLP	Analysis	8260C		10	159293	12/24/13 17:51	TRB	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159727	12/28/13 07:28	TRG	TAL BUF
TCLP	Analysis	8270D		1	159928	12/31/13 07:11	ANM	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3510C			159844	12/30/13 10:29	MRB	TAL BUF
TCLP	Analysis	8081B		1	159959	12/31/13 13:29	LMW	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	8151A			159801	12/30/13 09:31	MRB	TAL BUF
TCLP	Analysis	8151		1	160069	01/01/14 02:00	GSR	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	7470A			159401	12/26/13 09:30	SS1	TAL BUF
TCLP	Analysis	7470A		1	159485	12/26/13 12:50	SS1	TAL BUF
TCLP	Leach	1311			159062	12/23/13 09:00	MRB	TAL BUF
TCLP	Prep	3010A			159358	12/26/13 08:30	EHD	TAL BUF
TCLP	Analysis	6010C		1	159969	12/30/13 20:29	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	158911	12/20/13 22:08		TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13 *
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	03-31-14
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C	TCLP Volatiles	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8151	TCLP Herbicides	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	TCLP Mercury	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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: Vestal Water Supply RSO

TestAmerica Job ID: 480-52398-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-52398-1	4009-23 (5-6') 121113	Solid	12/11/13 11:30	12/20/13 10:30
480-52398-2	4009-23 (11-12') 121113	Solid	12/11/13 12:20	12/20/13 10:30
480-52398-3	4009-24 (14-16') 121313	Solid	12/13/13 11:00	12/20/13 10:30
480-52398-4	4009-25 (14-16') 121413	Solid	12/14/13 10:15	12/20/13 10:30
480-52398-5	4009-26 (14-15') 121613	Solid	12/16/13 13:00	12/20/13 10:30
480-52398-6	4009-27 (13-14') 121813	Solid	12/18/13 09:30	12/20/13 10:30
480-52398-7	4009-23 TCLP 121113	Solid	12/11/13 16:00	12/20/13 10:30
480-52398-8	4009-24 TCLP 121313	Solid	12/13/13 14:30	12/20/13 10:30
480-52398-9	4009-25 TCLP 121413	Solid	12/14/13 15:15	12/20/13 10:30
480-52398-10	4009-26 TCLP 121613	Solid	12/16/13 16:45	12/20/13 10:30
480-52398-11	4009-27 TCLP 121813	Solid	12/18/13 16:30	12/20/13 10:30

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Chain of Custody Record

Client Information Client Contact: Ms. Katie Bidwell Company: ARCADIS U.S. Inc. Address: 855 Route 146 Suite 210 City: Clifton Park State, Zip: NY, 12065 Phone: [blank] Email: katie.bidwell@arcadis-us.com Project Name: Vestal Water Supply RSO Site: [blank]		Lab PM: Fox, Candace L E-Mail: candace.fox@testamerica.com Carner Tracking No(s): 480-41979-11356.1 Page: 1 of 3 Job #: [blank]	
Due Date Requested: [blank] TAT Requested (days): <i>Standard</i> PO #: [blank] Purchase Order Requested: [blank] WO #: <i>60266401.0000</i> Project #: 48008914 SOW#: [blank]		Analysis Requested 8260C - TCLP Volatiles 8260C - TCLP list OLM04.2 8081B - TCLP Pesticides 6010C, 7479A, 8151A, 8270D Perform MS/MSD (Yes or No)	
Field Filtered Sample (Yes or No)		Total Number of Containers: 2	
Sample Identification 4009-23 (5-6) 12/11/13 4009-23 (11-12) 12/11/13 4009-24 (19-16) 12/13/13 4009-25 (14-16) 12/14/13 4009-26 (19-15) 12/16/13 4009-27 (13-14) 12/16/13 4009-23 TCLP 12/11/13 4009-24 TCLP 12/13/13 4009-25 TCLP 12/14/13 4009-26 TCLP 12/16/13 4009-27 TCLP 12/18/13		Matrix (W=Water, S=Solid, O=Organic, A=Air) Preservation Code: Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid	
Sample Date 12/11/13 12/11/13 12/13/13 12/14/13 12/16/13 12/16/13 12/11/13 12/13/13 12/14/13 12/16/13 12/18/13		Sample Time 11:30 12:20 11:00 10:15 13:00 9:30 16:00 14:30 15:15 16:45 16:30	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Special Instructions/Note: 2 Story petroleum odor 2 Story petroleum odor	
Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: [blank] Date: [blank]		Relinquished by: <i>Jeff Barry</i> Date/Time: 12/19/13 11:30 Relinquished by: [blank] Date/Time: [blank] Relinquished by: [blank] Date/Time: [blank]	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 3.1# 2.	



Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-52398-1

Login Number: 52398

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon 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.	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: 480-51285-1

Client Project/Site: Vestal Water Supply RSO

For:

ARCADIS U.S. Inc

855 Route 146

Suite 210

Clifton Park, New York 12065

Attn: Bruce Nelson



Authorized for release by:

12/23/2013 1:27:04 PM

Candace Fox, Manager of Project Management

(716)504-9844

candace.fox@testamericainc.com

LINKS

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results through

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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: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Job ID: 480-51285-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-51285-1

Comments

No additional comments.

Receipt

The samples were received on 12/4/2013 5:31 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

GC/MS VOA

No analytical or quality issues were noted.

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Detection Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Client Sample ID: 4009-22

Lab Sample ID: 480-51285-1

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
Benzene	0.69	J	1.0	0.41	ug/L	1			8260C	Total/NA
Toluene	0.65	J	1.0	0.51	ug/L	1			8260C	Total/NA

Client Sample ID: TB-120313

Lab Sample ID: 480-51285-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chloroform	0.45	J	1.0	0.34	ug/L	1			8260C	Total/NA

Client Sample ID: 4009-23 (120513) 4'

Lab Sample ID: 480-51673-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	55000		1200	340	ug/Kg	10		*	8260C	Total/NA
1,3,5-Trimethylbenzene	32000		1200	370	ug/Kg	10		*	8260C	Total/NA
4-Isopropyltoluene	9800		1200	410	ug/Kg	10		*	8260C	Total/NA
Ethylbenzene	1400		1200	360	ug/Kg	10		*	8260C	Total/NA
Isopropylbenzene	1700		1200	180	ug/Kg	10		*	8260C	Total/NA
Methylcyclohexane	1100	J	1200	570	ug/Kg	10		*	8260C	Total/NA
Methylene Chloride	1000	J	1200	240	ug/Kg	10		*	8260C	Total/NA
Naphthalene	9300		1200	410	ug/Kg	10		*	8260C	Total/NA
n-Butylbenzene	8500		1200	360	ug/Kg	10		*	8260C	Total/NA
N-Propylbenzene	4600		1200	320	ug/Kg	10		*	8260C	Total/NA
sec-Butylbenzene	3100		1200	450	ug/Kg	10		*	8260C	Total/NA
Toluene	570	J	1200	330	ug/Kg	10		*	8260C	Total/NA
Xylenes, Total	10000		2500	210	ug/Kg	10		*	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Client Sample ID: 4009-22

Lab Sample ID: 480-51285-1

Date Collected: 12/03/13 12:45

Matrix: Water

Date Received: 12/04/13 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/05/13 14:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/05/13 14:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/05/13 14:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/05/13 14:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/05/13 14:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/05/13 14:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/05/13 14:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/05/13 14:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/05/13 14:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/05/13 14:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/05/13 14:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/05/13 14:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/05/13 14:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/05/13 14:24	1
2-Hexanone	ND		5.0	1.2	ug/L			12/05/13 14:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/05/13 14:24	1
Acetone	3.1	J	10	3.0	ug/L			12/05/13 14:24	1
Benzene	0.69	J	1.0	0.41	ug/L			12/05/13 14:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/05/13 14:24	1
Bromoform	ND		1.0	0.26	ug/L			12/05/13 14:24	1
Bromomethane	ND		1.0	0.69	ug/L			12/05/13 14:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/05/13 14:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/05/13 14:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/05/13 14:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/05/13 14:24	1
Chloroethane	ND		1.0	0.32	ug/L			12/05/13 14:24	1
Chloroform	ND		1.0	0.34	ug/L			12/05/13 14:24	1
Chloromethane	ND		1.0	0.35	ug/L			12/05/13 14:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/05/13 14:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/05/13 14:24	1
Cyclohexane	ND		1.0	0.18	ug/L			12/05/13 14:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/05/13 14:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/05/13 14:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/05/13 14:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/05/13 14:24	1
Methyl acetate	ND		1.0	0.50	ug/L			12/05/13 14:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/05/13 14:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/05/13 14:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/05/13 14:24	1
Styrene	ND		1.0	0.73	ug/L			12/05/13 14:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/05/13 14:24	1
Toluene	0.65	J	1.0	0.51	ug/L			12/05/13 14:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/05/13 14:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/05/13 14:24	1
Trichloroethene	ND		1.0	0.46	ug/L			12/05/13 14:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/05/13 14:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/05/13 14:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/05/13 14:24	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Client Sample ID: 4009-22
Date Collected: 12/03/13 12:45
Date Received: 12/04/13 17:31

Lab Sample ID: 480-51285-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		71 - 126		12/05/13 14:24	1
1,2-Dichloroethane-d4 (Surr)	98		66 - 137		12/05/13 14:24	1
4-Bromofluorobenzene (Surr)	98		73 - 120		12/05/13 14:24	1

Client Sample ID: TB-120313
Date Collected: 12/03/13 00:00
Date Received: 12/04/13 17:31

Lab Sample ID: 480-51285-2
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	ND		1.0	0.82	ug/L			12/05/13 14:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/05/13 14:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/05/13 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/05/13 14:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/05/13 14:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/05/13 14:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/05/13 14:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/05/13 14:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/05/13 14:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/05/13 14:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/05/13 14:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/05/13 14:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/05/13 14:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/05/13 14:48	1
2-Hexanone	ND		5.0	1.2	ug/L			12/05/13 14:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/05/13 14:48	1
Acetone	ND		10	3.0	ug/L			12/05/13 14:48	1
Benzene	ND		1.0	0.41	ug/L			12/05/13 14:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/05/13 14:48	1
Bromoform	ND		1.0	0.26	ug/L			12/05/13 14:48	1
Bromomethane	ND		1.0	0.69	ug/L			12/05/13 14:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/05/13 14:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/05/13 14:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/05/13 14:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/05/13 14:48	1
Chloroethane	ND		1.0	0.32	ug/L			12/05/13 14:48	1
Chloroform	0.45	J	1.0	0.34	ug/L			12/05/13 14:48	1
Chloromethane	ND		1.0	0.35	ug/L			12/05/13 14:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/05/13 14:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/05/13 14:48	1
Cyclohexane	ND		1.0	0.18	ug/L			12/05/13 14:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/05/13 14:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/05/13 14:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/05/13 14:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/05/13 14:48	1
Methyl acetate	ND		1.0	0.50	ug/L			12/05/13 14:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/05/13 14:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/05/13 14:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/05/13 14:48	1
Styrene	ND		1.0	0.73	ug/L			12/05/13 14:48	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Client Sample ID: TB-120313

Lab Sample ID: 480-51285-2

Date Collected: 12/03/13 00:00

Matrix: Water

Date Received: 12/04/13 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			12/05/13 14:48	1
Toluene	ND		1.0	0.51	ug/L			12/05/13 14:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/05/13 14:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/05/13 14:48	1
Trichloroethene	ND		1.0	0.46	ug/L			12/05/13 14:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/05/13 14:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/05/13 14:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/05/13 14:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 126					12/05/13 14:48	1
1,2-Dichloroethane-d4 (Surr)	97		66 - 137					12/05/13 14:48	1
4-Bromofluorobenzene (Surr)	95		73 - 120					12/05/13 14:48	1

Client Sample ID: 4009-23 (120513) 4'

Lab Sample ID: 480-51673-1

Date Collected: 12/05/13 11:00

Matrix: Solid

Date Received: 12/10/13 09:40

Percent Solids: 79.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1200	340	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,1,2,2-Tetrachloroethane	ND		1200	200	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1200	610	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,1,2-Trichloroethane	ND		1200	260	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,1-Dichloroethane	ND		1200	380	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,1-Dichloroethene	ND		1200	420	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,2,4-Trichlorobenzene	ND		1200	460	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,2,4-Trimethylbenzene	55000		1200	340	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,2-Dibromo-3-Chloropropane	ND		1200	610	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,2-Dibromoethane	ND		1200	47	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,2-Dichlorobenzene	ND		1200	310	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,2-Dichloroethane	ND		1200	500	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,2-Dichloropropane	ND		1200	200	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,3,5-Trimethylbenzene	32000		1200	370	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,3-Dichlorobenzene	ND		1200	330	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
1,4-Dichlorobenzene	ND		1200	170	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
2-Butanone (MEK)	ND		6100	3600	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
2-Hexanone	ND		6100	2500	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
4-Isopropyltoluene	9800		1200	410	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
4-Methyl-2-pentanone (MIBK)	ND		6100	390	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Acetone	ND		6100	5000	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Benzene	ND		1200	59	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Bromodichloromethane	ND		1200	250	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Bromoform	ND		1200	610	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Bromomethane	ND		1200	270	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Carbon disulfide	ND		1200	560	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Carbon tetrachloride	ND		1200	310	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Chlorobenzene	ND		1200	160	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Chloroethane	ND		1200	260	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Chloroform	ND		1200	840	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Client Sample ID: 4009-23 (120513) 4'

Lab Sample ID: 480-51673-1

Date Collected: 12/05/13 11:00

Matrix: Solid

Date Received: 12/10/13 09:40

Percent Solids: 79.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1200	290	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
cis-1,2-Dichloroethene	ND		1200	340	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
cis-1,3-Dichloropropene	ND		1200	290	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Cyclohexane	ND		1200	270	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Dibromochloromethane	ND		1200	590	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Dichlorodifluoromethane	ND		1200	530	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Ethylbenzene	1400		1200	360	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Isopropylbenzene	1700		1200	180	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Methyl acetate	ND		1200	580	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Methyl tert-butyl ether	ND		1200	460	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Methylcyclohexane	1100	J	1200	570	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Methylene Chloride	1000	J	1200	240	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Naphthalene	9300		1200	410	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
n-Butylbenzene	8500		1200	360	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
N-Propylbenzene	4600		1200	320	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
sec-Butylbenzene	3100		1200	450	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Styrene	ND		1200	300	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
tert-Butylbenzene	ND		1200	340	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Tetrachloroethene	ND		1200	160	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Toluene	570	J	1200	330	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
trans-1,2-Dichloroethene	ND		1200	290	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
trans-1,3-Dichloropropene	ND		1200	59	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Trichloroethene	ND		1200	340	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Trichlorofluoromethane	ND		1200	580	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Vinyl chloride	ND		1200	410	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Xylenes, Total	10000		2500	210	ug/Kg	☼	12/11/13 17:09	12/13/13 19:42	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88		50 - 149				12/11/13 17:09	12/13/13 19:42	10
1,2-Dichloroethane-d4 (Surr)	89		53 - 146				12/11/13 17:09	12/13/13 19:42	10
4-Bromofluorobenzene (Surr)	85		49 - 148				12/11/13 17:09	12/13/13 19:42	10

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (50-149)	12DCE (53-146)	BFB (49-148)
480-51673-1	4009-23 (120513) 4'	88	89	85
LCS 480-157089/1-A	Lab Control Sample	110	104	112
MB 480-157089/2-A	Method Blank	111	107	110

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (71-126)	12DCE (66-137)	BFB (73-120)
480-51285-1	4009-22	102	98	98
480-51285-2	TB-120313	98	97	95
LCS 480-155822/5	Lab Control Sample	101	98	103
MB 480-155822/6	Method Blank	99	98	95

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

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

Lab Sample ID: MB 480-155822/6

Matrix: Water

Analysis Batch: 155822

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	ND		1.0	0.82	ug/L			12/05/13 12:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/05/13 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/05/13 12:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/05/13 12:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/05/13 12:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/05/13 12:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/05/13 12:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/05/13 12:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/05/13 12:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/05/13 12:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/05/13 12:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/05/13 12:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/05/13 12:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/05/13 12:50	1
2-Hexanone	ND		5.0	1.2	ug/L			12/05/13 12:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/05/13 12:50	1
Acetone	ND		10	3.0	ug/L			12/05/13 12:50	1
Benzene	ND		1.0	0.41	ug/L			12/05/13 12:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/05/13 12:50	1
Bromoform	ND		1.0	0.26	ug/L			12/05/13 12:50	1
Bromomethane	ND		1.0	0.69	ug/L			12/05/13 12:50	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/05/13 12:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/05/13 12:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/05/13 12:50	1
Chloroethane	ND		1.0	0.32	ug/L			12/05/13 12:50	1
Chloroform	ND		1.0	0.34	ug/L			12/05/13 12:50	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/05/13 12:50	1
Chloromethane	ND		1.0	0.35	ug/L			12/05/13 12:50	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/05/13 12:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/05/13 12:50	1
Cyclohexane	ND		1.0	0.18	ug/L			12/05/13 12:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/05/13 12:50	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/05/13 12:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/05/13 12:50	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/05/13 12:50	1
Methyl acetate	ND		1.0	0.50	ug/L			12/05/13 12:50	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/05/13 12:50	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/05/13 12:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/05/13 12:50	1
Styrene	ND		1.0	0.73	ug/L			12/05/13 12:50	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/05/13 12:50	1
Toluene	ND		1.0	0.51	ug/L			12/05/13 12:50	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/05/13 12:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/05/13 12:50	1
Trichloroethene	ND		1.0	0.46	ug/L			12/05/13 12:50	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/05/13 12:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/05/13 12:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/05/13 12:50	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

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

Lab Sample ID: MB 480-155822/6

Matrix: Water

Analysis Batch: 155822

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	99		71 - 126		12/05/13 12:50	1
1,2-Dichloroethane-d4 (Surr)	98		66 - 137		12/05/13 12:50	1
4-Bromofluorobenzene (Surr)	95		73 - 120		12/05/13 12:50	1

Lab Sample ID: LCS 480-155822/5

Matrix: Water

Analysis Batch: 155822

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	20.0		ug/L		80	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		96	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	18.6		ug/L		74	52 - 148
1,1,2-Trichloroethane	25.0	23.1		ug/L		92	76 - 122
1,1-Dichloroethane	25.0	22.1		ug/L		88	71 - 129
1,1-Dichloroethene	25.0	20.8		ug/L		83	58 - 121
1,2,4-Trichlorobenzene	25.0	23.7		ug/L		95	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.0		ug/L		96	56 - 134
1,2-Dichlorobenzene	25.0	23.0		ug/L		92	80 - 124
1,2-Dichloroethane	25.0	22.0		ug/L		88	75 - 127
1,2-Dichloropropane	25.0	22.2		ug/L		89	76 - 120
1,3-Dichlorobenzene	25.0	22.6		ug/L		90	77 - 120
1,4-Dichlorobenzene	25.0	22.6		ug/L		91	75 - 120
2-Butanone (MEK)	125	139		ug/L		111	57 - 140
2-Hexanone	125	141		ug/L		113	65 - 127
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125
Acetone	125	131		ug/L		105	56 - 142
Benzene	25.0	22.0		ug/L		88	71 - 124
Bromodichloromethane	25.0	21.2		ug/L		85	80 - 122
Bromoform	25.0	22.0		ug/L		88	66 - 128
Bromomethane	25.0	25.3		ug/L		101	55 - 144
Carbon disulfide	25.0	21.4		ug/L		86	59 - 134
Carbon tetrachloride	25.0	20.1		ug/L		80	72 - 134
Chlorobenzene	25.0	22.9		ug/L		91	72 - 120
Chloroethane	25.0	26.3		ug/L		105	69 - 136
Chloroform	25.0	21.4		ug/L		85	73 - 127
1,2-Dibromoethane	25.0	24.4		ug/L		98	77 - 120
Chloromethane	25.0	21.1		ug/L		84	68 - 124
cis-1,2-Dichloroethene	25.0	22.3		ug/L		89	74 - 124
cis-1,3-Dichloropropene	25.0	22.3		ug/L		89	74 - 124
Cyclohexane	25.0	18.5		ug/L		74	65 - 126
Dibromochloromethane	25.0	22.4		ug/L		90	75 - 125
Dichlorodifluoromethane	25.0	16.0		ug/L		64	59 - 135
Ethylbenzene	25.0	22.2		ug/L		89	77 - 123
Isopropylbenzene	25.0	22.0		ug/L		88	77 - 122
Methyl acetate	25.0	25.4		ug/L		102	60 - 140
Methyl tert-butyl ether	25.0	24.1		ug/L		96	64 - 127
Methylcyclohexane	25.0	18.2		ug/L		73	60 - 140

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

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

Lab Sample ID: LCS 480-155822/5

Matrix: Water

Analysis Batch: 155822

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	22.1		ug/L		88	57 - 132
Styrene	25.0	22.7		ug/L		91	70 - 130
Tetrachloroethene	25.0	21.4		ug/L		86	74 - 122
Toluene	25.0	22.6		ug/L		90	80 - 122
trans-1,2-Dichloroethene	25.0	21.8		ug/L		87	73 - 127
trans-1,3-Dichloropropene	25.0	22.3		ug/L		89	72 - 123
Trichloroethene	25.0	21.3		ug/L		85	74 - 123
Trichlorofluoromethane	25.0	19.0		ug/L		76	62 - 152
Vinyl chloride	25.0	19.3		ug/L		77	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	101		71 - 126
1,2-Dichloroethane-d4 (Surr)	98		66 - 137
4-Bromofluorobenzene (Surr)	103		73 - 120

Lab Sample ID: MB 480-157089/2-A

Matrix: Solid

Analysis Batch: 157356

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 157089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		99	28	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,1,2,2-Tetrachloroethane	ND		99	16	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		99	50	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,1,2-Trichloroethane	ND		99	21	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,1-Dichloroethane	ND		99	31	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,1-Dichloroethene	ND		99	34	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,2,4-Trichlorobenzene	ND		99	38	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,2,4-Trimethylbenzene	ND		99	28	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,2-Dibromo-3-Chloropropane	ND		99	50	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,2-Dichlorobenzene	ND		99	25	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,2-Dichloroethane	ND		99	41	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,2-Dichloropropane	ND		99	16	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,3,5-Trimethylbenzene	ND		99	30	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,3-Dichlorobenzene	ND		99	27	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,4-Dichlorobenzene	ND		99	14	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
2-Butanone (MEK)	ND		500	300	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
2-Hexanone	ND		500	200	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
4-Isopropyltoluene	ND		99	33	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Acetone	ND		500	410	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Benzene	ND		99	4.8	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Bromodichloromethane	ND		99	20	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Bromoform	ND		99	50	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Bromomethane	ND		99	22	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Carbon disulfide	ND		99	45	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Carbon tetrachloride	ND		99	25	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Chlorobenzene	ND		99	13	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Chloroethane	ND		99	21	ug/Kg		12/11/13 17:09	12/12/13 21:56	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

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

Lab Sample ID: MB 480-157089/2-A

Matrix: Solid

Analysis Batch: 157356

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 157089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		99	68	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
1,2-Dibromoethane	ND		99	3.8	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Chloromethane	ND		99	24	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
cis-1,2-Dichloroethene	ND		99	27	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
cis-1,3-Dichloropropene	ND		99	24	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Cyclohexane	ND		99	22	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Dibromochloromethane	ND		99	48	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Dichlorodifluoromethane	ND		99	43	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Ethylbenzene	ND		99	29	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Isopropylbenzene	ND		99	15	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Methyl acetate	ND		99	47	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Methyl tert-butyl ether	ND		99	38	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Methylcyclohexane	ND		99	47	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Methylene Chloride	ND		99	20	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Naphthalene	ND		99	33	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
n-Butylbenzene	ND		99	29	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
N-Propylbenzene	ND		99	26	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
sec-Butylbenzene	ND		99	37	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Styrene	ND		99	24	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
tert-Butylbenzene	ND		99	28	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Tetrachloroethene	ND		99	13	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Toluene	ND		99	27	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
trans-1,2-Dichloroethene	ND		99	23	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
trans-1,3-Dichloropropene	ND		99	4.8	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Trichloroethene	ND		99	28	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Trichlorofluoromethane	ND		99	47	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Vinyl chloride	ND		99	33	ug/Kg		12/11/13 17:09	12/12/13 21:56	1
Xylenes, Total	ND		200	17	ug/Kg		12/11/13 17:09	12/12/13 21:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	111		50 - 149	12/11/13 17:09	12/12/13 21:56	1
1,2-Dichloroethane-d4 (Surr)	107		53 - 146	12/11/13 17:09	12/12/13 21:56	1
4-Bromofluorobenzene (Surr)	110		49 - 148	12/11/13 17:09	12/12/13 21:56	1

Lab Sample ID: LCS 480-157089/1-A

Matrix: Solid

Analysis Batch: 157356

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 157089

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	2500	2390		ug/Kg		96	82 - 138
1,1-Dichloroethene	2500	1860		ug/Kg		75	54 - 144
1,2,4-Trimethylbenzene	2500	2690		ug/Kg		108	78 - 134
1,2-Dichlorobenzene	2500	2650		ug/Kg		106	80 - 132
1,2-Dichloroethane	2500	2420		ug/Kg		97	78 - 129
Benzene	2500	2620		ug/Kg		105	75 - 131
Chlorobenzene	2500	2710		ug/Kg		109	80 - 127
cis-1,2-Dichloroethene	2500	2550		ug/Kg		102	79 - 128
Ethylbenzene	2500	2650		ug/Kg		106	78 - 136

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

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

Lab Sample ID: LCS 480-157089/1-A

Matrix: Solid

Analysis Batch: 157356

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 157089

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec. Limits
	Added	Result	Qualifier				
Methyl tert-butyl ether	2500	2340		ug/Kg		94	67 - 137
Tetrachloroethene	2500	2710		ug/Kg		109	72 - 141
Toluene	2500	2620		ug/Kg		105	76 - 133
trans-1,2-Dichloroethene	2500	2550		ug/Kg		102	81 - 147
Trichloroethene	2500	2620		ug/Kg		105	77 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	110		50 - 149
1,2-Dichloroethane-d4 (Surr)	104		53 - 146
4-Bromofluorobenzene (Surr)	112		49 - 148



QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

GC/MS VOA

Analysis Batch: 155822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-51285-1	4009-22	Total/NA	Water	8260C	
480-51285-2	TB-120313	Total/NA	Water	8260C	
LCS 480-155822/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-155822/6	Method Blank	Total/NA	Water	8260C	

Prep Batch: 157089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-51673-1	4009-23 (120513) 4'	Total/NA	Solid	5035A	
LCS 480-157089/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-157089/2-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 157356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-157089/1-A	Lab Control Sample	Total/NA	Solid	8260C	157089
MB 480-157089/2-A	Method Blank	Total/NA	Solid	8260C	157089

Analysis Batch: 157459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-51673-1	4009-23 (120513) 4'	Total/NA	Solid	8260C	157089

General Chemistry

Analysis Batch: 157367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-51673-1	4009-23 (120513) 4'	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Client Sample ID: 4009-22

Date Collected: 12/03/13 12:45

Date Received: 12/04/13 17:31

Lab Sample ID: 480-51285-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	155822	12/05/13 14:24	RAL	TAL BUF

Client Sample ID: TB-120313

Date Collected: 12/03/13 00:00

Date Received: 12/04/13 17:31

Lab Sample ID: 480-51285-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	155822	12/05/13 14:48	RAL	TAL BUF

Client Sample ID: 4009-23 (120513) 4'

Date Collected: 12/05/13 11:00

Date Received: 12/10/13 09:40

Lab Sample ID: 480-51673-1

Matrix: Solid

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			157089	12/11/13 17:09	RAL	TAL BUF
Total/NA	Analysis	8260C		10	157459	12/13/13 19:42	RAL	TAL BUF
Total/NA	Analysis	Moisture		1	157367	12/12/13 21:44	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S. Inc
 Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13 *
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13 *
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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: Vestal Water Supply RSO

TestAmerica Job ID: 480-51285-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-51285-1	4009-22	Water	12/03/13 12:45	12/04/13 17:31
480-51285-2	TB-120313	Water	12/03/13 00:00	12/04/13 17:31
480-51673-1	4009-23 (120513) 4'	Solid	12/05/13 11:00	12/10/13 09:40

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes No

Chain of Custody Record

TAL-4124 (1007)

Client: **ARCADIS** Chain of Custody Number: **220103**
 Address: **50 Fountain Plaza** Date: **12/03/13**
 City: **Buffalo** State: **NY** Zip Code: **14202** Lab Number: **12/03/13**
 Project Name and Location (State): **Vestal Water Supply Remedial Site** Lab Contact: **Katie Bidwell**
 Contract/Purchase Order/Quote No.: **00266401.0000** Carrier/Waybill Number: **Drop off**

Project Manager: **Bruce Nelson (ATTN: Katie Bidwell)** Date: **12/03/13**
 Telephone Number (Area Code)/Fax Number: **518-250-7360** Lab Number: **12/03/13**
 Site Contact: **Katie Bidwell** Lab Contact: **Candice Fox**
 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					Containers & Preservatives					Special Instructions/Conditions of Receipt	
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		
4009-22	12/03/13	12:45	X							X				
TB-120313	12/03/13		X							X				



480-51285 Chain of Custody

Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant Poison B Unknown 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: **Stored**

QC Requirements (Specify):
 1. Relinquished By: **Bye ARUNDIS/Jeff Bawa** Date: **12/03/13** Time: **17:31**
 2. Relinquished By: **Don Tolson** Date: **12-4-13** Time: **17:31**
 3. Relinquished By: _____ Date: _____ Time: _____

Comments: **11 3,2**

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-51285-1

Login Number: 51285

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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.	True	
Chlorine Residual checked.	N/A	



Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-51285-1

Login Number: 51673

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.	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.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

3821 Buck Drive • Cortland, New York 13045

CERTIFICATE OF ANALYSIS
1410689
TOWN OF VESTAL
 Scott Groats
 701 Vestal Parkway West
 Vestal, NY 13850-1363

Project Name: DO NOT SEND TO SAYRE

 Project / PO Number: N/A
 Received: 03/27/2014 11:20
 Reported: 04/16/2014 14:18

 Client Sample ID: **1-2A Finished**

Collected By: Deron Biechele

 Lab Sample ID: **1410689-02**

Sampled: 03/27/2014 09:01

Subcontracted To: Benchmark Analytics (NY 11827)
Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV

Subcontracted To: Benchmark Analytics (NY 11827)
Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Isopropylbenzene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1624	DN-CV
Surr: 1,2-Dichlorobenzene-d4		92			% Rec	70-130	EPA 524.2	3/31/2014 1624	DN-CV
Surr: 4-Bromofluorobenzene		93			% Rec	70-130	EPA 524.2	3/31/2014 1624	DN-CV

 Client Sample ID: **1-3 Raw**
 Lab Sample ID: **1410689-03**

 Collected By: **Deron Biechele**
 Sampled: **03/27/2014 08:51**
Subcontracted To: Benchmark Analytics (NY 11827)
Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV

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CERTIFICATE OF ANALYSIS : 1410689

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Isopropylbenzene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV

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CERTIFICATE OF ANALYSIS : 1410689

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1647	DN-CV
Surr: 1,2-Dichlorobenzene-d4		97			% Rec	70-130	EPA 524.2	3/31/2014 1647	DN-CV
Surr: 4-Bromofluorobenzene		98			% Rec	70-130	EPA 524.2	3/31/2014 1647	DN-CV

Client Sample ID: **1-3 Finished**
Lab Sample ID: **1410689-04**

Collected By: Deron Biechele
Sampled: 03/27/2014 08:52

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV

Subcontracted To: Benchmark Analytics (NY 11827)
Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Isopropylbenzene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1711	DN-CV
Surr: 1,2-Dichlorobenzene-d4		94			% Rec	70-130	EPA 524.2	3/31/2014 1711	DN-CV
Surr: 4-Bromofluorobenzene		99			% Rec	70-130	EPA 524.2	3/31/2014 1711	DN-CV

 Client Sample ID: **4-2 Raw**
 Lab Sample ID: **1410689-05**

 Collected By: **Deron Biechele**
 Sampled: **03/27/2014 09:23**
Subcontracted To: Benchmark Analytics (NY 11827)
Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,1,1-Trichloroethane	71-55-6	1	0.0011	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV

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CERTIFICATE OF ANALYSIS : 1410689

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Isopropylbenzene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Tetrachloroethene	127-18-4	1	0.0011	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Trichloroethene	79-01-6	1	0.0018	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1735	DN-CV
Surr: 1,2-Dichlorobenzene-d4		93				% Rec 70-130	EPA 524.2	3/31/2014 1735	DN-CV
Surr: 4-Bromofluorobenzene		94				% Rec 70-130	EPA 524.2	3/31/2014 1735	DN-CV

Client Sample ID: 4-2 Finished

Collected By: Deron Biechele

Lab Sample ID: 1410689-06

Sampled: 03/27/2014 09:28

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Isopropylbenzene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	3/31/2014 1758	DN-CV
Surr: 1,2-Dichlorobenzene-d4		91			% Rec	70-130	EPA 524.2	3/31/2014 1758	DN-CV
Surr: 4-Bromofluorobenzene		91			% Rec	70-130	EPA 524.2	3/31/2014 1758	DN-CV

Client Sample ID: Trip Blank

Lab Sample ID: 1410689-12

Collected By: Deron Biechele

Sampled: 03/26/2014 14:00

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV

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CERTIFICATE OF ANALYSIS : 1410689

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Isopropylbenzene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	4/1/2014 1724	DN-CV
Surr: 1,2-Dichlorobenzene-d4		93			% Rec	70-130	EPA 524.2	4/1/2014 1724	DN-CV
Surr: 4-Bromofluorobenzene		97			% Rec	70-130	EPA 524.2	4/1/2014 1724	DN-CV

Laboratory Certifications:

Below is a list of certifications maintained by Microbac Laboratories, Inc. New York Division. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

- NYELAP # 10795

-EPA# NY00935

- NYS Ag & Markets #36-142

Qualifiers and Definitions:

- **CAS:** Chemical Abstract Series identification for the analyte.
- **DF:** "1" indicates that there was no dilution. Any other number indicates that the sample was diluted by that factor.
- **PQL:** The **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

Report Comments:

In accordance with NYSDOH-ELAP and NELAC, any non-conformance of these regulations are noted directly on the laboratory as qualifiers and/or noted in the case narrative.

Reviewed and Approved By:


Jennifer Walker
General Manager

Go Green:

Contact nyresults@microbac.com to set up email reporting and invoicing options.

For any feedback concerning our services, please contact Jennifer Walker General Manager, at Jennifer.Walker@microbac.com or 607.753.3403. You may also contact Trevor Boyce President, at president@microbac.com.



1410689



Tentatively Scheduled Date: 3/4/2014

Client: **TOWN OF VESTAL**

Project: **Volatiles**

Project Number: **DO NOT SEND TO SAYRE**

PWSID

Report To:

Scott Groats
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

Invoice To:

D Skiba
701 Vestal Parkway West
Vestal, NY 13850-1363
Phone: (607) 748-1514

TAT 7 days

Sample ID: 1-2A Raw

Lab Sample ID: **1410689-01**
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: N/A

Sampling Point: Frequency Compliance Start Date
Sampling Point ID: Num/Frequency Compliance Stop Date
Point Type: Sample Location:

Analysis	Method	Container	Hold
524.2	EPA 524.2		14

Analysis Comments CANT SEND SAMPLES TO SYRE

01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C

Total Containers: 2

Sample ID: 1-2A Finished

Lab Sample ID: **1410689-02**
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 3-27-14 / 0901

Sampling Point: Frequency Compliance Start Date
Sampling Point ID: Num/Frequency Compliance Stop Date
Point Type: Sample Location:

Analysis	Method	Container	Hold
524.2	EPA 524.2		14

Analysis Comments CANT SEND SAMPLES TO SYRE

01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C

Total Containers: 2

Sample ID: 1-3 Raw

Lab Sample ID: **1410689-03**
Matrix: Drinking Water
Type: Grab

Sampled Date & Time: 3-27-14 / 0951

Sampling Point: Frequency Compliance Start Date
Sampling Point ID: Num/Frequency Compliance Stop Date
Point Type: Sample Location:

Analysis	Method	Container	Hold
524.2	EPA 524.2		14

Analysis Comments CANT SEND SAMPLES TO SYRE

01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C

Total Containers: 2

1410689



Tentatively Scheduled Date: 3/4/2014

Client: **TOWN OF VESTAL**
 Project: **Volatiles**
 Project Number: **DO NOT SEND TO SAYRE**

PWSID

Sample ID: 1-3 Finished

Lab Sample ID: **1410689-04**
 Matrix: Drinking Water
 Type: Grab

Sampled Date & Time: 3-27-14/0852

Sampling Point: Frequency Compliance Start Date
 Sampling Point ID: Num/Frequency Compliance Stop Date
 Point Type: Sample Location:

Analysis	Method	Container	Hold
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524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers:			2

Sample ID: 4-2 Raw

Lab Sample ID: **1410689-05**
 Matrix: Drinking Water
 Type: Grab

Sampled Date & Time: 3-27-14/0923

Sampling Point: Frequency Compliance Start Date
 Sampling Point ID: Num/Frequency Compliance Stop Date
 Point Type: Sample Location:

Analysis	Method	Container	Hold
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524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers:			2

Sample ID: 4-2 Finished

Lab Sample ID: **1410689-06**
 Matrix: Drinking Water
 Type: Grab

Sampled Date & Time: 3-27-14/0928

Sampling Point: Frequency Compliance Start Date
 Sampling Point ID: Num/Frequency Compliance Stop Date
 Point Type: Sample Location:

Analysis	Method	Container	Hold
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524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers:			2

Sample ID: Trip Blank 1-2A Raw

Lab Sample ID: **1410689-07**
 Matrix: Drinking Water
 Type: Trip Blank

Sampled Date & Time: 3-26-14/1400 DJB N/A

Sampling Point: Frequency Compliance Start Date
 Sampling Point ID: Num/Frequency Compliance Stop Date
 Point Type: Sample Location:

1410689



Tentatively Scheduled Date: 3/4/2014

Client: **TOWN OF VESTAL**
 Project: **Volatiles**
 Project Number: **DO NOT SEND TO SAYRE**

PWSID

Analysis	Method	Container	Hold
524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers: 1			

Sample ID: Trrip Blank 1-2A Finished

Lab Sample ID: 1410689-08
Matrix: Drinking Water
Type: Trip Blank
Sampled Date & Time: 3-26-14/1400

Sampling Point: Frequency
Sampling Point ID: Num/Frequency
Point Type: Compliance Start Date
 Compliance Stop Date
 Sample Location:

Analysis	Method	Container	Hold
524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers: 1			

Sample ID: Trip Blank 1-3 Raw

Lab Sample ID: 1410689-09
Matrix: Drinking Water
Type: Trip Blank
Sampled Date & Time: 3-26-14/1400

Sampling Point: Frequency
Sampling Point ID: Num/Frequency
Point Type: Compliance Start Date
 Compliance Stop Date
 Sample Location:

Analysis	Method	Container	Hold
524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers: 1			

Sample ID: Trip Blank 1-3 Finished

Lab Sample ID: 1410689-10
Matrix: Drinking Water
Type: Trip Blank
Sampled Date & Time: 3-26-14/1400

Sampling Point: Frequency
Sampling Point ID: Num/Frequency
Point Type: Compliance Start Date
 Compliance Stop Date
 Sample Location:

Analysis	Method	Container	Hold
524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers: 1			

1410689



Tentatively Scheduled Date: 3/4/2014

Client: **TOWN OF VESTAL**
 Project: **Volatiles**
 Project Number: **DO NOT SEND TO SAYRE**

PWSID

Sample ID: Trip Blank 4-2 Raw

Lab Sample ID: **1410689-11**
 Matrix: Drinking Water
 Type: Trip Blank
 Sampled Date & Time: 3-26-14/1400

Sampling Point: Frequency Compliance Start Date
 Sampling Point ID: Num/Frequency Compliance Stop Date
 Point Type: Sample Location:

Analysis	Method	Container	Hold
----------	--------	-----------	------

524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers:			1

Sample ID: Trip Blank 4-2 Finished

Lab Sample ID: **1410689-12**
 Matrix: Drinking Water
 Type: Trip Blank
 Sampled Date & Time: 3-26-14/1400

Sampling Point: Frequency Compliance Start Date
 Sampling Point ID: Num/Frequency Compliance Stop Date
 Point Type: Sample Location:

Analysis	Method	Container	Hold
----------	--------	-----------	------

524.2	EPA 524.2		14
<i>Analysis Comments</i> CANT SEND SAMPLES TO SYRE			
01_40mL Clear Vial, Ascorbic/HCl, Cool to 4° C			
Total Containers:			1

Sampled by:	Date/Time: <u>3-27-14/0912</u>	Received by:
Printed Name: Deron Biechele		Printed Name:
Relinquished by:	Date/Time: <u>3/27/14 1120</u>	Received by:
Printed Name:		Printed Name: Christine Rhodes MLE
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:

As Received at Laboratory: On Ice: Yes/No Cooler Temp 4.2 Total Bottles **18**

Notes:



Microbac Laboratories, Inc.
 New York Division
 3821 Buck Drive
 Cortland, New York 13045
 Phone: 607-753-3403

Work Order Number: 1403702

Certificate of Results

TOWN OF VESTAL
 Scott Groats
 701 Vestal Parkway West
 Vestal, NY 13850-1363

Contact: Scott Groats
Project Name: Quarterly
 Date Received: January 30, 2014
 Time Received: 12:56 pm

Analytical Testing Parameters

Client Sample ID: **1-2 A Raw**
 Lab Sample ID: **1403702-01**

Collection Date: **1/30/2014**
 Collection Time: **9:38 am**
 Collected By: DJB-Lab

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,1,1,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1546	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV



The data and information contained in this report represents only the samples analyzed. It is rendered under the condition that it not be reproduced wholly or in part for advertising purposes without the prior written approval of Microbac Laboratories, Inc.

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Methylene chloride	75-09-2	1	0.0008	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1546	DN-CV

Analytical Testing Parameters

Client Sample ID: **1-2 A Finished**
Lab Sample ID: **1403702-02**

Collection Date: **1/30/2014**
Collection Time: **9:12 am**
Collected By: DJB-Lab

Subcontracted To: Benchmark Analytics (NY 11827)



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Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,1,1,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1611	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Methylene chloride	75-09-2	1	0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Toluene	108-88-3	1	0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1611	DN-CV

Analytical Testing Parameters

Client Sample ID: **1-3 Raw**
Lab Sample ID: **1403702-03**

Collection Date: **1/30/2014**
Collection Time: **9:47 am**
Collected By: DJB-Lab

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV



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Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1635	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Methylene chloride	75-09-2	1	0.0006	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1635	DN-CV

Analytical Testing Parameters

Client Sample ID: **1-3 Finished**
 Lab Sample ID: **1403702-04**

Collection Date: **1/30/2014**
 Collection Time: **10:05 am**
 Collected By: DJB-Lab

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1659	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV



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Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Toluene	108-88-3	1	0.0009	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1659	DN-CV

Analytical Testing Parameters

Client Sample ID: **4-2 Raw**
Lab Sample ID: **1403702-05**

Collection Date: **1/30/2014**
Collection Time: **10:51 am**
Collected By: DJB-Lab

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,1,1-Trichloroethane	71-55-6	1	0.0015	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1724	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV



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 New York Division
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Work Order Number: 1403702

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Tetrachloroethene	127-18-4	1	0.0016	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Trichloroethene	79-01-6	1	0.0023	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1724	DN-CV

Analytical Testing Parameters

Client Sample ID: **4-2 Finished**
 Lab Sample ID: **1403702-06**

Collection Date: **1/30/2014**
 Collection Time: **11:00 am**
 Collected By: **DJB-Lab**



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Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,1,1,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1748	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Methylene chloride	75-09-2	1	0.0008	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1748	DN-CV

Analytical Testing Parameters

Client Sample ID: **4-3 Raw**
Lab Sample ID: **1403702-07**

Collection Date: **1/30/2014**
Collection Time: **10:43 am**
Collected By: DJB-Lab

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV



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Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1813	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1813	DN-CV

Analytical Testing Parameters

Client Sample ID: **4-4 Raw**
 Lab Sample ID: **1403702-08**

Collection Date: **1/30/2014**
 Collection Time: **10:29 am**
 Collected By: DJB-Lab

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1837	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV



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Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Methylene chloride	75-09-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV



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 New York Division
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 Phone: 607-753-3403

Work Order Number: 1403702

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1837	DN-CV

Analytical Testing Parameters

Client Sample ID: **5-1Raw**
 Lab Sample ID: **1403702-09**

Collection Date: **1/30/2014**
 Collection Time: **8:45 am**
 Collected By: DJB-Lab

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
1,1,1,2-Tetrachloroethane	630-20-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,1,1-Trichloroethane	71-55-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,1,2,2-Tetrachloroethane	79-34-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,1,2-Trichloroethane	79-00-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,1-Dichloroethane	75-34-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,1-Dichloroethene	75-35-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,1-Dichloropropene	563-58-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,2,3-Trichlorobenzene	87-61-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,2,3-Trichloropropane	96-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,2,4-Trichlorobenzene	120-82-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,2,4-Trimethylbenzene	95-63-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,2-Dibromoethane	106-93-4	1	< 0.0005	mg/L	0.0005	N	EPA 524.2	2/6/2014 1902	DN-CV
1,2-Dichlorobenzene	95-50-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,2-Dichloroethane	107-06-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,2-Dichloropropane	78-87-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,3,5-Trimethylbenzene	108-67-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,3-Dichlorobenzene	541-73-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,3-Dichloropropane	142-28-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
1,4-Dichlorobenzene	106-46-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
2,2-Dichloropropane	594-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
2-Chlorotoluene	95-49-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
4-Chlorotoluene	106-43-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
4-Isopropyltoluene	99-87-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Benzene	71-43-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Bromobenzene	108-86-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Bromochloromethane	74-97-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Bromodichloromethane	75-27-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV



The data and information contained in this report represents only the samples analyzed. It is rendered under the condition that it not be reproduced wholly or in part for advertising purposes without the prior written approval of Microbac Laboratories, Inc.

Certificate of Results

Subcontracted To: Benchmark Analytics (NY 11827)

Subcontracted (Center Valley - GCMS Volatiles)

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Bromoform	75-25-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Bromomethane	74-83-9	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Carbon tetrachloride	56-23-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Chlorobenzene	108-90-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Chloroethane	75-00-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Chloroform	67-66-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Chloromethane	74-87-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
cis-1,2-Dichloroethene	156-59-2	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
cis-1,3-Dichloropropene	10061-01-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Cumene	98-82-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Dibromochloromethane	124-48-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Dibromomethane	74-95-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Dichlorodifluoromethane	75-71-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Ethylbenzene	100-41-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Hexachlorobutadiene	87-68-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
m,p-Xylene	179601-23-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Methylene chloride	75-09-2	1	0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
MTBE	1634-04-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Naphthalene	91-20-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
n-Butylbenzene	104-51-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
n-Propylbenzene	103-65-1	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
o-Xylene	95-47-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
sec-Butylbenzene	135-98-8	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Styrene	100-42-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
tert-Butylbenzene	98-06-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Tetrachloroethene	127-18-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Toluene	108-88-3	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
trans-1,2-Dichloroethene	156-60-5	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
trans-1,3-Dichloropropene	10061-02-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Trichloroethene	79-01-6	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Trichlorofluoromethane	75-69-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Vinyl chloride	75-01-4	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV
Xylenes, Total	1330-20-7	1	< 0.0005	mg/L	0.0005		EPA 524.2	2/6/2014 1902	DN-CV

Certificate of Results

Laboratory Certifications:

Below is a list of certifications maintained by Microbac Laboratories, Inc. New York Division. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

- NYELAP # 10795
- EPA # NY00935
- PADEP # 68-01385
- Connecticut #PH-0331
- New Hampshire #2985
- NYS Ag & Markets #36-142

Qualifiers and Definitions:

- **N:** Parameter is not NELAP certified
- **CAS:** Chemical Abstract Series identification for the analyte.
- **DF:** "1" indicates that there was no dilution. Any other number indicates that the sample was diluted by that factor.
- **PQL:** The **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.
- **Units:** The units of measure for the analysis. Ug/L (ppb) and mg/L (ppm) are for liquid samples. Ug/kg (ppb) and mg/kg (ppm) are for solid wet-based results while ug/kg-dry and mg/kg-dry are for solid-dry-based results.



Microbac Laboratories, Inc.
 New York Division
 3821 Buck Drive
 Cortland, New York 13045
 Phone: 607-753-3403

Work Order Number: 1403702

Certificate of Results

Report Comments:

The analytical results for your samples are presented on the enclosed laboratory report(s). The data and information on this report and other accompanying documents represent on the sample(s) analyzed. In accordance with NYSDOH-ELAP and NELAC regulations, we are required to notify you of any aspects of the analysis that did not comply with these regulations. Any data qualifiers are noted directly on the laboratory report. The Laboratory also maintains a "Sample Receipt Checklist" and the submitted "Chain of Custody" form in its files that are available on request.

The pagination at the bottom of the narrative and reports indicates the total number of pages in the client submittal. No duplication of this report should be done without duplication of the entire package, including cover letter and narrative if present.

Thank you for the opportunity to provide these analytical services. Please contact Pamela Davis, Client Services Manager, with questions on the analysis.

Reviewed and Approved By:

Date Reviewed and Approved:

2/15/2014

Jennifer Walker
 General Manager

For any feedback concerning our services, please contact Peter Indick, the Managing Director at 607.753.3403. You may also contact both James Nokes, President at president@microbac.com and Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com.

Please help us in meeting our Go Green initiative by selecting to have reports and invoices submitted via email only. Please contact nyresults@microbac.com to set up email reporting and invoicing options.



The data and information contained in this report represents only the samples analyzed. It is rendered under the condition that it not be reproduced wholly or in part for advertising purposes without the prior written approval of Microbac Laboratories, Inc.

3821 Buck Drive
 Cortland NY 13045
 Phone:(607)753-3403 Fax:(607)753-3415
 NY #10795, EPA #NY00935

Microbac Laboratories, Inc. CHAIN OF CUSTODY

Client Information			Billing/Invoice:			Analysis Requested			Receiving Info (Lab-Use Only)			
Name:	Town of Vestal					Ice:	YES	NO				
Address:	701 Vestal Parkway, West Vestal, NY 13850-1363					Cooler:	YES	NO				
Contact:	Scott Groats					Sample Temp:	42					
Phone:	607-748-1514 Ext: 357					Cooler Seal:	YES	NO				
Project:	Quarterly					Pickup:	YES	NO				
Quote ID:			PO#:			Dropoff:	C	W				
Rush TAT Bus. Days:	< 2-5 5-7 7-10		Date Req.:			Accepted?	YES	NO				
Carbon Copy:	Yes					Container Material						
Email Results:	Yes					Container Size (in Ml)						
Fax Results:	Yes					Preservative						
Sample Information			Number of Containers for Analysis Requested			Comments/F						
Description/Location	Date	Time	Initial	Matrix Type								
1-2 A Raw	1-30-14	0938	DJB	DW	2	1						
1-2 A Finished		0942		Grab								
1-3 Raw		0947		DW	2	1						
1-3 Finished		1005		Grab								
4-2 Raw		1051		DW	2	1						
4-2 Finished		1100		Grab								
4-3 Raw		1043		DW	2	1						
4-4 Raw		1029		Grab	2	1						
Print Name and Company			Signature			Date/Time						
Sampled: Deron Biechele MICROBAC			<i>[Signature]</i>			1-30-14/1215						
Received: CHRISTINE RHODES MVE			<i>[Signature]</i>			Trip Blank with each set of samples w/ HCL						
received:												
received:												



1403702

Microbac Laboratories (MNY) 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 MNY of the intent to subcontract and are in agreement with this action.

3821 Buck Drive
 Cortland NY 13045
 Phone: (607)753-3403 Fax: (607)753-3415
 NY #10795, EPA #NY00935

Microbac Laboratories, Inc.

CHAIN OF CUSTODY

Client Information		Billing/Invoice:		Analysis Requested		Receiving Info (Lab Use Only)	
Name:	Town of Vestal					Ice:	YES NO
Address:	701 Vestal Parkway, West Vestal, NY 13850-1363					Cooler:	YES NO
Contact:	Scott Groats					Sample Temp:	YES NO
Phone:	607-748-1514 Ext: 357					Cooler Seal:	YES NO
Project:	Quarterly					Pickup:	YES NO
Quote ID:	PO#:					Dropoff:	C W
Rush TAT Bus. Days: <2 2-5 5-7 7-10	Date Req.:					Accepted?	YES NO
Carbon Copy: Yes						Container Material	
Email Results: Yes						Container Size (in MI)	
Fax Results: Yes						Preservative	
Sample Information				Number of Containers for Analysis Requested			
Description/Location	Date	Time	Initial	Matrix	Type	Date/Time	Comments
1 5-1 Raw	1-30-14	0845	DJTB	DW	Grab	1-30-14/1215	Trip Blank per set of vials w/HCL
2							
3							
4							
5							
6							
7							
8							
Print Name and Company				Signature		Comments	
Deron Biechele MICROBAC				<i>[Signature]</i>		Trip Blank per set of vials w/HCL	
Christine Rhodes MI				<i>[Signature]</i>			
ceived:				ceived:		ceived:	



1403702

Microbac Laboratories (MNY) 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 MNY of the intent to subcontract and are in agreement with this action.

Appendix C

Waste Manifest

WASTESTREAM INFORMATION PROFILE

Recertification

Disposal Code _____

Veolia ES LOCATION _____

ADDRESS _____

CITY _____

ST _____

Invoice Address

Manifest from – blank if direct

Veolia ES TSDF requested _____ Technology requested _____ Generator No. _____ Generator EPA ID No. NYD980763767

1. Generator Name NYS Department of Environmental Conservation

Generator State No. _____

Address 32 Pumphouse Road

State Wastestream No. _____

City Vestal

State NY

Country USA

ZIP 13850

NAICS (SIC) Code _____

Source _____

Origin _____

Form _____

System Type _____

2. Waste Name Investigation Derived Waste Soils

Lab or Waste Area _____

3. Process Generating Waste Subsurface Investigation

4. Shipping Name NON HAZARDOUS, NON DOT REGULATED

Hazard Class None

UN/NA No. None PG _____

RQ amt _____ lb

RQ Desc: 1. _____ 2. _____

DOT Desc: 1. _____ 2. _____

5. Waste Codes _____

Wastewater

Non Wastewater

Sub Category _____

6. Physical and chemical properties

(check all that apply)

pH

- a < 2
- b 2 - 5
- c 5 - 9
- d 9 - 12.5
- e > 12.5
- _____ exact

Specific Gravity

- a < .8
- b .8 - 1.0
- c 1.0
- d 1.0 - 1.2
- e > 1.2
- _____ exact

Flash Point (F)

- a < 80
- b 80 - 100
- c 101 - 140
- d 141 - 200
- e > 200
- f no flash _____ exact

Solids

- _____ % suspended
- _____ % settleable
- _____ % dissolved

- _____ % ash
- _____ water solubility
- _____ BTU/lb

Free Liquid Range _____ to _____ %

Physical State

- s solid
- m semi-solid
- l liquid
- p pumpable semi-solid
- f flowable powder
- g gas
- a aerosol
- r pressurized liquid
- d debris per 40 CFR 268.45
- h sharps

Hazardous Characteristics

- a air reactive
- w water reactive
- c cyanide reactive
- f sulfide reactive
- e explosive
- o oxidizing acid
- p peroxide former
- r radioactive or NRC regulated
- s shock sensitive
- t temp sensitive
- m polymerization/monomer
- n OSHA carcinogen
- l infectious
- h inhalation hazard Zone: _____

Odor

- a none
- b mild
- c strong
- describe _____

Halogens

- Br _____ % Bromine
- Cl _____ % Chlorine
- F _____ % Fluorine
- I _____ % Iodine

Layers: a multilayered: b bi-layered: c single phase:

	Top Layer	Second Layer	Bottom Layer
Viscosity by Layer:	<input type="checkbox"/> high (syrup) <input type="checkbox"/> medium (oil) <input type="checkbox"/> low (water) <input type="checkbox"/> solid	<input type="checkbox"/> high (syrup) <input type="checkbox"/> medium (oil) <input type="checkbox"/> low (water) <input type="checkbox"/> solid	<input type="checkbox"/> high (syrup) <input type="checkbox"/> medium (oil) <input type="checkbox"/> low (water) <input type="checkbox"/> solid

Color

Brown

Used oil y/n N HOC <1000 ppm or > 1000 ppm

WIP No. _____

7. **Chemical Composition** [M = Marine Pollutant, S = Severe Marine Pollutant, O = Ozone Depleting Substance, U = Underlying Hazardous Constituent, B = Benzene NESHP, T = TRI Chemical, C = OSHA Carcinogen]

Constituents	Range	Units	Constituents	Range	Units
Soils and debris	90-100	%			
Water	0-10	%			

Total Composition Must Equal or Exceed 100%

- Other:**
8. Is the wastestream being imported into the USA? Yes No
9. Does the wastestream contain PCBs regulated by 40CFR? Yes No
PCB concentration _____ ppm
10. Is the wastestream subject to the Marine Pollutant Regulations? Yes No
11. Is the wastestream from an industry regulated under Benzene NESHP? Yes No
If yes, is the wastestream subject to Notification and Control Requirements? Yes No
Benzene concentration _____ ppm
Does it contain >= 10% water? Yes No
What is the TAB at your facility? _____ Mg/Yr
12. Is the wastestream subject to RCRA subpart CC controls? Yes No
Volatile organic concentration, if known _____ ppmw
CC approved analytical method Generator Knowledge
13. Is the wastestream from a CERCLA or state mandated cleanup? Yes No

14. **Container Information** (Identify UN container marking if known)
Packaging: Bulk Solid Type/Size: _____ Bulk Liquid Type/Size: _____ Drum Type/Size: STL/55 gal
Other _____
Shipping Frequency: Units 19 Per Month Quarter Year One Time Other _____

15. **Additional Information: Generator Mailing Address: NYS DEC - Division of Environmental Remediation**
Attn: Payson Long
625 Broadway - Albany, NY 12233
Phone: 518-402-9813

Is analytical or an MSDS available that describes the waste? Yes No If yes, please attach.

GENERATOR CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize sampling of any waste shipment for purposes of recertification.

Payson Long (518) 402-9813 May 1, 2014
NAME (PRINT OR TYPE) PHONE DATE
Payson Long Project manager
SIGNATURE TITLE

FACILITY NOTIFICATION

If approved for management, Veolia ES has all the necessary permits and licenses for the waste that has been characterized and identified by this profile.

TSDF PROCESSING USE ONLY: PPE REQUIRED No _____ Yes _____ Describe _____

WASTESTREAM INFORMATION PROFILE

Recertification

Disposal Code _____

Veolia ES LOCATION _____

ADDRESS _____

CITY _____

ST _____

Invoice Address

Manifest from – blank if direct

Veolia ES TSDF requested _____ Technology requested _____ Generator No. _____

Generator EPA ID No. NYD980763767

1. Generator Name NYS Department of Environmental Conservation

Generator State No. _____

Address 32 Pumphouse Road

State Wastestream No. _____

City Vestal

State NY

Country USA

ZIP 13850

NAICS (SIC) Code _____

Source _____

Origin _____

Form _____

System Type _____

2. Waste Name Investigation Derived Waste Soils

Lab or Waste Area _____

3. Process Generating Waste Subsurface Investigation

4. Shipping Name NON HAZARDOUS, NON DOT REGULATED

Hazard Class None

UN/NA No. None

PG _____ RQ amt _____ lb

RQ Desc: 1. _____

2. _____

DOT Desc: 1. _____

2. _____

5. Waste Codes _____

Wastewater

Non Wastewater

Sub Category _____

6. Physical and chemical properties

(check all that apply)

pH

- a < 2
 - b 2 - 5
 - c 5 - 9
 - d 9 - 12.5
 - e > 12.5
- _____ exact

Specific Gravity

- a < .8
 - b .8 - 1.0
 - c 1.0
 - d 1.0 - 1.2
 - e > 1.2
- _____ exact

Flash Point (F)

- a < 80
- b 80 - 100
- c 101 - 140
- d 141 - 200
- e > 200
- f no flash _____ exact

Solids

- _____ % suspended
- 5 % settleable
- _____ % dissolved

- _____ % ash
- _____ water solubility
- _____ BTU/lb

Free Liquid Range 60 to 70%

Physical State

- s solid
- m semi-solid
- l liquid
- p pumpable semi-solid
- f flowable powder
- g gas
- a aerosol
- r pressurized liquid
- d debris per 40 CFR 268.45
- h sharps

Hazardous Characteristics

- a air reactive
- w water reactive
- c cyanide reactive
- f sulfide reactive
- e explosive
- o oxidizing acid
- p peroxide former
- r radioactive or NRC regulated
- s shock sensitive
- t temp sensitive
- m polymerization/monomer
- n OSHA carcinogen
- l infectious
- h inhalation hazard

Zone: _____

Odor

- a none
 - b mild
 - c strong
- describe _____

Halogens

- Br _____ % Bromine
- Cl _____ % Chlorine
- F _____ % Fluorine
- I _____ % Iodine

Layers: a multilayered: b bi-layered: c single phase:

	Top Layer	Second Layer	Bottom Layer
Viscosity by Layer:	<input type="checkbox"/> high (syrup)	<input type="checkbox"/> high (syrup)	<input type="checkbox"/> high (syrup)
	<input type="checkbox"/> medium (oil)	<input type="checkbox"/> medium (oil)	<input type="checkbox"/> medium (oil)
	<input checked="" type="checkbox"/> low (water)	<input type="checkbox"/> low (water)	<input type="checkbox"/> low (water)
	<input type="checkbox"/> solid	<input checked="" type="checkbox"/> solid	<input type="checkbox"/> solid

Color

Light brown

Used oil y/n N HOC <1000 ppm or > 1000 ppm

7. **Chemical Composition** [M = Marine Pollutant, S - Severe Marine Pollutant, O = Ozone Depleting Substance, U = Underlying Hazardous Constituent, B = Benzene NESHAP, T = TRI Chemical, C = OSHA Carcinogen]

Constituents	Range	Units	Constituents	Range	Units
Water	60-70	%			
Filters	15-25	%			
Sediment	0-5	%			

Total Composition Must Equal or Exceed 100%

- Other:**
8. Is the wastestream being imported into the USA? Yes No
9. Does the wastestream contain PCBs regulated by 40CFR? Yes No
PCB concentration _____ ppm
10. Is the wastestream subject to the Marine Pollutant Regulations? Yes No
11. Is the wastestream from an industry regulated under Benzene NESHAP? Yes No
If yes, is the wastestream subject to Notification and Control Requirements? Yes No
Benzene concentration _____ ppm
Does it contain >= 10% water? Yes No
What is the TAB at your facility? _____ Mg/Yr
12. Is the wastestream subject to RCRA subpart CC controls? Yes No
Volatile organic concentration, if known _____ ppmw
CC approved analytical method Generator Knowledge
13. Is the wastestream from a CERCLA or state mandated cleanup? Yes No

14. **Container Information** (Identify UN container marking if known)

Packaging: Bulk Solid Type/Size: _____ Bulk Liquid Type/Size: _____ Drum Type/Size: STL/55 gal

Other _____

Shipping Frequency: Units 1 Per Month Quarter Year One Time Other _____

15. **Additional Information: Generator Mailing Address: NYS DEC - Division of Environmental Remediation**

Attn: Payson Long

625 Broadway - Albany, NY 12233

Phone: 518-402-9813

Is analytical or an MSDS available that describes the waste? Yes No If yes, please attach.

GENERATOR CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize sampling of any waste shipment for purposes of recertification.

Payson Long (518) 402-9813 May 1, 2014
NAME (PRINT OR TYPE) PHONE DATE

Payson Long Project manager
SIGNATURE TITLE

FACILITY NOTIFICATION

If approved for management, Veolia ES has all the necessary permits and licenses for the waste that has been characterized and identified by this profile.

TSDF PROCESSING USE ONLY: PPE REQUIRED No _____ Yes _____ Describe _____

SHIPPING DOCUMENT	1. Generator ID Number NYD080763767	2. Page 1 of 1	3. Emergency Response Phone (877) 818-0037	4. Shipping Document Tracking Number ZZ 00344344				
5. Generator's Name and Mailing Address NYS DEC DIV. OF ENVIRONMENTAL REMED. 625 BROADWAY ALBANY, NY 12233 Generator's Phone: 518 402-9313			Generator's Site Address (if different than mailing address) NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION 32 PUMPHOUSE ROAD VESTAL, NY 13850					
6. Transporter 1 Company Name VEOLIA ES TECHNICAL SOLUTIONS			U.S. EPA ID Number NJ D 0 8 0 6 3 1 3 6 9					
7. Transporter 2 Company Name FREEHOLD CARTAGE INC			U.S. EPA ID Number NJ D 0 5 4 1 2 6 1 6 4					
8. Designated Facility Name and Site Address VEOLIA ES TECHNICAL SOLUTIONS 4301 INFIRMARY ROAD WEST CARROLLTON, OH 45449 Facility's Phone: 937 859-6101			U.S. EPA ID Number OH D 0 9 3 9 4 5 2 9 3					
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Codes	
		1. NON HAZARDOUS, NON DOT REGULATED MATERIAL, (SOIL, WATER)	17 8	DM	10,200 1200	P	NONE L	
		2. NON HAZARDOUS, NON DOT REGULATED MATERIAL, (WATER, FILTERS, SOIL, DEBRIS)	3 A7	DM	1200 10,200	P	NONE L	
		3.						
		4.						
14. Special Handling Instructions and Additional Information ER Service Contracted by VESTS +- **VEOLIA PERMIT# NJ-410**NEED CERT OF DISPOSAL** - 1) W:562731 A:SRRLFSOLID-NH 2) W:562739 A:SRRLFLIQ-NH								
15. GENERATOR S/OFFEROR S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.								
Generator's/Offeror's Printed/Typed Name <i>Warren Savage</i>			Signature <i>Warren Savage</i>			Month Day Year 05 28 14		
TRANSPORTER INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
	17. Transporter Acknowledgment of Receipt of Shipment							
	Transporter 1 Printed/Typed Name WARREN SAVAGE			Signature <i>Warren Savage</i>			Month Day Year 05 28 14	
Transporter 2 Printed/Typed Name			Signature			Month Day Year		
DESIGNATED FACILITY	18. Discrepancy							
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
	Shipping Document Tracking Number:							
	18b. Alternate Facility (or Generator)			U.S. EPA ID Number				
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator)						Month Day Year		
19. Report Management Method Codes (i.e., codes for treatment, disposal, and recycling systems)								
1.		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of shipment except as noted in Item 18a								
Printed/Typed Name			Signature			Month Day Year		

Activity Report

JOB NO: 2014626000 WO NO: 2014626000
 BILL DOC NO YG40525773
 GENERATOR NO 607990 EPA ID: NYD980763767

BILL TO: ARCADIS
 28550 CABOT DRIVE
 NORVI, MI 48377
 (123) 456-7890

JOB SITE: NYS DEPARTMENT OF
 ENVIRONMENTAL CONSERVATION
 32 PUMPHOUSE ROAD
 VESTAL, NY 13850
 (518) 402-9813

CONTACT: LIZ MARSH
 MANIFEST NUMBER(S):
 ZZ00344344

CONTACT: PAYSON LONG

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.
	ON site 8 ⁰⁰ AM - 9 ³⁰ AM	05/28/2014	NY2

Comments:

Signature: *[Handwritten Signature]*

Print Name: JOSHUA BROWN

Activity Report

JOB NO: 2014626000
BILL DOC NO YG40525773
GENERATOR NO 607990

WO NO: 2014626000
EPA ID: NYD980763767

BILL TO: ARCADIS
28550 CABOT DRIVE
NORVI, MI 48377
(123) 456-7890

JOB SITE: NYS DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
32 PUMPHOUSE ROAD
VESTAL, NY 13850
(518) 402-9813

CONTACT: LIZ MARSH

CONTACT: PAYSON LONG

MANIFEST NUMBER(S):
ZZ00344344

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.
		05/28/2014	NY2

DESCRIPTION	# CONT.	CONT./CODE	QTY	UDM	PG/LN	WASTE AREA
Manifest # ZZ00344344 WIP 562731 / Approval SRRLFSOLID-NH INVESTIGATION DERIVED WASTE SOILS	17	551A2-DM	10,300	F	1 / 1	
Manifest # ZZ00344344 WIP 562739 / Approval SRRLFLIQ-NH INVESTIGATION DERIVED WASTE SOILS-SLUDGE	3	551A2-DM	1200	F	1 / 2	
05/28/2014 Manpwr.- MOBILIZATION FEE		1248	1@1	EACH		
05/28/2014 Manpwr.- MATERIAL PICK-UP CHARGE		989	1@1	EACH		
05/28/2014 Misc. - STATE REGULATORY FEES		4419	1	EACH		
05/28/2014 Misc. - ENERGY & SECURITY SURCHARGE		3129	17	PERCNT		

Total Hours:	0
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Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities.

PACKING SUMMARY

Generator Number: 607990
NYS DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
VESTAL, NY 13850

Manifest Number: ZZ00344344
Field System ID: YG
Work Order Number: 2014626000
Date Shipped: 05/28/2014

Attn: PAYSON LONG
EPA ID: NYD880763767

Container#: YG-2014626000-001 Waste Area: Manifest Page/Line: 01 / 1
 WMP: 562731 Disposal Code: SRRLFSOLID-NH PHY State: S
 Date Accumulated: 05/28/2014 Gen Drum ID:
 Shipping Name: NON HAZARDOUS, NON DOT REGULATED MATERIAL, (SOIL, WATER)
 No. of Commons: 17 Outer Container: 551A2-DM Inner Container:
 Primary Waste Codes: NONE, L PCB Serial #: OOS Date: / /
 Total Crms Wt: 480 / 0.2 SIC: 8999 Source: G18 Form: W408 System: H141 Cubic Ft.: 7.50
 Individual Common Weights: 1 @ 480 (POUNDS)

Units	Container Size	Net Weight	Chemical Name	EPA/State Codes
1	55 GAL		WATER [0-10%] SOIL AND DEBRIS [90-100%]	NONE, L

Container#: YG-2014626000-002 Waste Area: Manifest Page/Line: 01 / 2
 WMP: 562739 Disposal Code: SRRLFLIQ-NH PHY State: S
 Date Accumulated: 05/28/2014 Gen Drum ID:
 Shipping Name: NON HAZARDOUS, NON DOT REGULATED MATERIAL, (WATER, FILTERS, SOIL, DEBRIS)
 No. of Commons: 3 Outer Container: 551A2-DM Inner Container:
 Primary Waste Codes: NONE, L PCB Serial #: OOS Date: / /
 Total Crms Wt: 400 SIC: 8999 Source: G18 Form: W408 System: H141 Cubic Ft.: 7.50
 Individual Common Weights: 3 @ 400 (POUNDS)

Units	Container Size	Net Weight	Chemical Name	EPA/State Codes
1	55 GAL		WATER [60-70%] FILTERS [15-25%] SEDIMENT [0-5%]	NONE, L